

# APEX

The Task Tracker Application

# SQL Workshop - Object Browser - +Table

## Create Table

Columns

\* Table Name  ?

Preserve Case

Column Name	Type	Precision	Scale	Not Null	Identity	Move
<input type="text" value="ID"/>	<input type="text" value="NUMBER"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text" value="- None -"/>	^ v
<input type="text" value="TITLE"/>	<input type="text" value="VARCHAR2"/>		<input type="text" value="100"/>	<input checked="" type="checkbox"/>		^ v
<input type="text" value="DUE_DATE"/>	<input type="text" value="DATE"/>			<input checked="" type="checkbox"/>		^ v
<input type="text" value="NOTES"/>	<input type="text" value="VARCHAR2"/>		<input type="text" value="4000"/>	<input type="checkbox"/>		^ v
<input type="text"/>	<input type="text" value="- Select Datatype -"/>					^ v
<input type="text"/>	<input type="text" value="- Select Datatype -"/>					^ v
<input type="text"/>	<input type="text" value="- Select Datatype -"/>					^ v
<input type="text"/>	<input type="text" value="- Select Datatype -"/>					^ v

Add Column

Cancel

Next >

# Create Table



## Primary Key

Table name: **T\_TASK** ?

Primary Key:  No Primary Key ?  
 **Populated from a new sequence**  
 Populated from an existing sequence  
 Not populated  
 Populated by Identity column

\* Primary Key Constraint Name  ?

\* Primary Key  ?

\* Sequence Name  ?

### Primary Key

A primary key allows each row in a table to be uniquely identified.

If you select to populate your primary key from a new sequence, you will be prompted to enter the new sequence's name. If you select to populate your primary key from an existing sequence, you will be prompted to select the sequence. Both these methods result in the generation of a trigger against your table. You can also select to not populate your primary. This is the only method that allows you to define a composite primary key made up of more than two columns.



Cancel

Next >

# Create Table



Foreign Key

Einstweilen brauchen wir keine Fremdschlüssel

## Foreign Keys

Foreign Key Columns Referenced Table Referenced Columns Action

### Add Foreign Key

Add

Name  ?

- Disallow Delete  
 Cascade Delete  
 Set Null on Delete

Select Key Column(s)  ?

References Table  ^ ?

Referenced Column(s)

### Foreign Key

A foreign key establishes a relationship between a column or columns in one table and a primary or unique key in another table.

To define a foreign key:

- Select one or more columns and click the **Add** icon.
- Select the table name that has the corresponding primary key.
- Select the corresponding primary key column or columns and click the **Add** icon.
- Select **Disallow Delete** to block delete of rows from the referenced table when there are dependant rows in this table.
- Select **Cascade Delete** to delete the dependant rows from this table when the corresponding parent table row is deleted.
- Select **Set to Null on Delete** to set foreign key column values to null when the corresponding parent table row is deleted.
- Click **Add**.

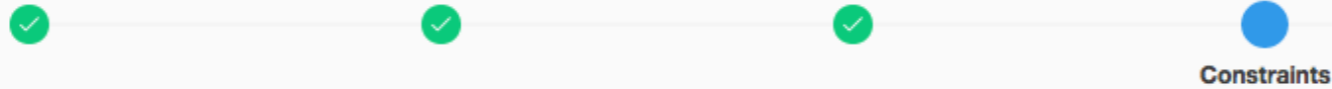
You can define more than one foreign key on this page but only those displayed in the report at the top of the page will be included in the resulting create table statement.



Cancel

Next >

# Create Table



... und auch keine  
zusätzlichen  
Constraints

Constraint Name	Type	Column(s)/Check
-----------------	------	-----------------

Add

Constraint Type  Check  Unique

Check Condition

Key Column(s)

ID	↻		↑
TITLE	>>		↑
DUE_DATE	>		↓
NOTES	<		↓
	<<		↓

\* Name  ?

> Available Columns

> Example Check Constraints

### Constraints

Use this page to define constraints for your table. You can create multiple constraints of each type but must **Add** each constraint. Only those constraints displayed in the report at the top of the page will be included in the resulting create table statement.

### Check Constraint

A check constraint is a validation check on one or more columns within the table. No value can be inserted or updated in a table which violates an enabled check constraint.

A unique constraint designates a column or a combination of columns as a unique key. To satisfy a unique constraint, no two rows in the table can have the same values for the specified columns.

< Cancel

Next >

# Create Table



Confirm

Please confirm your request.

Schema: **STUETZ** ⓘ

Table name: **T\_TASK** ⓘ

> SQL



Cancel

Create Table

- Tables
- DUMMY
- EMP
- ITEM
- ORD
- PRICE
- PRODUCT
- SALGRADE
- SW\_CUSTOMER
- SW\_ITEM
- SW\_ORDERING
- SW\_PRODUCT
- T\_TASK**
- VEHICLE

T_TASK				
Table	Data	Indexes	Model	Constraints
<div style="display: flex; justify-content: space-between;"> <span>Add Column</span> <span>Modify Column</span> <span>Rename Column</span> <span>Drop Column</span> <span>Rename</span> <span>Copy</span> <span>Drop</span> <span>Truncate</span> <span>Create Lookup Table</span> </div>				
Column Name	Data Type	Nullable	Default	Primary Key
ID	NUMBER	No	-	1
TITLE	VARCHAR2(100)	No	-	-
DUE_DATE	DATE	No	-	-
NOTES	VARCHAR2(4000)	Yes	-	-
<a href="#">Download</a>				



Create



Import



Dashboard



Workspace Utilities



Search input field

Go



Actions

Reset

Create >

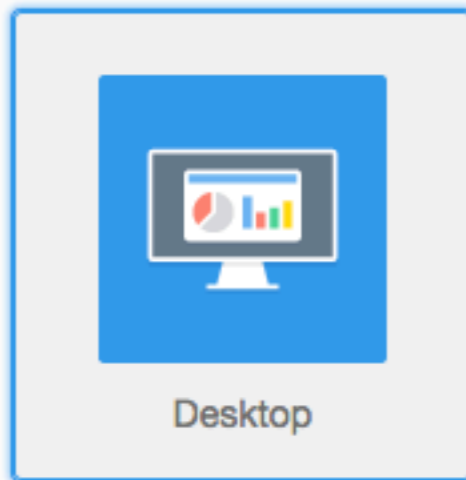


Testprojekt  
739



# Create an Application

What type of application would you like to create?



Desktop



Mobile



Websheet



Packaged Application

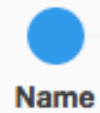
[From a spreadsheet](#) · [Copy an existing application](#)

[▶ About](#)



Cancel


Next >

# Create an Application



\* User Interface **Desktop**

Schema   

\* Name  

\* Application  

Theme   

Theme Style   



Cancel

Create Application

Next >

# Create an Application



Pages

	Page	Name	Type	Page Mode	Source Type	Source	Parent Page	
	1	Home	Blank	Normal	-	-	-	X

Add Page

< Cancel

Create Application Next >

# Create Application



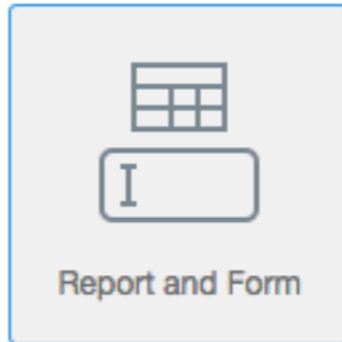
Select Page Type:



Blank



Report



Report and Form



Form



Tabular Form



Master Detail



Chart

Action: **Add a report with an edit form on a second page**

Parent Page

Table Name

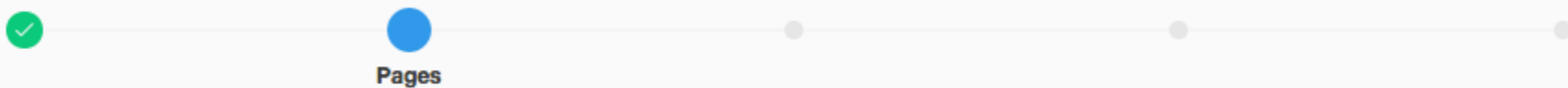
Report Type

Form Page Mode

Cancel

Add Page

# Create an Application



	Page	Name	Type	Page Mode	Source Type	Source	Parent Page	
	1	Home	Blank	Normal	-	-	-	×
	2	T Task	Report	Normal	Table	T_TASK	1	×
	3	T Task	Form	Modal Dialog	Table	T_TASK	2	×

Add Page

< Cancel

Create Application

Next >

# Create an Application



Shared components are common application elements that can be displayed or applied across multiple pages in an application. To save time or maintain consistency between applications, copy the shared components from an existing application.

Copy Shared Components from Another Application:  Yes  No

# Create an Application



Authentication Scheme  ?

Language  ?

User Language Preference Derived From  ?

Date Format  ^ ?

Date Time Format  ^ ?

Timestamp Format  ^ ?

Timestamp Time Zone Format  ^ ?







Run Application



Supporting Objects



Shared Components



Utilities



Export / Import

**Tasks**

- Delete this Application >
- Copy this Application >

**Recently Edited Pages**

- 101. Login Page
- 3. T Task
- 2. T Task
- 1. Home



1 - Home



2 - T Task



3 - T Task

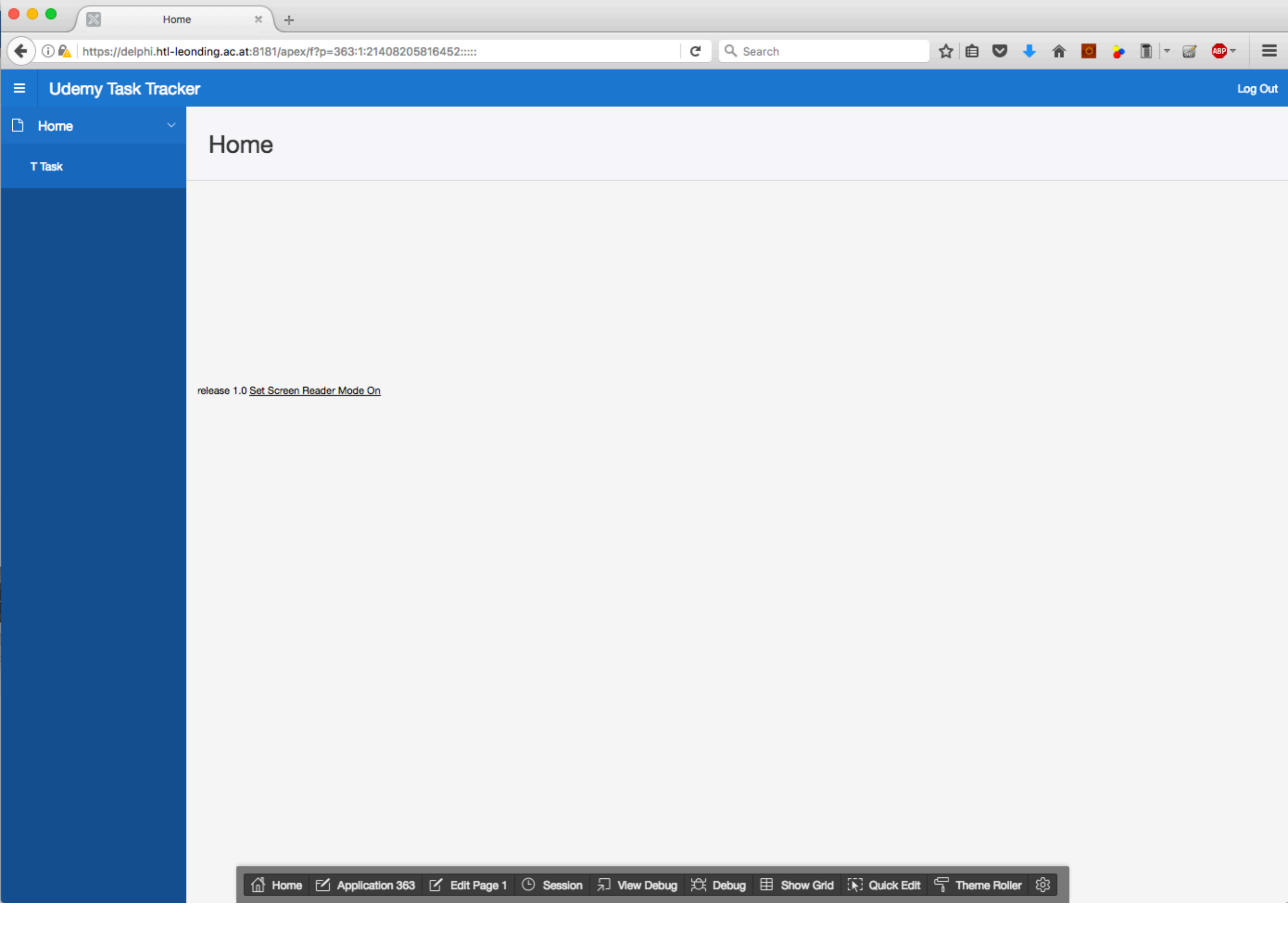


101 - Login Page

## Log In

Username

Password



# Home

release 1.0 [Set Screen Reader Mode On](#)

Home /  
T Task

Search bar with 'Go' button and 'Actions' dropdown. A 'Create' button is on the right. The main area contains a magnifying glass icon and the text 'No data found.'

release 1.0 [Set Screen Reader Mode On](#)

Home /  
T Task

Search  Go Actions

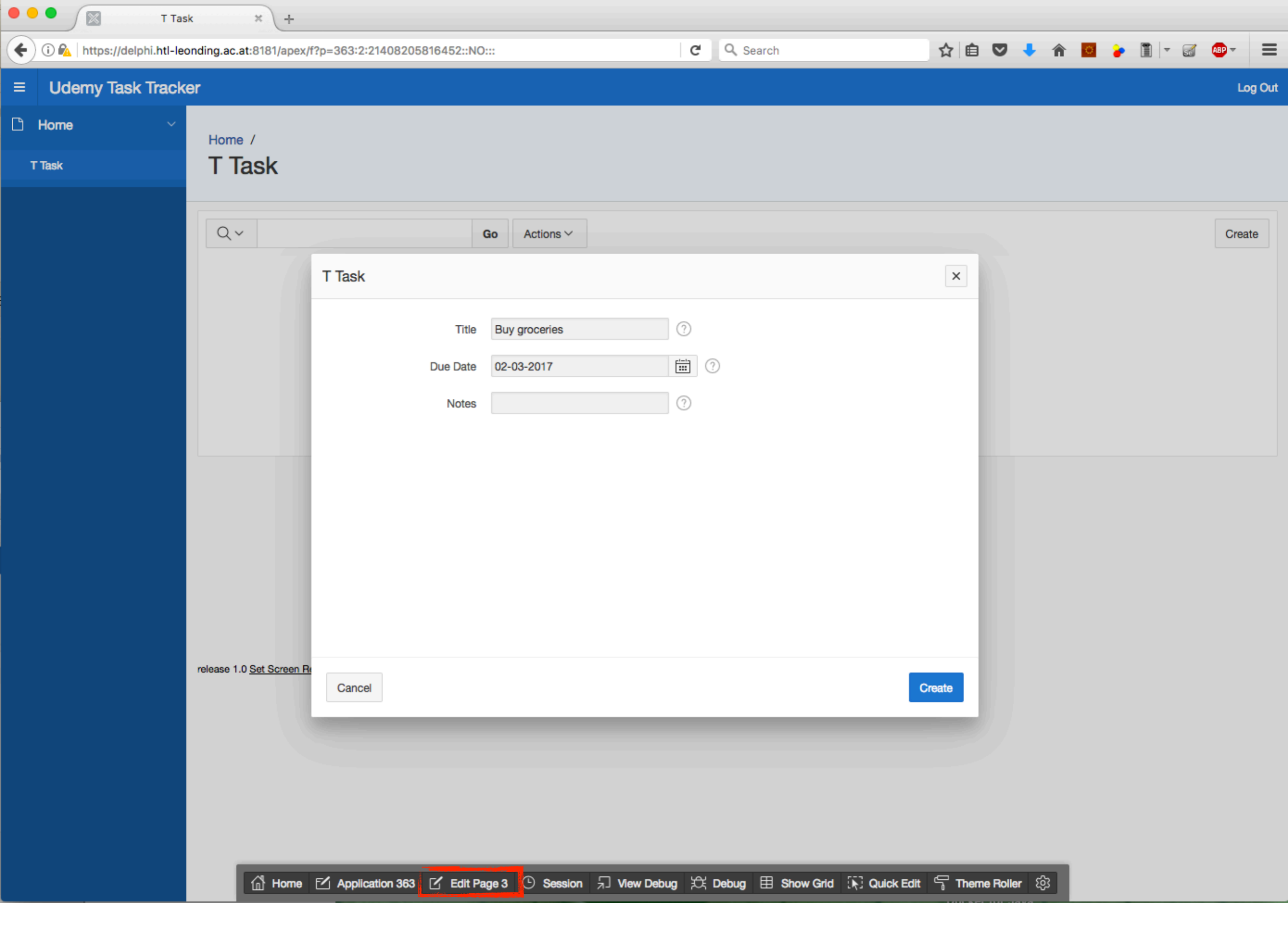
T Task

Title  ?

Due Date   ?

Notes  ?

release 1.0 Set Screen R



T Task



Title Buy groceries ?

Due Date 02-03-2017 ?

Notes ?

Cancel

Create

release 1.0 Set Screen R

Rendering | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit T\_TASK
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE**
        - P3\_NOTES
    - Dialog Footer
      - Buttons
        - Attributes
        - Region Buttons
          - CANCEL
          - DELETE
          - SAVE
          - CREATE
    - Post-Rendering

Grid Layout | Messages | Page Search | Help

T Task

DIALOG HEADER

CONTENT BODY

</> Edit T\_TASK

PREVIOUS

ITEMS

P3\_TITLE

**P3\_DUE\_DATE**

P3\_NOTES

REGION CONTENT

SUB REGIONS

NEXT

DIALOG FOOTER

</> Buttons

PREVIOUS DELETE CLOSE

Page Item

Identification

Name: P3\_DUE\_DATE

Type: Date Picker

Label: Due Date

Settings

Highlighted Date

Minimum Date

Maximum Date

Show: On icon click

Show other Months: On focus

Navigation List for: None

Layout

Sequence: 30

Region: Edit T\_TASK

Grid

Start New Row: Yes No

Column: Automatic

Regions | Items | Buttons

Breadcrumb | Calendar | Chart | Classic Report | Classic Report (based on Function) | Help Text | Interactive Report

Legacy Calendar | List | Map Chart | PL/SQL Dynamic | Region Display | Static Content | Tabular Form

# T Task

Search  Go Actions

### T Task

Title:  ?

Due Date:  ?

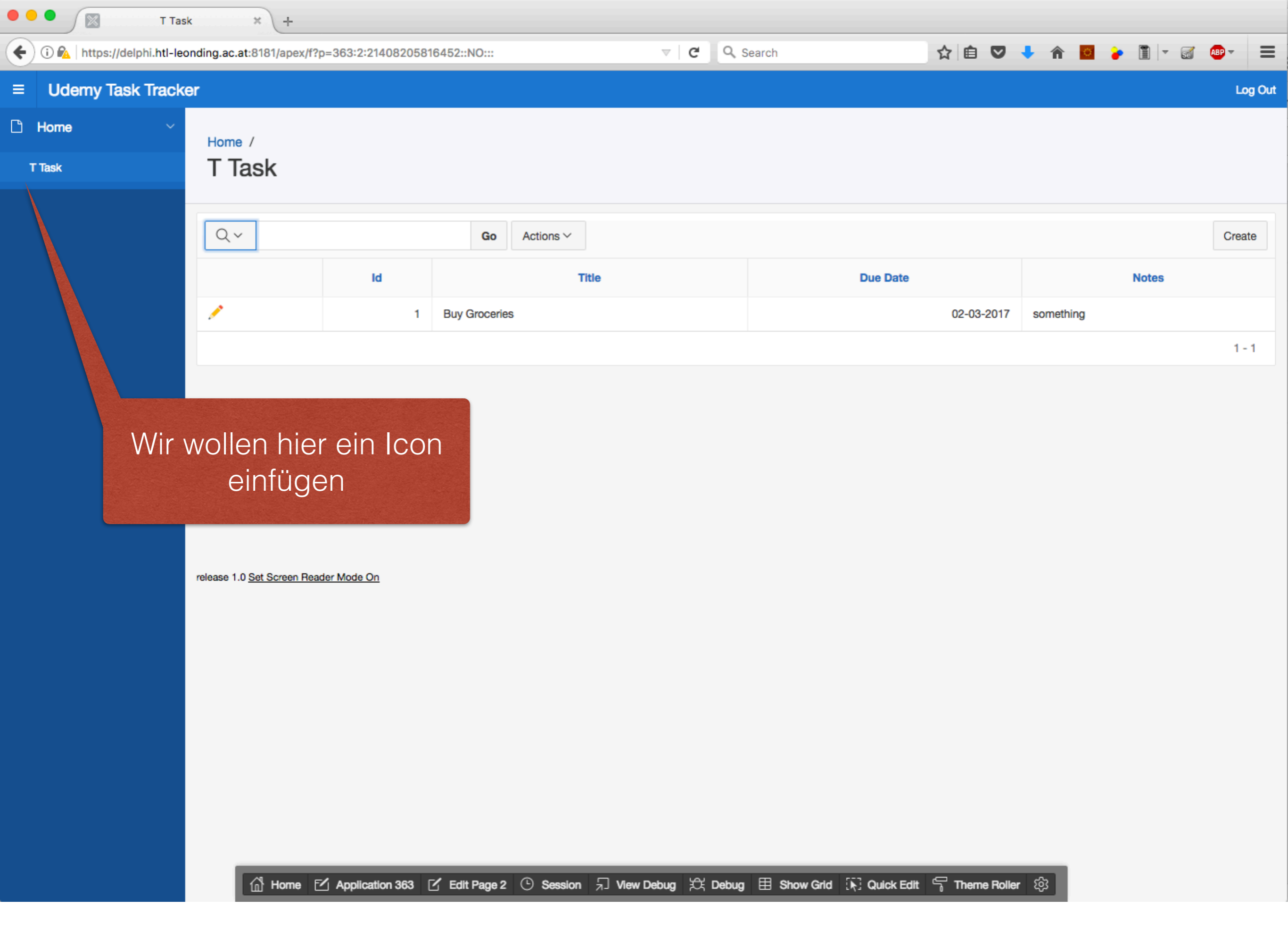
Notes: 

March 2017

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

release 1.0 [Set Screen R...](#)





	Id	Title	Due Date	Notes
	1	Buy Groceries	02-03-2017	something

1 - 1

Wir wollen hier ein Icon einfügen

# Shared Components

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363 Shared Components

Application Logic	Security	Other Components	Tasks
<ul style="list-style-type: none"><li>Application Definition Attributes</li><li>Application Items</li><li>Application Processes</li><li>Application Computations</li></ul>	<ul style="list-style-type: none"><li>Security Attributes</li><li>Authentication Schemes</li><li>Authorization Schemes</li><li>Session State Protection</li><li>Build Options</li></ul>	<ul style="list-style-type: none"><li>List of Values</li><li>Plug-ins</li><li>Component Settings</li><li>Shortcuts</li></ul>	<ul style="list-style-type: none"><li>Export Application Components</li><li>Manage Supporting Objects</li><li>Edit Application Comment</li><li>Developer Comments</li></ul>
Navigation	User Interface	Files	
<ul style="list-style-type: none"><li><b>Lists</b></li><li>Navigation Menu</li><li>Breadcrumbs</li><li>Navigation Bar List</li></ul>	<ul style="list-style-type: none"><li>User Interface Attributes</li><li>Themes</li><li><b>Templates</b></li></ul>	<ul style="list-style-type: none"><li>Static Application Files</li><li>Static Workspace Files</li></ul>	
Data References	Reports	Globalization	
<ul style="list-style-type: none"><li>Data Load Definitions</li><li>Web Service References</li></ul>	<ul style="list-style-type: none"><li>Report Queries</li><li>Report Layouts</li></ul>	<ul style="list-style-type: none"><li>Globalization Attributes</li><li>Text Messages</li><li>Translate Application</li></ul>	

https://delphi.htl-leonding.ac.at:8181/apex/f?p=4000:4003:16327869815233::NO:::



### List Entry

Cancel Delete **Apply Changes**

Show All | Entry | Target | Current List Entry | Conditions | Authorization | Configuration | Click Counting | User Defined Attributes

List: **Desktop Navigation Menu**

Parent List Entry: **- No Parent List Item -**

Sequence: 20

Image/Class: **fa-pencil**

Attributes:

Alt Attribute:

\* List Entry Label: **Tasks**

Target

Target type: Page in this Application

\* Page: 2

reset pagination for this page

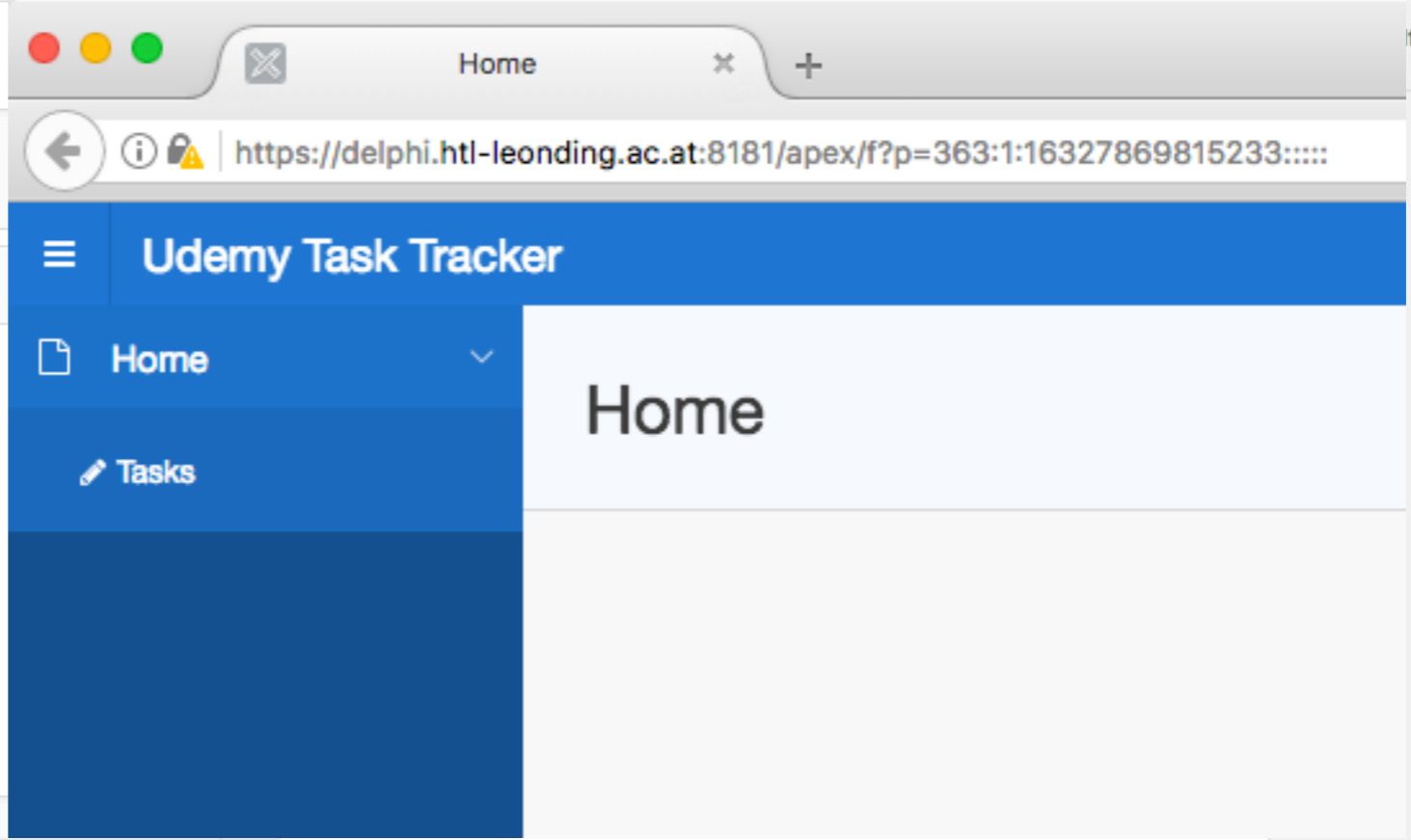
Printer Friendly

Request:

Clear Cache:

Set these items:

With these values:



#### List Entry

Define the list entry. Each entry is typically a link to page in this application or a URL.

#### Tasks

[Change Parent List](#)

#### List Entries

- 10Home
- 20...T Task

#### Page Items

Items found.

Ändern des Titels

### Application 363 - Udemy Task Tracker



Run Application



Supporting Objects



Shared Components



Utilities

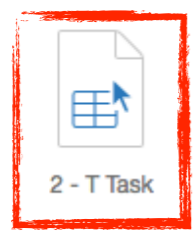


Export / Import

- Tasks
- Delete this Application >
  - Copy this Application >
- Recently Edited Pages
- 2. T Task
  - 3. T Task
  - 101. Login Page
  - 1. Home



1 - Home



2 - T Task



3 - T Task



101 - Login Page

Shared Components

https://delphi.htl-leonding.ac.at:8181/apex/f?p=4000:9:4540360456259::NO::FB\_FLOW\_ID,FB\_FLOW\_PAGE\_

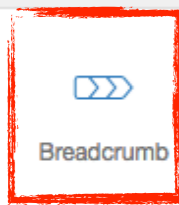
ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363 Shared Components

Application Logic	Security	Other Components	Tasks
<ul style="list-style-type: none"><li>Application Definition Attributes</li><li>Application Items</li><li>Application Processes</li><li>Application Computations</li></ul>	<ul style="list-style-type: none"><li>Security Attributes</li><li>Authentication Schemes</li><li>Authorization Schemes</li><li>Session State Protection</li><li>Build Options</li></ul>	<ul style="list-style-type: none"><li>List of Values</li><li>Plug-ins</li><li>Component Settings</li><li>Shortcuts</li></ul>	<ul style="list-style-type: none"><li>Export Application Components</li><li>Manage Supporting Objects</li><li>Edit Application Comment</li><li>Developer Comments</li></ul>
Navigation	User Interface	Files	
<ul style="list-style-type: none"><li>Lists</li><li>Navigation Menu</li><li><b>Breadcrumbs</b></li><li>Navigation Bar List</li></ul>	<ul style="list-style-type: none"><li>User Interface Attributes</li><li>Themes</li><li>Templates</li></ul>	<ul style="list-style-type: none"><li>Static Application Files</li><li>Static Workspace Files</li></ul>	
Data References	Reports	Globalization	
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https://delphi.htl-leonding.ac.at:8181/apex/f?p=4000:546:4540360456259::NO::

Search:  Go   Actions



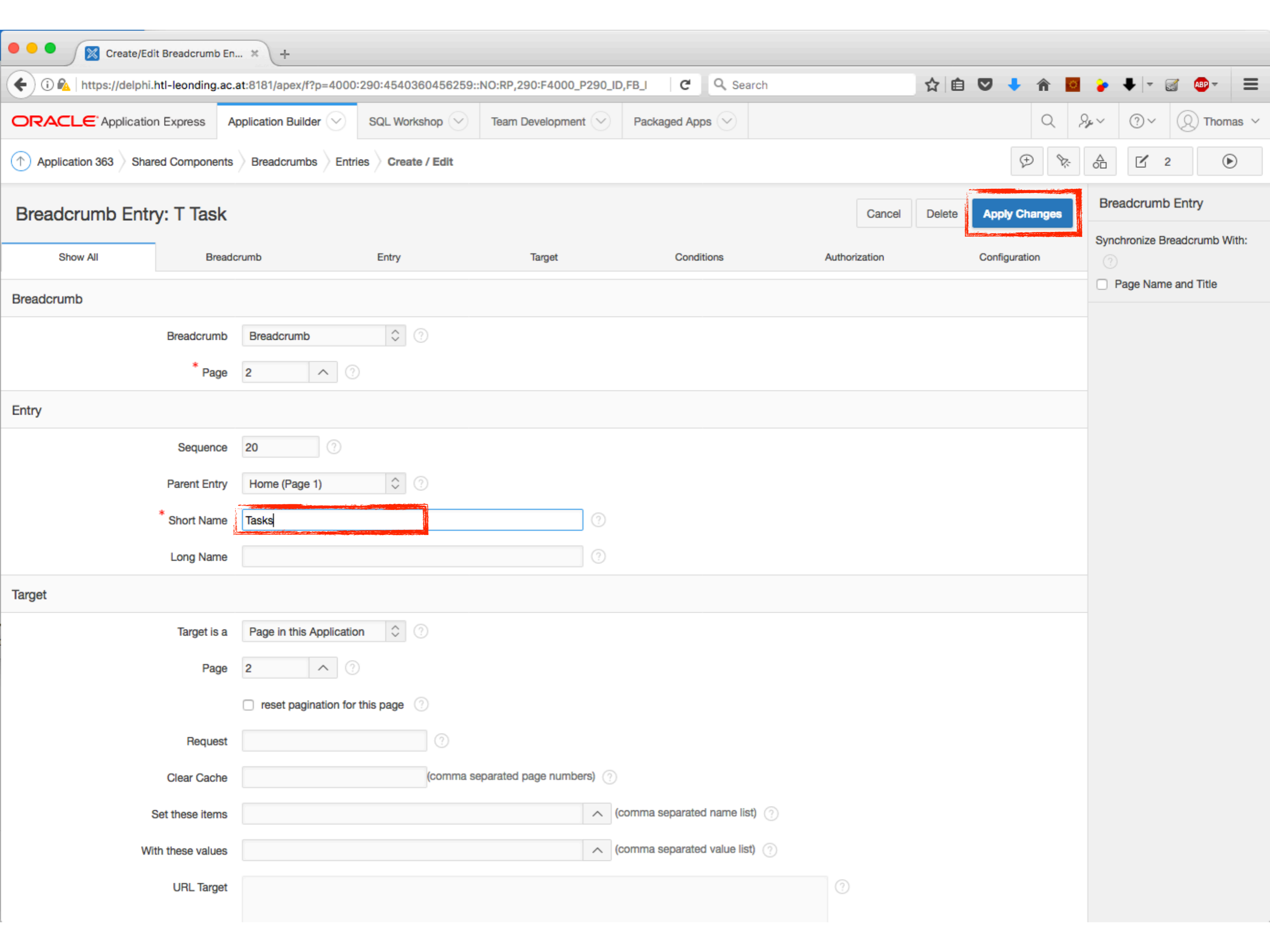
**Breadcrumbs**

Breadcrumbs provide hierarchical navigation to any number of levels. Once a breadcrumb is created, breadcrumb entries can be defined. To define breadcrumb entries click on the breadcrumb name.

Breadcrumb entries are associated with pages and also identify a parent page. Breadcrumbs can be displayed on a page by adding a breadcrumb region using the create region wizard.

1 - 1





# Breadcrumb Entry: T Task

Cancel Delete **Apply Changes**

Show All Breadcrumb Entry Target Conditions Authorization Configuration

**Breadcrumb**  
Breadcrumb: Breadcrumb  
\* Page: 2


**Entry**  
Sequence: 20  
Parent Entry: Home (Page 1)  
\* Short Name: **Tasks**  
Long Name:

**Target**  
Target is a: Page in this Application  
Page: 2  
 reset pagination for this page  
Request:  
Clear Cache: (comma separated page numbers)  
Set these items: (comma separated name list)  
With these values: (comma separated value list)  
URL Target:

**Breadcrumb Entry**  
Synchronize Breadcrumb With:  
 Page Name and Title

Home /  
**Tasks**

Search:  Go Actions

	Id	Title	Due Date	Notes
	1	Buy Groceries	02-03-2017	something

1 - 1

release 1.0 [Set Screen Reader Mode On](#)

# Alternativer Aufruf 1

The screenshot displays the Oracle APEX Page Designer interface for 'Application 363'. The main workspace shows a page layout with a 'BREADCRUMB BAR' region containing a 'Breadcrumbs' component. The 'Breadcrumbs' component is currently in a 'CREATE' state, indicated by a green outline. The 'Content Body' region contains a 'Tasks' component with a 'CREATE' button and a 'RIGHT OF INTERACTIVE REPORT SEARCH BAR' label.

The right-hand 'Region' properties panel is open, showing the configuration for the selected 'Breadcrumbs' region. The 'Identification' section shows the title 'Breadcrumbs' and type 'Breadcrumb'. The 'Source' section shows 'Breadcrumb' as the source type, with a red box highlighting the right-pointing arrow button. The 'Layout' section shows a sequence of '10' and a parent region of '- Select -'. The 'Appearance' section shows the template as 'Title Bar' and template options as 'Use Template Defaults, Use Current Breadcrumb Entry'. The 'Item Display Position' is set to 'Above Content'.

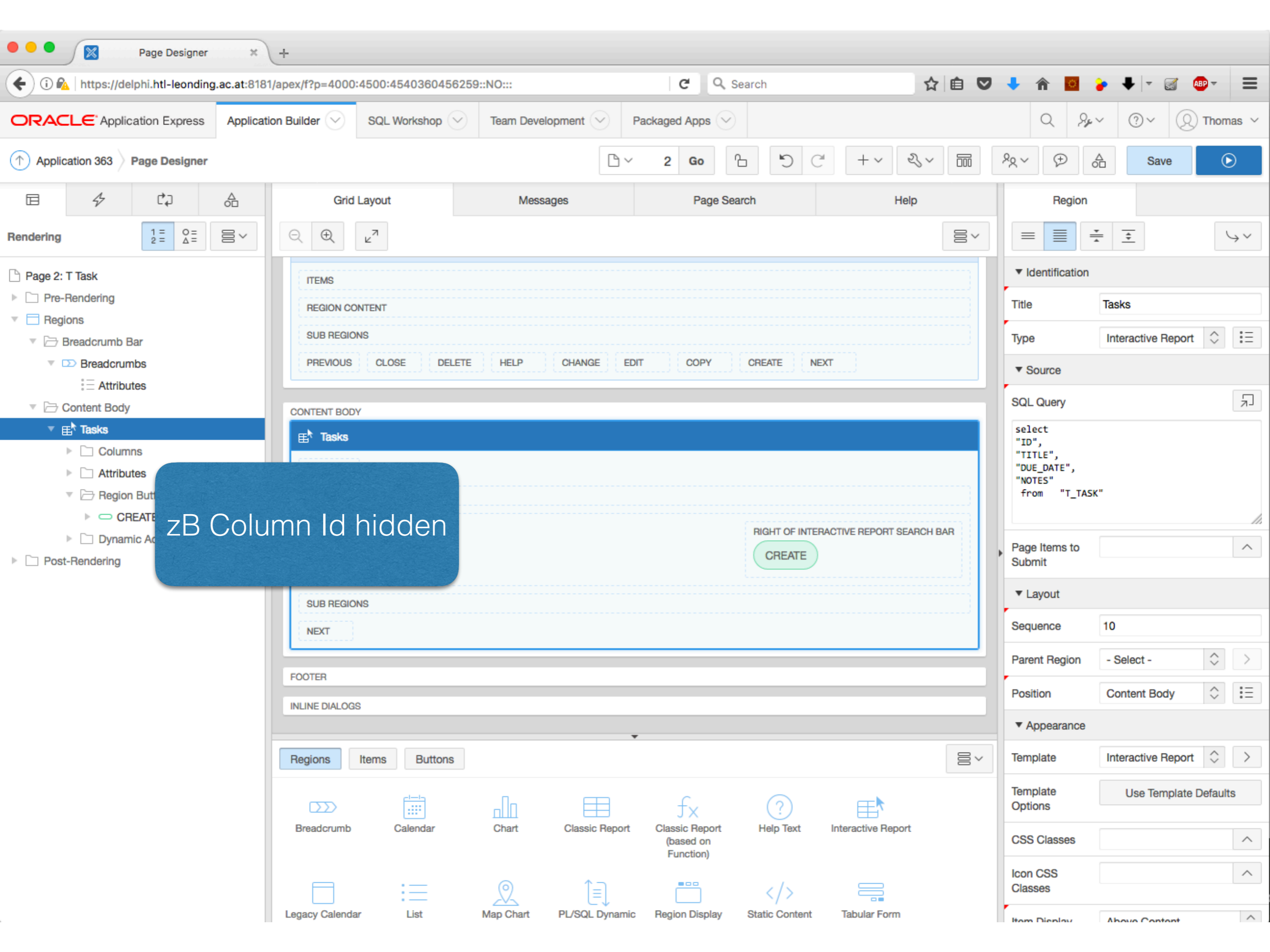
The left-hand 'Rendering' panel shows the page structure, with 'Page 2: T Task' selected. The 'Regions' list includes 'Breadcrumbs', 'Attributes', 'Content Body', 'Tasks', 'Columns', 'Attributes', 'Region Buttons', 'CREATE', and 'Dynamic Actions'. The 'Content Body' region is expanded to show 'Tasks', 'PREVIOUS', 'ITEMS', and 'REGION CONTENT'.

# Alternativer Aufruf 2

The screenshot displays the Oracle APEX Page Designer interface. The top navigation bar includes 'ORACLE Application Express', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Packaged Apps'. The current page is 'Application 363 > Page Designer'. The main workspace shows a page layout with sections: 'T Task', 'PAGE HEADER', 'PAGE NAVIGATION', 'BREADCRUMB BAR', and 'CONTENT BODY'. The 'BREADCRUMB BAR' section contains a 'Breadcrumbs' component with sub-sections 'ITEMS', 'REGION CONTENT', and 'SUB REGIONS', and buttons for 'PREVIOUS', 'CLOSE', 'DELETE', 'HELP', 'CHANGE', 'EDIT', 'COPY', and 'CREATE'. The 'CONTENT BODY' section contains a 'Tasks' component with buttons for 'PREVIOUS', 'ITEMS', 'REGION CONTENT', and 'RIGHT OF INTERACTIVE REPORT SEARCH BAR' with a 'CREATE' button. On the right side, the 'Breadcrumbs' component is selected, and the 'Edit Component' button is highlighted with a red box. The 'Identification' table below shows the component's name and breadcrumb.

Name	Breadcrumb

# Page Design



zB Column Id hidden

Regions Items Buttons

- Breadcrumb
- Calendar
- Chart
- Classic Report
- Classic Report (based on Function)
- Help Text
- Interactive Report
- Legacy Calendar
- List
- Map Chart
- PL/SQL Dynamic
- Region Display
- Static Content
- Tabular Form

Region

Identification

Title: Tasks

Type: Interactive Report

Source

SQL Query

```
select "ID", "TITLE", "DUE_DATE", "NOTES" from "T_TASK"
```

Page Items to Submit

Layout

Sequence: 10

Parent Region: - Select -

Position: Content Body

Appearance

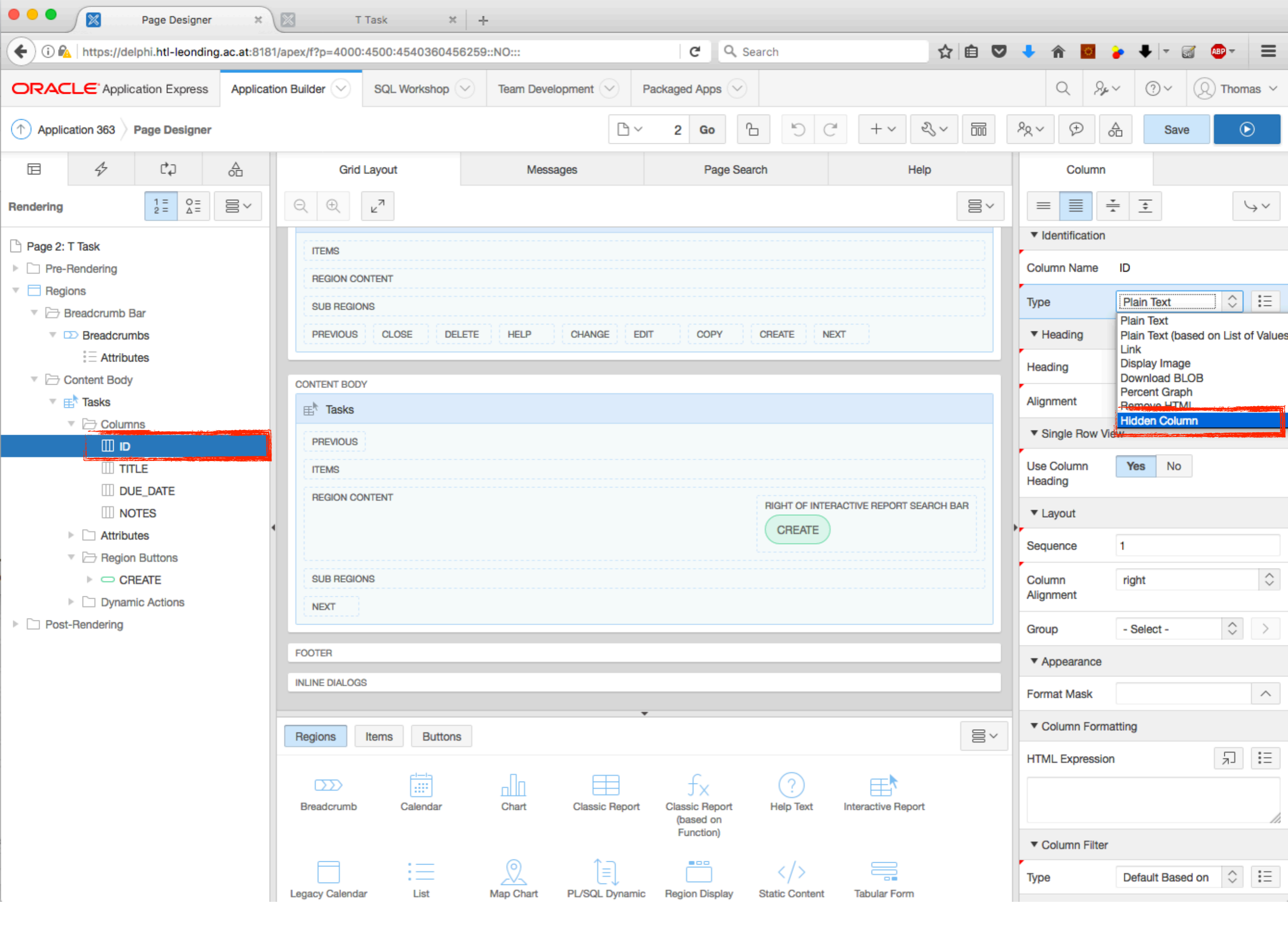
Template: Interactive Report

Template Options: Use Template Defaults

CSS Classes

Icon CSS Classes

Item Display: Above Content



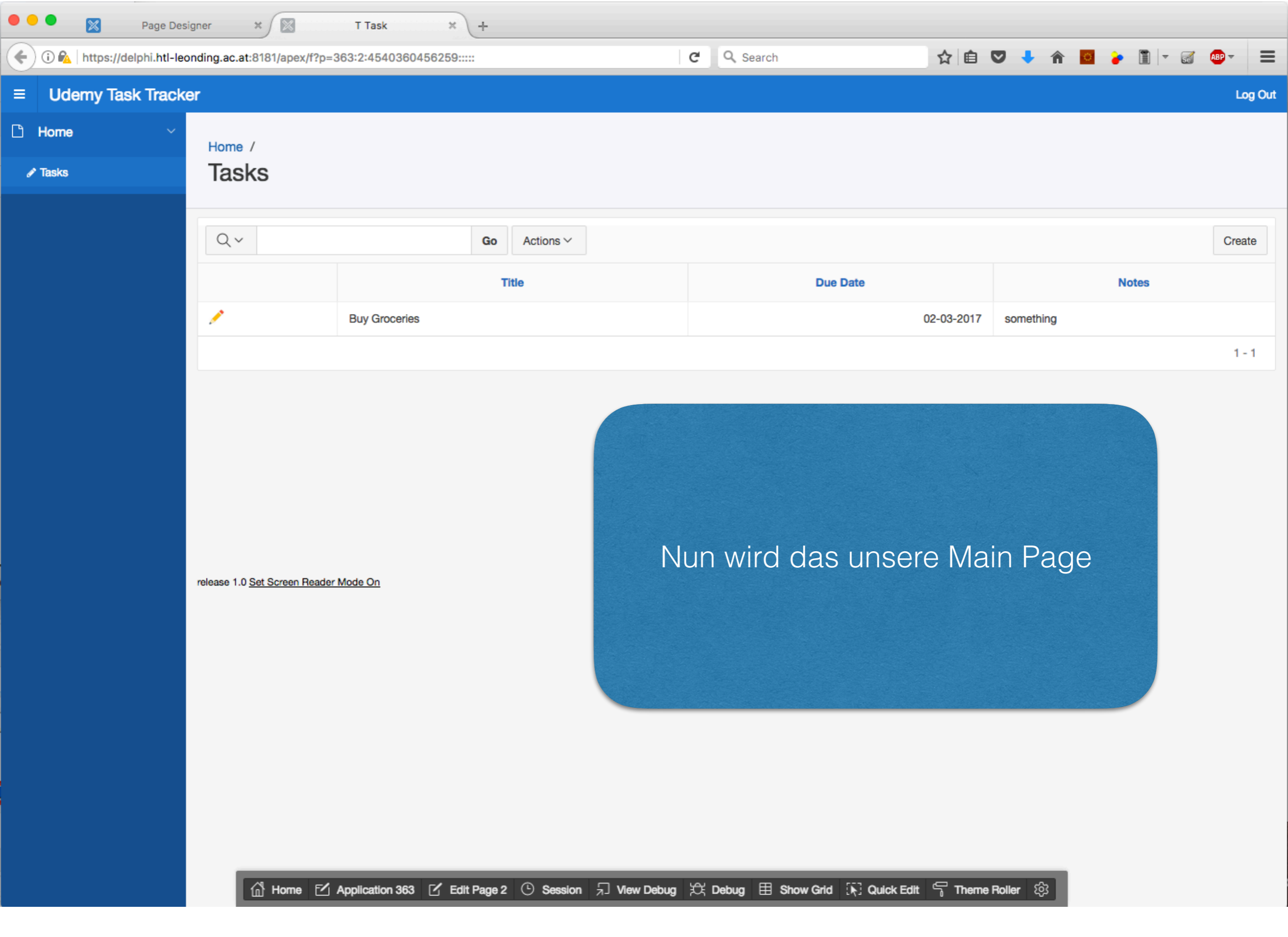
Rendering 1 2

Page 2: T Task Pre-Rendering Regions Breadcrumb Bar Breadcrumbs Attributes Content Body Tasks Columns ID TITLE DUE\_DATE NOTES Attributes Region Buttons CREATE Dynamic Actions Post-Rendering

Grid Layout Messages Page Search Help ITEMS REGION CONTENT SUB REGIONS PREVIOUS CLOSE DELETE HELP CHANGE EDIT COPY CREATE NEXT CONTENT BODY Tasks PREVIOUS ITEMS REGION CONTENT RIGHT OF INTERACTIVE REPORT SEARCH BAR CREATE SUB REGIONS NEXT FOOTER INLINE DIALOGS

Column Identification Column Name ID Type Plain Text Plain Text (based on List of Values) Link Display Image Download BLOB Percent Graph Remove HTML Hidden Column Single Row View Use Column Heading Yes No Layout Sequence 1 Column Alignment right Group - Select - Appearance Format Mask Column Formatting HTML Expression Column Filter Type Default Based on

Regions Items Buttons Breadcrumb Calendar Chart Classic Report Classic Report (based on Function) Help Text Interactive Report Legacy Calendar List Map Chart PL/SQL Dynamic Region Display Static Content Tabular Form



Home / Tasks

	Title	Due Date	Notes
	Buy Groceries	02-03-2017	something

1 - 1

Nun wird das unsere Main Page

release 1.0 [Set Screen Reader Mode On](#)



Application Builder T Task

https://delphi.htl-leonding.ac.at:8181/apex/f?p=4000:1:4540360456259::NO:RP:FB\_FLOW\_ID,F4000,P1\_FLO Search

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps Thomas

Application 363

Application 363 - Udemy Task Tracker **Edit Application Properties** Tasks

- Run Application
- Supporting Objects
- Shared Components
- Utilities
- Export / Import

2. T Task  
3. T Task  
101. Login Page  
1. Home

1 - Home 2 - T Task 3 - T Task 101 - Login Page

1 - 4

stuetz ws\_stuetz en Copyright © 1999, 2016, Oracle. All rights reserved. Application Express 5.0.4.00.12

Oracle Application Express interface showing the configuration for Application 363. The browser address bar shows the URL: [https://delphi.htl-leonding.ac.at:8181/apex/f?p=4000:197:4540360456259::NO:197:FB\\_FLOW\\_ID:363&succe](https://delphi.htl-leonding.ac.at:8181/apex/f?p=4000:197:4540360456259::NO:197:FB_FLOW_ID:363&succe). The user is logged in as Thomas.

The breadcrumb navigation is: Application 363 > User Interfaces. A notification at the top states: "Application 363 processed." The "User Interface" tab is selected and highlighted with a red box.



### Application 363

Buttons: Cancel, Apply Changes

Navigation tabs: Show All, User Interfaces, General Properties, Logo, User Interface Detection

#### User Interfaces

Buttons: Add User Interface >

Name	Type	Default	Auto Detect	Global Page	Theme	Theme Style
 Desktop		✓			Universal Theme - 42	Vita

#### General Properties

Static File Prefix:  ?

Image Prefix:  ?

Media Type:  ?

#### Logo

Logo Type:  Image ?  Text

Logo:  ?

Logo Attributes:  ^ ?

#### User Interface Detection

CSS File URLs:  ?

Oracle Application Express interface showing 'User Interface Details' for Application 363. The 'Identification' section includes fields for Application (363), User Interface Type (Desktop), Display Name (Desktop), and Sequence (10). The 'Attributes' section includes fields for Auto Detect (No), Default (Yes), Home URL (f?p=&APP\_ID.:1:&SESSION.), Login URL (f?p=&APP\_ID.:LOGIN\_DESKTOP:&SESSION.), Theme (Universal Theme), Theme Style (Vita), and Global Page. The 'Navigation Menu' section includes fields for Navigation Menu List (Desktop Navigation Menu) and Position (Side). The 'Apply Changes' button is highlighted in red. A blue callout box points to the Home URL field with the text 'Ändern der Startseite von 1 auf 2'.

Ändern der Startseite  
von 1 auf 2

# Neue Startseite



Run Application

The screenshot shows a web browser window with the following details:

- Browser tab: T Task
- Address bar: <https://delphi.htl-leonding.ac.at:8181/apex/f?p=363:2:4540360456259:.....>
- Page Title: Udemy Task Tracker
- Navigation Menu: Home (selected), Tasks
- Breadcrumbs: Home / Tasks
- Search Bar: Search icon, input field, Go button, Actions dropdown
- Table:

	Title	
	Buy Groceries	

Aufgabe

# Löschen des Home Items

Udemy Task Tracker Log Out

Home / Tasks

Search

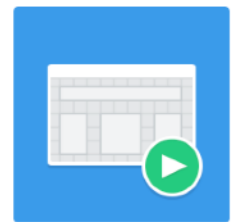
	Title	Due Date	Notes
	Groceries	02-03-2017	something

1 - 1

release 1.0 [Set Screen Reader Mode On](#)

Home Application 363 Edit Page 2 Session View Debug Debug Show Grid Quick Edit Theme Roller

Wir wollen nun diesen Eintrag aus der Liste löschen



Run Application



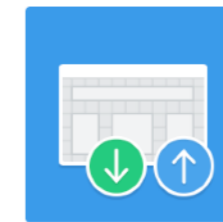
Supporting Objects



Shared Components



Utilities



Export / Import

- Tasks
- Delete this Application >
- Copy this Application >
- Recently Edited Pages
- 2. T Task
- 3. T Task
- 101. Login Page
- 1. Home



1 - Home



2 - T Task



3 - T Task



101 - Login Page

<p><b>Application Logic</b></p> <ul style="list-style-type: none"> <li>Application Definition Attributes</li> <li>Application Items</li> <li>Application Processes</li> <li>Application Computations</li> </ul>	<p><b>Security</b></p> <ul style="list-style-type: none"> <li>Security Attributes</li> <li>Authentication Schemes</li> <li>Authorization Schemes</li> <li>Session State Protection</li> <li>Build Options</li> </ul>	<p><b>Other Components</b></p> <ul style="list-style-type: none"> <li>List of Values</li> <li>Plug-ins</li> <li>Component Settings</li> <li>Shortcuts</li> </ul>	<p><b>Tasks</b></p> <ul style="list-style-type: none"> <li>Export Application Components</li> <li>Manage Supporting Objects</li> <li>Edit Application Comment</li> <li>Developer Comments</li> </ul>
<p><b>Navigation</b></p> <ul style="list-style-type: none"> <li><b>Lists</b></li> <li>Navigation Menu</li> <li>Breadcrumbs</li> <li>Navigation Bar List</li> </ul>	<p><b>User Interface</b></p> <ul style="list-style-type: none"> <li>User Interface Attributes</li> <li>Themes</li> <li>Templates</li> </ul>	<p><b>Files</b></p> <ul style="list-style-type: none"> <li>Static Application Files</li> <li>Static Workspace Files</li> </ul>	
<p><b>Data References</b></p>	<p><b>Reports</b></p>	<p><b>Globalization</b></p>	

Name	Type	Entries	References	Entries Updated	List Updated	Navigation Bar	Navigation Menu
Desktop Navigation Bar	Static	1	0	-	-	Yes	No
Desktop Navigation Menu	Static	2	0	9 days ago	9 days ago	No	Yes

**Lists**

A List is a template driven, shared collection of links. Use Lists to add navigation to your application.

**Recently Edited**

Desktop Navigation Menu

1 - 2



Sequence	Name	Parent Entry	Target	Conditional	Updated	Level	Authorization Scheme	Copy
10	Home	-	f?p=&APP_ID.:1:&APP_SESSION.::&DEBUG.:	-	-	1	-	
20	Tasks	-	f?p=&APP_ID.:2:&SESSION.::&DEBUG.::::	-	9 days ago	1	-	

1 - 2

List Entries

Each list may contain any number of list entries. Edit the List to set the list name and list template.

Tasks

- Add this list to the current page >
- Copy List >
- Copy List Entries from one List to Another >
- Reparent List Entries within this List >
- Manage Orphaned List Entries >
- Resequence List Entries >

List Entry [Cancel] **Delete** [Apply Changes]

Show All [Entry] [Target] [Current List Entry] [Conditions] [Authorization] [Configuration] [Click Counting] [User Defined Att...]

Entry

List: Desktop Navigation Menu

Parent List Entry: - No Parent List Item -

Sequence: 10

Image/Class: [ ]

Attributes: [ ]

Alt Attribute: [ ]

\* List Entry Label: Home

Target

Target type: Page in this Application

List Entry

Define the list entry. Each entry is typically a link to page in this application or a URL.

Tasks

[Change Parent List](#)

List Entries

- 10Home
- 20Tasks

Page Items

No Page Items found.

# List Entry

Cancel Delete Apply Changes

- Show All
- Entry
- Target
- Current List Entry
- Conditions
- Authorization
- Configuration
- Click Counting
- User Defined Att...

## Entry

List: Desktop Navigation M

Parent List Entry: - No Parent List Item -

Sequence: 10

Image/Class: ^ ?

Attributes: ^ ?

Alt Attribute: ?

\* List Entry Label: Home

Would you like to perform this delete action?

Cancel OK

### List Entry

Define the list entry. Each entry is typically a link to page in this application or a URL.

### Tasks

[Change Parent List](#)

### List Entries

- 10Home
- 20Tasks

### Page Items

No Page Items found.

## Target

Target type: Page in this Application

✓ Action processed.

Lists **List Details** Unused Conditional Entries Utilization History

List Desktop Navigation Menu

Sequence	Name	Parent Entry	Target	Conditional	Updated	Level	Authorization Scheme	Copy
20	Tasks	-	f?p=&APP_ID.:2:&SESSION.::&DEBUG.::::	-	9 days ago	1	-	

1 - 1

**List Entries**

Each list may contain any number of list entries. Edit the List to set the list name and list template.

**Tasks**

- Add this list to the current page >
- Copy List >
- Copy List Entries from one List to Another >
- Reparent List Entries within this List >
- Manage Orphaned List Entries >
- Resequence List Entries >

Tasks

- Delete this Application >
- Copy this Application >

Recently Edited Pages

- 2. T Task
- 3. T Task
- 101. Login Page
- 1. Home



Run Application



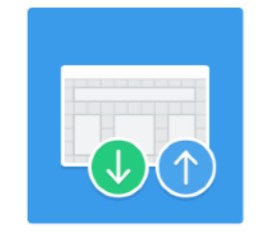
Supporting Objects



Shared Components



Utilities



Export / Import



1 - Home



2 - T Task




3 - T Task



101 - Login Page

Home /  
Tasks

Der Eintrag wurde entfernt

	Title	Due Date	Notes
	Buy Groceries	02-03-2017	something

1 - 1

release 1.0 [Set Screen Reader Mode On](#)

Home / Ta T Task

?

?

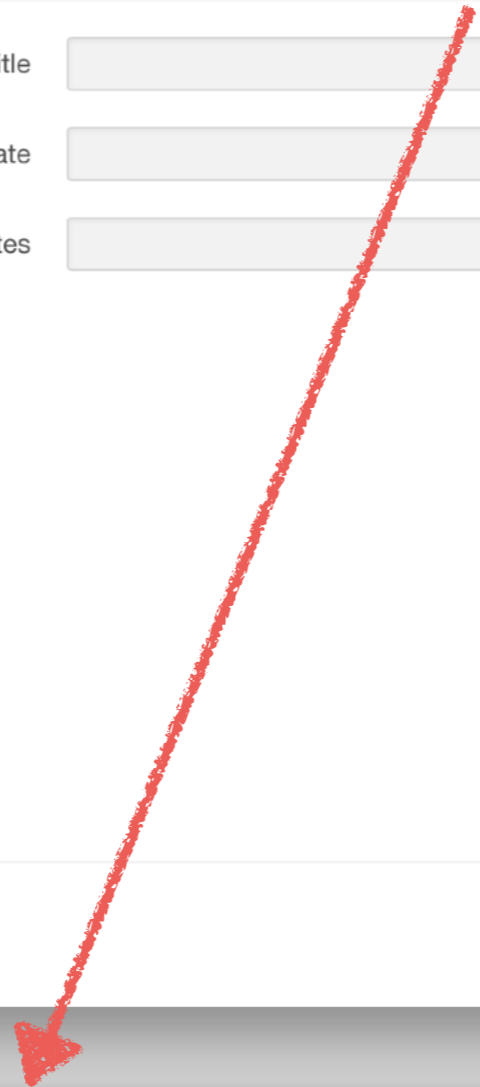
?

Notes

something

1 - 1

Problem: Diese Überschrift muss geändert werden



Rendering 1= 2= O= Δ=

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - </> Edit T\_TASK**
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
    - Dialog Footer
      - Buttons
        - Attributes
        - Region Buttons
          - CANCEL
          - DELETE
          - SAVE
          - CREATE

Grid Layout Messages Page Search Help

</> Edit T\_TASK

PREVIOUS

ITEMS

- P3\_TITLE
- P3\_DUE\_DATE
- P3\_NOTES

REGION CONTENT

SUB REGIONS

Regions Items Buttons

Breadcrumb Calendar Chart Classic Report Classic Report (based on Function) Help Text Interactive Report Legacy Calendar List Map Chart

Region

Identification

Title Edit T\_TASK

Type Static Content

Source

Sequence 10

Parent Region - Select -

Position Content Body

Appearance

Template Blank with Attrib

Template Options Use Template Defaults

CSS Classes

Edit Task Details



Rendering

1= 2= O= Δ= ≡

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit Task Details
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
    - Dialog Footer
      - Buttons
        - Attributes
        - Region Buttons
          - CANCEL
          - DELETE
          - SAVE
          - CREATE

Grid Layout Messages Page Search Help

T Task

DIALOG HEADER

CONTENT BODY

</> Edit Task Details

PREVIOUS

ITEMS

P3\_TITLE

P3\_DUE\_DATE

P3\_NOTES

Regions Items Buttons

Breadcrumb Calendar Chart Classic Report Classic Report (based on Function) Help Text Interactive Report Legacy Calendar List Map Chart

Page

≡ ≡ ≡ ≡ ↶

Identification

Name T Task

Page Alias

Title T Task

Page Group - Select -

Appearance

User Interface

Options

CSS Classes

Media Type

Dialog

Width

Task Details

✓ Changes saved

3 Go [Icons: Undo, Redo, Refresh, Save, Run]

Rendering [Icons: Refresh, Undo, Redo]

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit Task Details
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
  - Dialog Footer
    - Buttons
      - Attributes
      - Region Buttons
        - CANCEL
        - DELETE
        - SAVE
        - CREATE

Grid Layout Messages Page Search Help

T Task

DIALOG HEADER

CONTENT BODY

</> Edit Task Details

PREVIOUS

ITEMS

P3\_TITLE

P3\_DUE\_DATE

P3\_NOTES

Regions Items Buttons

Breadcrumb Calendar Chart Classic Report Classic Report (based on Function) Help Text Interactive Report Legacy Calendar List Map Chart

Page

Identification

Name: T Task

Page Alias:

Title: Task Details

Page Group: - Select -

Appearance

User Interface: Desktop

Page Mode: Modal Dialog

Dialog Template: Theme Default

Template Options: Use Template Defaults

CSS Classes:

Media Type:

Dialog

Width:

✓ Changes saved. Dialog pages can not be run directly from Page Designer. Review this page by running a page that launches this dialog.

Rendering


1 = 2 = O = A =

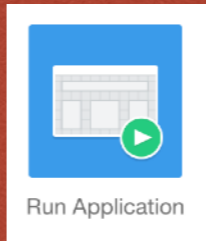
Grid Layout Messages Page Search Help

Search icons

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit Task Details
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
  - Dialog Footer
    - Buttons
      - Attributes
      - Region Buttons
        - CANCEL
        - DELETE
        - SAVE

Würde man nun versuchen, dieses modale Fenster zu starten (  ), erscheint obenstehende Fehlermeldung. Man muss daher das übergeordnete Fenster laufen lassen:



Page

Identification

Name: T Task

Page Alias:

Title: Task Details

Page Group: - Select -

Appearance

User Interface: Desktop

Page Mode: Modal Dialog

Dialog Template: Theme Default

Template Options: Use Template Defaults

CSS Classes:

Media Type:

Dialog

Breadcrumb

Calendar

Chart

Classic Report

Classic Report (based on Function)



Home /

### Task Details

Title  ?

Due Date  ?

Notes  ?


# Zusätzliches Feld

Udemy Task Tracker Log Out

Tasks

Home / Tasks

Q ▾  Go Actions ▾ Create

	Title	Due Date	Notes
	Buy Groceries	02-03-2017	something

1 - 1

release 1.0 [Set Screen Reader Mode On](#)

Dem Formular (und der Tabelle) sollen nun ein neues Feld hinzugefügt werden - ein Priority-Feld

Home Application 363 Edit Page 2 Session View Debug Debug Show Grid Quick Edit Theme Roller



Application Builder



SQL Workshop

- Object Browser
- SQL Commands
- SQL Scripts
- Utilities
- RESTful Services



Team Development

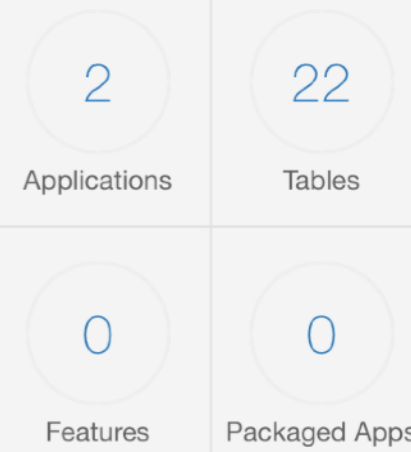


Packaged Apps

About

Application Express is a rapid Web application development tool that lets you share data and create applications. Using only a Web browser and limited programming experience, you can develop and deploy applications that are fast and secure.

Dashboard



Available Updates

Oracle APEX 5.1.0 is available [\[More Information\]](#)

Accessibility Mode

Top Applications



Top Users



News and Messages

Tables  
TASK  
T\_TASK

### T\_TASK

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table

Column Name	Data Type	Nullable	Default	Primary Key
ID	NUMBER	No	-	1
TITLE	VARCHAR2(100)	No	-	-
DUE_DATE	DATE	No	-	-
NOTES	VARCHAR2(4000)	Yes	-	-

[Download](#)

Object Browser

Schema: STUETZ

Tables

TASK

T\_TASK

T\_TASK

Schema: STUETZ

Table: T\_TASK

\* Add Column: PRIORITY

Preserve Case

Type: VARCHAR2

Length: 20

Precision:

Scale:

Nullable: NULL (do not require a value)

Cancel

Next >

Existing Columns



Tables

TASK

T\_TASK

### T\_TASK

Confirm your request

Schema: **STUETZ**

Object: **T\_TASK**

Action: **Add Column PRIORITY**

< Cancel

Finish

▶ SQL

Tables
BNK_BESTANDSKONTO
BNK_BUCHUNG
BNK_KONTO
BNK_KONTOTYP
BNK_VIEW
BNK_ZAHLUNG
BONUS
CUSTOMER
DEPT
DUMMY
EMP
ITEM
ORD
PRICE
PRODUCT
SALGRADE
SW_CUSTOMER
SW_ITEM
SW_ORDERING

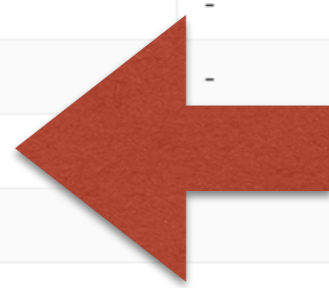
### T\_TASK

Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL

Add Column Modify Column Rename Column Drop Column Rename Copy Drop Truncate Create Lookup Table

Column Name	Data Type	Nullable	Default	Primary Key
ID	NUMBER	No	-	1
TITLE	VARCHAR2(100)	No	-	-
DUE_DATE	DATE	No	-	-
NOTES	VARCHAR2(4000)	Yes	-	-
PRIORITY	VARCHAR2(20)	Yes	-	-

Download



Nun müssen wir dieses Feld noch in die Formulare (Task-Liste und Task-Details) einfügen

# Page 2

The screenshot displays the Oracle APEX Page Designer interface for 'Application 363' in 'Page Designer' mode. The main workspace shows a 'Tasks' region with a grid layout containing 'PREVIOUS', 'ITEMS', 'REGION CONTENT', 'RIGHT OF INTERACTIVE REPORT SEARCH BAR' (with a 'CREATE' button), 'SUB REGIONS', and 'NEXT'. The left sidebar shows the 'Content Body' containing the 'Tasks' region. The right sidebar shows the configuration for the 'Tasks' region, including its title, type, source, and SQL query.

**Rendering**

- 1 = 2 =
- o =
- ≡ v

**Page 2: T Task**

- Pre-Rendering
- Regions
  - Breadcrumb Bar
    - Breadcrumbs
      - Attributes
  - Content Body
    - Tasks**
      - Columns
      - Attributes
      - Region Buttons
        - CREATE
      - Dynamic Actions
  - Post-Rendering

**Grid Layout**

- Messages
- Page Search
- Help

**Region**

- Identification
  - Title: Tasks
  - Type: Interactive Repo
- Source
  - SQL Query: 

```
select "ID", "TITLE", "DUE_DATE", "NOTES" from "T_TASK"
```
- Page Items to Submit
- Layout
  - Sequence: 10
  - Parent Region: - Select -
  - Position: Content Body
- Appearance
  - Template: Interactive Repo

**Regions** | **Items** | **Buttons**

- Breadcrumb
- Calendar
- Chart
- Classic Report
- Classic Report (based on Function)
- Help Text
- Interactive Report
- Legacy Calendar
- List
- Map Chart

### Code Editor - SQL Query

↑ ↺ 🔍 ↔ ⬆️ A.. ✓ ⚙️

```
1 select
2 "ID",
3 "TITLE",
4 "DUE_DATE",
5 "NOTES"
6 from "T_TASK"
7
```

Cancel OK

Application 363

Rendering

- Page 2: T Task
  - Pre-Rendering
  - Regions
    - Breadcrumb Bar
      - Breadcrumbs
        - Attributes
      - Content Body
        - Tasks
          - Columns
          - Attributes
          - Region B
            - CREA
          - Dynamic
  - Post-Rendering

Schema  
https://delphi.htl-leonding.ac.at:8181/apex/f?p=4500:1002:2588183426929:::1002:P1002\_F  
TURN\_INT0,P1002\_POPUP,P1002\_SCHEMA:ed  
orDlg-codeEditor,1,STUETZ:

Cancel

Run

Return

## Warning

Visual Query Builder is not able to open the current query.  
Click Create to replace your current query with a new one, or click Return to keep your current query.

Leider kann man unsere Query nicht visuell editieren, daher kehren wir zurück und fügen die Spalte textuell ein.

Return

Create

on Group By Delete

```
Code Editor - SQL Query  
1 select  
2 "ID",  
3 "TITLE",  
4 "DUE_DATE",  
5 "NOTES",  
6 PRIORITY  
7 from "T_TASK"  
8
```

Man könnte die Spalte PRIORITY auch mit doppelten Hochkomma einfügen. Hier wird dies vermieden.  
Diskutieren Sie, was die doppelten Hochkommas bedeuten!  
Können diese Hochkommas Probleme verursachen?

Application 363

Rendering

Page 2: T Task

- Pre-Rendering
- Regions
  - Breadcrumb Ba
    - Breadcrumb
      - Attribute
    - Content Body
      - Tasks
        - Columns
          - ID
          - TITL
          - DUE
          - NOT
          - PRIC
        - Attribute
        - Region E
          - CRE
        - Dynamic
- Post-Rendering

Save

Active Repo

Appearance

Template

Interactive Rep

Rendering

1=2

Grid Layout Messages Page Search Help

Column

Page 2: T Task

- Pre-Rendering
- Regions
  - Breadcrumb Bar
    - Breadcrumbs
      - Attributes
  - Content Body
    - Tasks
      - Columns
        - ID
        - TITLE
        - DUE\_DATE
        - NOTES
        - PRIORITY**
      - Attributes
      - Region Buttons
        - CREATE
      - Dynamic Actions
  - Post-Rendering

Tasks

PREVIOUS

ITEMS

REGION CONTENT

RIGHT OF INTERACTIVE REPORT SEARCH BAR

CREATE

SUB REGIONS

NEXT

FOOTER

▼ Identification

Column Name PRIORITY

Type Plain Text

▼ Heading

Heading Priority

Alignment center

▼ Single Row View

Use Column Heading Yes No

▼ Layout

Sequence 14

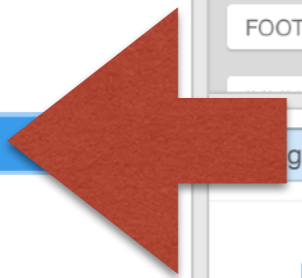
Column Alignment left

Group - Select -

▼ Appearance

Format Mask

▼ Column Formatting




Regions Items Buttons

Breadcrumb Calendar Chart Classic Report Classic Report (based on Function)

Help Text Interactive Report Legacy Calendar List Map Chart

Home /  
Tasks

	Title	Due Date	Notes	Priority
	Buy Groceries	02-03-2017	something	-

1 - 1



Task Details

Title: Buy Groceries

Due Date: 02-03-2017

Notes: something

Delete Cancel Save

In der obigen Liste ist die spalte PRIORITY bereits verfügbar, nun muß sie auch noch in den "TaskDetails" eingetragen werden. —> Edit Page 3



Rendering 1 2 3 4

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit Task Details
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
  - Dialog Footer
    - Buttons
      - Attributes
      - Region Buttons
        - CANCEL
        - DELETE
        - SAVE
        - CREATE
  - Post-Rendering

Grid Layout Messages Page Search Help

T Task

DIALOG HEADER

CONTENT BODY

</> Edit Task Details

PREVIOUS

ITEMS

- P3\_TITLE
- P3\_DUE\_DATE
- P3\_NOTES

Regions Items Buttons

Popup LOV Radio Group Rich Text Editor Select List Shuttle

Wir ziehen nun eine "Select List" in den CONTENT BODY

Select List

Displays an item with a built-in list of values selector. When the end user clicks the item, the list of supported values displays directly inline with the current item.

Select List is best suited for relatively small, discrete lists. End-Users can very quickly select a value from the list without needing to change focus to a popup dialog. For large lists *Popup LOV* is often better suited.

No components currently selected.

Rendering 1= 2=

- Page 3: T Task
  - Pre-Rendering
  - Regions
    - Dialog Header
    - Content Body
      - Edit Task Details
        - Attributes
        - Items
          - P3\_ID
          - P3\_TITLE
          - P3\_DUE\_DATE
          - P3\_NOTES
    - Dialog Footer
      - Buttons
        - Attributes
        - Region Buttons
          - CANCEL
          - DELETE
          - SAVE
          - CREATE
    - Post-Rendering

Grid Layout Messages Page Search Help

</> Edit Task Details

PREVIOUS

ITEMS

P3\_TITLE

P3\_DUE\_DATE

P3\_NOTES

Select List

REGION CONTENT

SUB REGIONS

Regions Items Buttons

File Browse... Hidden List Manager Number Field Password

Popup LOV Radio Group Rich Text Editor Select List Shuttle

Property Editor

No components currently selected.

Grid Layout Messages 2 Page

Page Item → P3\_NEW → Source → Database Column  
Is required!

Page Item → P3\_NEW → List of Values → Type  
Is required!

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363 Page Designer

Rendering 1= 2=

Grid Layout Messages 2 Page Search Help

Page Item Identification Name P3\_NEW Type Select List

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit Task Details
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
        - P3\_NEW
  - Dialog Footer
    - Buttons
      - Region Buttons
        - CANCEL
        - DELETE
        - SAVE
        - CREATE

PREVIOUS

ITEMS

P3\_TITLE

P3\_DUE\_DATE

P3\_NOTES

P3\_NEW

Label: New

Type: Select List

Start New Row: Yes

Source Type Database Column Database Column: PRIORITY

Used: Always replacing any e...

Column: Automatic

Column Span: Automatic

Popup LOV Radio Group Rich Text Editor Select List Shuttle

P3\_PRIORITY  
Bei korrekter Benennung des Items wird automatisch die korrekte Tabellenspalte eingetragen

Es gibt nun nur noch eine Fehlermeldung

Grid Layout Messages 1 Page Search Help

Page Item → P3\_NEW → List of Values → Type  
Is required!

ORACLE Application Express Application Builder SQL Workshop Test Development Packaged Apps

Application 363 Page Designer Save

Rendering

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit Task Details
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
        - P3\_PRIORITY**
  - Dialog Footer
    - Buttons
    - Region Buttons
      - CANCEL
      - DELETE
      - SAVE
      - CREATE

Grid Layout Messages 1 Page Search Help

P3\_DUE\_DATE

P3\_NOTES

**P3\_PRIORITY**

REGION CONTENT

SUB REGIONS

NEXT

DIALOG FOOTER

Buttons

Regions Items Buttons

File Browse... Hidden List Manager Number Field Password

Popup LOV Radio Group Rich Text Editor Select List Shuttle

Page Item

List of Values

- Type** - Select -

Advanced

CSS Classes

Custom Attributes

Option HTML Attributes

Pre Text

Post Text

Source

Type Database Column

Database Column PRIORITY

Static Values

### Task Details

Title  ?

Due Date  ?

Notes  ?

Priority  ?

- Display1
- Display2

Create

Priority
-
1 - 1

Home /  
Tasks

<input type="text" value="Q"/>	<input type="button" value="Go"/>	<input type="button" value="Actions"/>	<input type="button" value="Create"/>	
	Title	Due Date	Notes	Priority
	Buy Groceries	02-03-2017	something	Return1

Der Display-Wert wird angezeigt, der Return-Wert zurückgegeben.

release 1.0 [Set Screen Reader Mode On](#)

Nun ändern wir die Liste und verwenden sinnvolle Werte

Rendering 1 2

Page 3: T Task  
Pre-Rendering  
Regions  
Dialog Header  
Content Body  
Edit Task Details  
Attributes  
Items  
P3\_ID  
P3\_TITLE  
P3\_DUE\_DATE  
P3\_NOTES  
**P3\_PRIORITY**

Grid Layout Messages Page Search Help

</> Edit Task Details

PREVIOUS

ITEMS

P3\_TITLE

P3\_DUE\_DATE

P3\_NOTES

**P3\_PRIORITY**

REGION CONTENT

SUB\_REGIONS

Regions Items Buttons

Checkbox Color Picker Date Picker Display Image Display Only

File Browse... Hidden List Manager Number Field Password

Page Item

Format Mask

Height 1 lines

Validation

Value Required Yes No

List of Values

Type Static Values

Static Values  
STATIC:Critical;CRITICAL,High;HIGH,Low;LOW

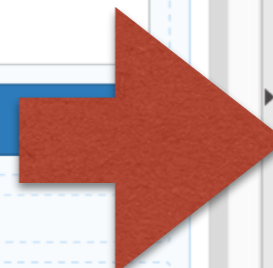
Display Extra Values Yes No

Display Null Value Yes No

Null Display Value

Null Return Value

Cascading LOV Parent



### Task Details



Title  ?

Due Date  ?

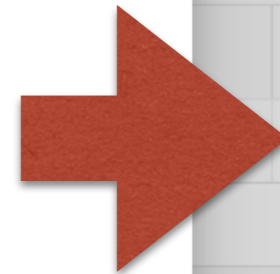
Notes  ?

Priority

Delete

Cancel

Save



Create

Priority

CRITICAL

1 - 1



Home / Tasks

Q Go Actions Create

	Title	Due Date	Notes	Priority
	Buy Groceries	02-03-2017	something	CRITICAL
	Mit Hund Gassi gehen	09-03-2017	Leine nicht vergessen	HIGH

1 - 2

T\_TASK +

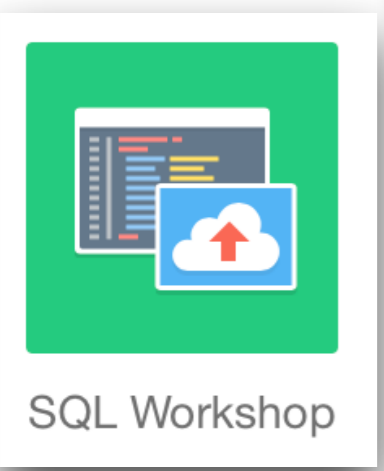
Table Data Indexes Model Constraints Grants Statistics UI Defaults Triggers Dependencies SQL

Query Count Rows Insert Row

Data

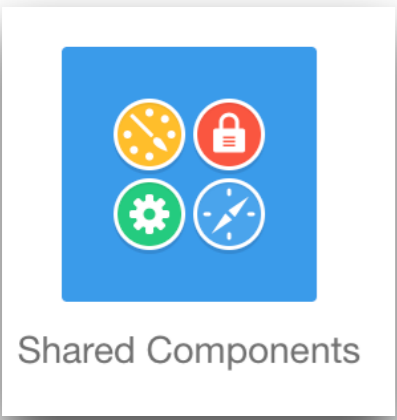
EDIT	ID	TITLE	DUE_DATE	NOTES	PRIORITY
	1	Buy Groceries	03/02/2017	something	CRITICAL
	21	Mit Hund Gassi gehen	03/09/2017	Leine nicht vergessen	HIGH

Download



# LOV - List of Values

The screenshot shows the Oracle APEX Page Designer interface. The top navigation bar includes 'ORACLE Application Express', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Packaged Apps'. The main workspace is titled 'Page Designer' and shows a page layout with regions like 'PAGE HEADER', 'PAGE NAVIGATION', 'BREADCRUMB BAR', and 'ITEMS'. A column named 'PRIORITY' is selected in the 'Columns' list on the left. The 'Properties' panel on the right shows the 'Type' dropdown menu open, with 'Plain Text (based on List of Values)' selected. A red banner at the bottom right contains the text: 'Nun benötigen wir noch eine List-of-Values'.



Application Logic	Security	Other Components	Tasks
<ul style="list-style-type: none"><li>Application Definition Attributes</li><li>Application Items</li><li>Application Processes</li><li>Application Computations</li></ul>	<ul style="list-style-type: none"><li>Security Attributes</li><li>Authentication Schemes</li><li>Authorization Schemes</li><li>Session State Protection</li><li>Build Options</li></ul>	<ul style="list-style-type: none"><li>List of Values</li><li>Plug-ins</li><li>Component Settings</li><li>Shortcuts</li></ul>	<ul style="list-style-type: none"><li>Export Application Components</li><li>Manage Supporting Objects</li><li>Edit Application Comment</li><li>Developer Comments</li></ul>
Navigation	User Interface	Files	
<ul style="list-style-type: none"><li>Lists</li><li>Navigation Menu</li><li>Breadcrumbs</li><li>Navigation Bar List</li></ul>	<ul style="list-style-type: none"><li>User Interface Attributes</li><li>Themes</li><li>Templates</li></ul>	<ul style="list-style-type: none"><li>Static Application Files</li><li>Static Workspace Files</li></ul>	
Data References	Reports	Globalization	

### Create List of Values

Static lists are based on predefined pairs of display and return values. Dynamic lists are based on a SQL query you write that selects values from a table.

\* Name

Type:  Static  Dynamic

< Cancel Next >

#### List of Values

A List of Values can be referenced by page items as well as report fields. It controls the values displayed and limits the user's selection. Lists of Values can be static (based on values you enter) or dynamic (based on a SQL query).

#### Recently Edited

No recently edited List of Values found.

Lists of Values Edit Null Text

## Create List of Values

✓ — ✓ — ●

**Query or Static Values**

the value that is returned to the Application Express engine. If you do not specify a **Return Value** then it is equal to the **Display Value**. You can display additional attributes including build option controls and item level conditional display by editing the List of Values.

List of Values Name: **LOV\_TASK\_PRIORITIES** ?

Sequence	Display Value	Return Value
1	<input type="text" value="Critical"/>	<input type="text" value="CRITICAL"/>
2	<input type="text" value="High"/>	<input type="text" value="HIGH"/>
3	<input type="text" value="Low"/>	<input type="text" value="LOW"/>
4	<input type="text"/>	<input type="text"/>

<
Cancel
Create List of Values

### List of Values

A List of Values can be referenced by page items as well as report fields. It controls the values displayed and limits the user's selection. Lists of Values can be static (based on values you enter) or dynamic (based on a SQL query).

### Recently Edited

No recently edited List of Values found.

# LOV in Page 2 eintragen

The screenshot displays the Oracle APEX Page Designer interface for 'Application 363' in 'Page Designer' mode. The main workspace shows a page layout with a 'BREADCRUMB BAR' containing a 'Breadcrumbs' region. The 'Columns' list on the left includes 'PRIORITY', which is currently selected. The right-hand 'Column' configuration panel is open, showing the following settings:

- Column Name:** PRIORITY
- Type:** Plain Text (basec) [Red box]
- List of Values:** LOV\_TASK\_PRIC [Red box]
- Heading:** Priority
- Alignment:** center
- Single Row View:** Use Column Heading: Yes
- Layout:** Sequence: 14, Column Alignment: left
- Group:** - Select -
- Link:** Target: No Link Defined

The 'Items' tab in the bottom toolbar is active, showing various widget options like Checkbox, Color Picker, Date Picker, Display Image, Display Only, File Browse..., Hidden, List Manager, Number Field, and Password.

# LOV in Page 3 eintragen

The screenshot displays the Oracle APEX Page Designer interface for 'Application 363' in 'Page Designer' mode. The main workspace shows a page layout with a 'P3\_PRIORITY' region selected. The right-hand 'Page Item' properties panel is open, showing the configuration for the selected item. The 'List of Values' section is highlighted with a red box, showing the following settings:

- Type: Shared Component
- List of Values: LOV\_TASK\_PRIC
- Display Extra Values: Yes
- Display Null Value: Yes
- Null Display Value: (empty)
- Null Return Value: (empty)
- Cascading LOV Parent Item(s): (empty)

The left-hand pane shows the page structure, including 'Page 3: T Task', 'Pre-Rendering', 'Regions', 'Dialog Header', 'Content Body', and 'Dialog Footer'. The 'Items' list under 'Edit Task Details' includes P3\_ID, P3\_TITLE, P3\_DUE\_DATE, P3\_NOTES, and P3\_PRIORITY (selected). The 'Buttons' list includes CANCEL, DELETE, SAVE, and CREATE. The bottom toolbar contains various widget options like Checkbox, Color Picker, Date Picker, Display Image, Display Only, File Browse..., Hidden, List Manager, Number Field, and Password.

# Ergebniskontrolle

Udemy Task Tracker Log Out

Tasks

Home / Task Details

Title: Buy Groceries

Due Date: 02-03-2017

Notes: something

Priority:  Critical  
 High  
 Low  
 Medium

Also in the LOV newly entered values are available

Nun werden die Display-Werte angezeigt

release

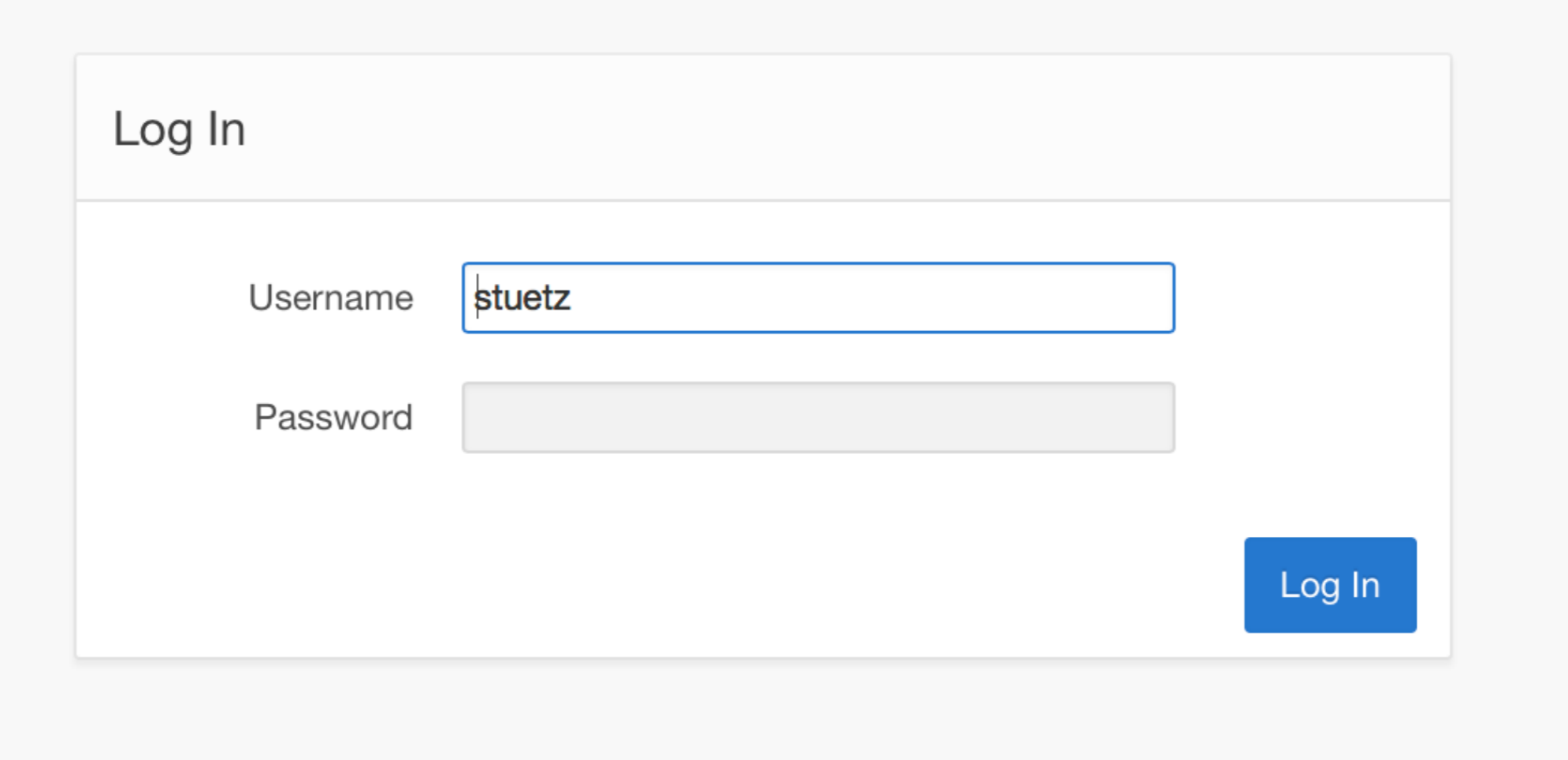
Delete Cancel Save

Priority
Critical
High
1 - 2

Home Application 363 Edit Page 3 Session View Debug Debug Show Grid Quick Edit Theme Roller



# Login Page überarbeiten



Log In

Username

Password

Rendering 1 2 3 4

Page 101: Login Page  
Pre-Rendering  
Regions  
Content Body  
Log In  
Attributes  
Items  
P101\_USERNAME  
P101\_PASSWORD  
Region Buttons  
LOGIN  
Post-Rendering

Grid Layout Messages Page Search Help

Login Page  
BODY HEADER  
CONTENT BODY  
</> Log In  
ITEMS  
P101\_USERNAME  
P101\_PASSWORD  
REGION CONTENT  
NEXT EDIT CREATE

Regions Items Buttons

Checkbox Color Picker Date Picker Display Image Display Only  
File Browse... Hidden List Manager Number Field Password

Region

Layout  
Sequence 10  
Parent Region - Select -  
Position Content Body

Appearance  
Template Login

Template Options Use Template Defaults

CSS Classes

Icon CSS Classes

Item Display Position Above Content

Grid

Start New Row Yes No

Column Automatic

## Log In

Username

Password

Rendering

1 = 2 = O = Δ =

Page 101: Login Page

- Pre-Rendering
- Regions
  - Content Body
    - Log In
      - Attributes
      - Items
        - P101\_USERNAME
        - P101\_PASSWORD
      - Region Buttons
        - LOGIN
    - Post-Rendering

### Pick Icon CSS Classes

Font Awesome Utilized

Category: Web Application

lock

Name	Preview
fa-clock-o	
fa-lock	
fa-unlock	
fa-unlock-alt	

Region

Layout

Sequence: 10

Parent Region: - Select -

Position: Content Body

Appearance

Template: Login

Template Options: Use Template Defaults

CSS Classes

Icon CSS Classes

Item Display Position: Above Content

Grid

Start New Row: Yes No

Column: Automatic



Log In

Username

A text input field with a blue border containing the text "stuetz".

Password

An empty password input field with a light gray background.A blue button with the text "Log In" in white.

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363 Page Designer 101 Go Save

Rendering

Page 101: Login Page

- Pre-Rendering
- Regions
  - Content Body
    - Log In
      - Attributes
      - Items
        - P101\_USERNAME**
        - P101\_PASSWORD
      - Region Buttons
        - LOGIN
- Post-Rendering

Grid Layout Messages Page Search Help

Login Page

BODY HEADER

CONTENT BODY

</> Log In

ITEMS

- P101\_USERNAME**
- P101\_PASSWORD

REGION CONTENT

Regions Items Buttons

Checkbox Color Picker Date Picker Display Image Display Only

File Browse... Hidden List Manager Number Field Password

Page Item

Subtype Text

Trim Spaces None

Submit when Enter pressed Yes No

Disabled Yes No

Layout

Sequence 10

Region Log In

Appearance

Template Optional

Template Options Use Template Defaults

CSS Classes **icon-login-username**

Format Mask

Width 40 characters

Value Placeholder

<http://dgielis.blogspot.co.at/2015/03/apex-50-pimping-login-page.html>

Rendering

1 = 2 =

Grid Layout Messages Page Search Help

Page 101: Login Page

- Pre-Rendering
- Regions
  - Content Body
    - Log In
      - Attributes
      - Items
        - P101\_USERNAME
        - P101\_PASSWORD
      - Region Buttons
      - LOGIN
    - Post-Rendering

Login Page

BODY HEADER

CONTENT BODY

</> Log In

ITEMS

- P101\_USERNAME
- P101\_PASSWORD

REGION CONTENT

Regions Items Buttons

Checkbox Color Picker Date Picker Display Image Display Only

File Browse... Hidden List Manager Number Field Password

Page Item

Submit when Enter pressed Yes No

Does not save state Yes No

Layout

Sequence 20

Region Log In

Appearance

Template Optional

Template Options Use Template Defaults

CSS Classes icon-login-password

Format Mask

Width 40 characters

Value Placeholder

Validation

Value Yes No

# Probelauf

Log In

Username

stuetz

Password

.....

Log In

Der Button könnte breiter sein



ORACLE Application Express

Application 363 Page Designer

Rendering

Page 101: Login Page

- Pre-Rendering
- Regions
  - Content Body
    - Log In
      - Attributes
      - Items
        - P101\_USERNAME
        - P101\_PASSWORD
      - Region Buttons
        - LOGIN
- Post-Rendering

### Template Options

Type	Normal
Style	Default
▼ Advanced	
Button Set	Default
Width	Stretch
Spacing Left	Default
Spacing Right	Default

Cancel OK

Save

Button

Layout

Sequence 30

Region Log In

Button Position Create

Appearance

Button Template Text

Hot Yes No

Template Options Use Template Defaults

CSS Classes

Icon CSS Classes

Behavior

Action Submit Page

Execute Validations Yes No




## Log In

Username

Password

Home



Application 363



Edit Page 101



Session



View Debug



Debug



Show Grid



Quick Edit



Theme Roller



# Validierung des Usernames

The screenshot displays the Oracle APEX Page Designer interface for configuring a login page. The main workspace shows a 'Log In' region with two items: 'P101\_USERNAME' and 'P101\_PASSWORD'. The 'P101\_USERNAME' item is selected, and its properties are visible in the right-hand 'Page Item' panel.

In the 'Page Item' panel, the 'Validation' section is expanded, and the 'Value Required' property is set to 'Yes'. The 'Maximum Length' is set to 100 characters. The 'Advanced' section is also visible, showing 'CSS Classes' and 'Custom Attributes' fields.

The 'Source' section at the bottom of the panel shows the HTML code for the validation icon:

```
<span class="t-Login-iconValidation a-Icon icon-check"></span>
```

The 'Save' button in the top toolbar is highlighted with a red box, indicating the configuration is being saved.

# Validierung des Passwords

The screenshot shows the Oracle APEX Page Designer interface for editing a page. The main workspace displays a 'Log In' region with a password field 'P101\_PASSWORD' highlighted in blue. The right-hand 'Page Item' properties panel is open, showing the configuration for the selected password field. The 'Value Required' property is set to 'Yes'. The 'Maximum Length' is set to 100 characters. In the 'Advanced' section, the 'Pre Text' field contains the HTML code: `<span class="t-Login-iconValidation a-Icon icon-check"></span>`. The 'Save' button in the top toolbar is highlighted with a red box. The 'Items' tab in the bottom toolbar is also active.

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363 Page Designer 101 Go Save

Rendering 1 2

Page 101: Login Page

- Pre-Rendering
- Regions
  - Content Body
    - Log In
      - Attributes
      - Items
        - P101\_USERNAME
        - P101\_PASSWORD
      - Region Buttons
        - LOGIN
- Post-Rendering

Grid Layout Messages Page Search Help

BODY HEADER

CONTENT BODY

</> Log In

ITEMS

- P101\_USERNAME
- P101\_PASSWORD

REGION CONTENT

NEXT EDIT CREATE LOGIN

Regions Items Buttons

Checkbox Color Picker Date Picker Display Image Display Only

File Browse... Hidden List Manager Number Field Password

Page Item

Value Required Yes No

Maximum Length 100 characters

Advanced

CSS Classes

Custom Attributes

Pre Text

Post Text

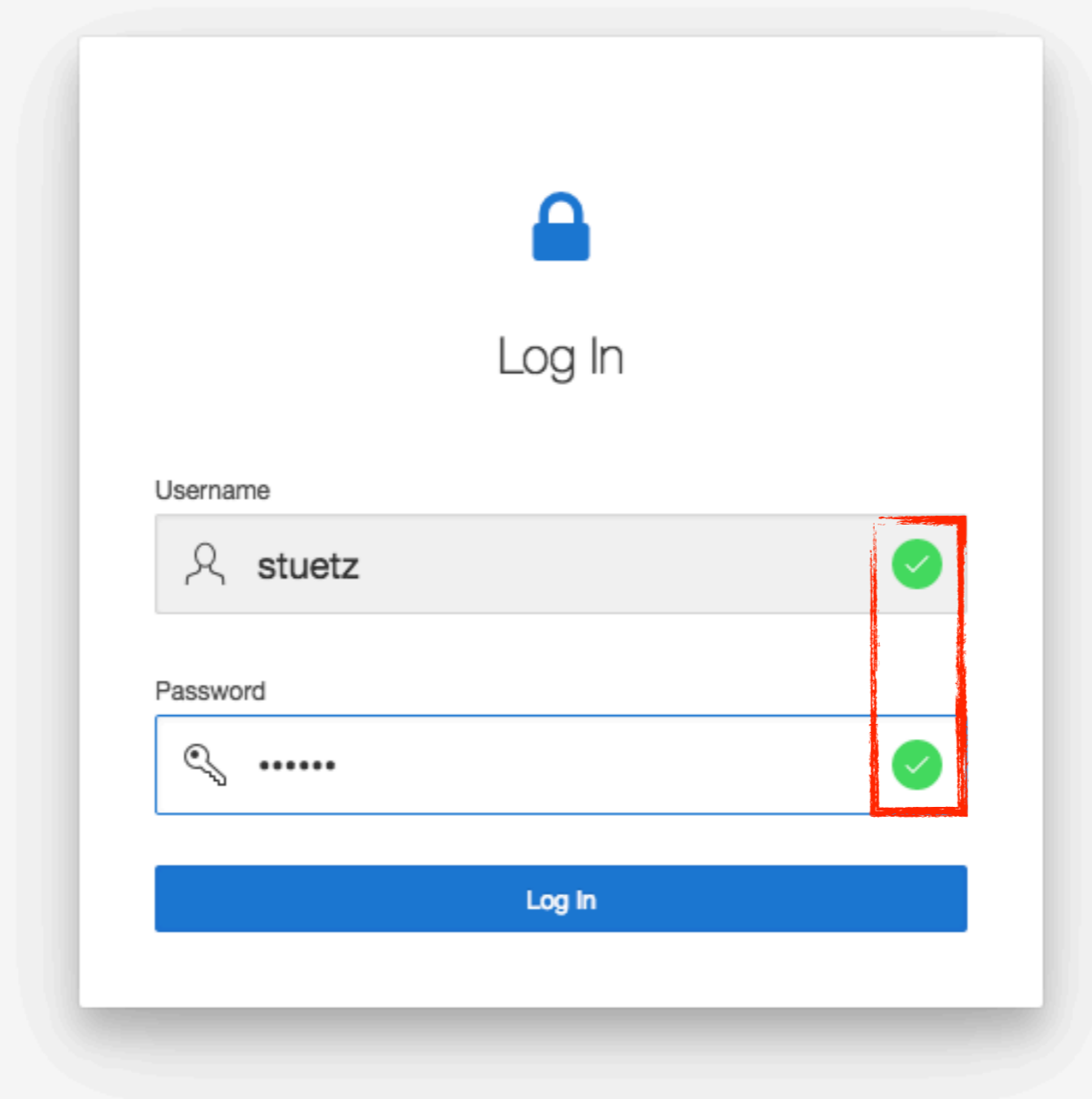
`<span class="t-Login-iconValidation a-Icon icon-check"></span>`

Source

Type Null

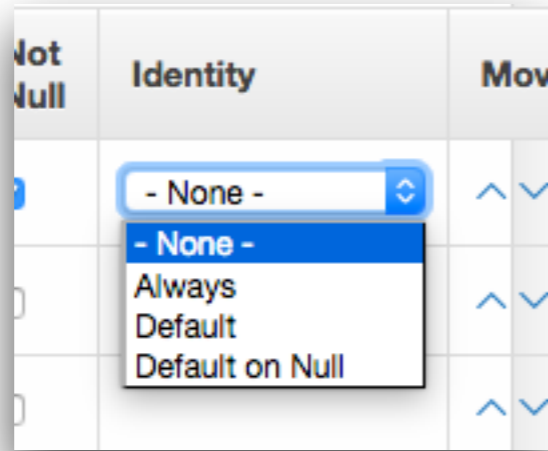
Used Only when current value i

# Probelauf



# Erstellen einer Tabelle

The screenshot displays the Oracle Application Express interface. The top navigation bar includes 'ORACLE Application Express', 'Application Builder', 'SQL Workshop' (highlighted with a red box), 'Team Development', and 'Packaged Apps'. The 'Object Browser' on the left shows a list of tables in the 'STUETZ' schema, including 'BNK\_ZAHLUNG', 'BONUS', 'CRYPTO', 'CUSTOMER', 'DEPT', 'DUMMY', 'EMP', 'ITEM', 'ORD', 'PRICE', 'PRODUCT', 'SALGRADE', 'SW\_CUSTOMER', 'SW\_ITEM', 'SW\_ORDERING', 'SW\_PRODUCT', 'T\_TASK', and 'VEHICLE'. The main workspace is empty, and a '+' button in the top right corner is highlighted with a red box. A dropdown menu is open, listing database objects: 'Table' (highlighted with a red box), 'View', 'Index', 'Sequence', 'Type', 'Package', 'Procedure', 'Function', 'Trigger', 'Database Link', 'Materialized View', and 'Synonym'. The URL at the bottom is 'https://delphi.htl-leonding.ac.at:8181/apex/f?p=4500:TABLE\_CREATE:3485419296755::NO:602,604,145,1...,186,187,120,124,125,121,122,123,97,99,3,84,182,183,91,TBL\_WIZ\_COLUMNS,TBL\_WIZ\_FKS,TBL\_WIZ\_CONS::'.



Ab Oracle 12c gibt es einen neuen Datentyp „IDENTITY COLUMN“ (Autowert)

<https://oracle-base.com/articles/12c/identity-columns-in-oracle-12cr1>

Columns

\* Table Name  ?

Preserve Case

Column Name	Type	Precision	Scale	Not Null	Identity	Move
<input type="text" value="ID"/>	<input type="text" value="NUMBER"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text" value="- None -"/>	<input type="button" value="^"/> <input type="button" value="v"/>
<input type="text" value="FULL_NAME"/>	<input type="text" value="VARCHAR2"/>	<input type="text"/>	<input type="text" value="200"/>	<input type="checkbox"/>		<input type="button" value="^"/> <input type="button" value="v"/>
<input type="text" value="FIRST_NAME"/>	<input type="text" value="VARCHAR2"/>	<input type="text"/>	<input type="text" value="100"/>	<input type="checkbox"/>		<input type="button" value="^"/> <input type="button" value="v"/>
<input type="text" value="LAST_NAME"/>	<input type="text" value="VARCHAR2"/>	<input type="text"/>	<input type="text" value="100"/>	<input type="checkbox"/>		<input type="button" value="^"/> <input type="button" value="v"/>
<input type="text" value="DOB"/>	<input type="text" value="DATE"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>		<input type="button" value="^"/> <input type="button" value="v"/>
<input type="text" value="NOTES"/>	<input type="text" value="VARCHAR2"/>	<input type="text"/>	<input type="text" value="4000"/>	<input type="checkbox"/>		<input type="button" value="^"/> <input type="button" value="v"/>
<input type="text"/>	<input type="text" value="- Select Datatype -"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>		<input type="button" value="^"/> <input type="button" value="v"/>
<input type="text"/>	<input type="text" value="- Select Datatype -"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>		<input type="button" value="^"/> <input type="button" value="v"/>



### Primary Key

Table name: **T\_CONTACT** ?

Primary Key:  No Primary Key ?

**Populated from a new sequence**

Populated from an existing sequence

Not populated

Populated by Identity column

\* Primary Key Constraint Name  ?

\* Primary Key  ?

\* Sequence Name  ?

### Primary Key

A primary key allows each row in a table to be uniquely identified.

If you select to populate your primary key from a new sequence, you will be prompted to enter the new sequence's name. If you select to populate your primary key from an existing sequence, you will be prompted to select the sequence. Both these methods result in the generation of a trigger against your table. You can also select to not populate your primary. This is the only method that allows you to define a composite primary key made up of more than two columns.



Cancel

**Next >**



## Add Foreign Key

Add

Name  ?

Disallow Delete

Cascade Delete

Set Null on Delete

Select Key Column(s)

ID  
FULL\_NAME  
FIRST\_NAME  
LAST\_NAME  
DOB  
NOTES



References Table

^ ?

Referenced Column(s)



### Foreign Key

A foreign key establishes a relationship between a column or columns in one table and a primary or unique key in another table.

To define a foreign key:

- Select one or more columns and click the **Add** icon.
- Select the table name that has the corresponding primary key.
- Select the corresponding primary key column or columns and click the **Add** icon.
- Select **Disallow Delete** to block delete of rows from the referenced table when there are dependant rows in this table.
- Select **Cascade Delete** to delete the dependant rows from this table when the corresponding parent table row is deleted.
- Select **Set to Null on Delete** to set foreign key column values to null when the corresponding parent table row is deleted.
- Click **Add**.

You can define more than one foreign key on this page but only those displayed in the report at the top of the page will be included in the resulting create table statement.



Cancel

Next >

Constraint Name	Type	Column(s)/Check
-----------------	------	-----------------

Add

Constraint Type  Check  Unique

Check Condition

Key Column(s)

ID  
FULL\_NAME  
FIRST\_NAME  
LAST\_NAME  
DOB  
NOTES



\* Name



> Available Columns

> Example Check Constraints

### Constraints

Use this page to define constraints for your table. You can create multiple constraints of each type but must **Add** each constraint. Only those constraints displayed in the report at the top of the page will be included in the resulting create table statement.

### Check Constraint

A check constraint is a validation check on one or more columns within the table. No value can be inserted or updated in a table which violates an enabled check constraint.

A unique constraint designates a column or a combination of columns as a unique key. To satisfy a unique constraint, no two rows in the table can have the same values for the specified columns.



Cancel

Next >

# Create Table



Please confirm your request.

Schema: **STUETZ** ?

Table name: **T\_CONTACT** ?

> SQL

< Cancel

**Create Table**

# SQL

```
CREATE TABLE "T_CONTACT"  
  (    "ID" NUMBER,  
    "FULL_NAME" VARCHAR2(200),  
    "FIRST_NAME" VARCHAR2(100),  
    "LAST_NAME" VARCHAR2(100),  
    "DOB" DATE,  
    "NOTES" VARCHAR2(4000),  
    CONSTRAINT "T_CONTACT_PK" PRIMARY KEY ("ID")  
  USING INDEX ENABLE  
  )  
/  
CREATE SEQUENCE "T_CONTACT_SEQ" START WITH 1;  
/  
  
CREATE OR REPLACE EDITIONABLE TRIGGER "BI_T_CONTACT"  
  before insert on "T_CONTACT"  
  for each row  
begin  
  if :NEW."ID" is null then  
    select "T_CONTACT_SEQ".nextval into :NEW."ID" from sys.dual;  
  end if;  
end;  
  
/  
ALTER TRIGGER "BI_T_CONTACT" ENABLE  
/  

```

# Erstellen einer neuen Page

The screenshot displays the Oracle Application Express interface for 'Application 363 - Udemy Task Tracker'. The top navigation bar includes 'ORACLE Application Express', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Packaged Apps'. Below this, the application name 'Application 363' is shown. The main workspace contains five icons: 'Run Application', 'Supporting Objects', 'Shared Components', 'Utilities', and 'Export / Import'. A search bar and 'Go' button are located below the workspace. The 'Create Page' button is highlighted with a red box. On the right, a 'Tasks' panel lists 'Delete this Application', 'Copy this Application', and 'Recently Edited Pages' including '101. Login Page', '3. T Task', '2. T Task', and '1. Home'. The bottom of the page shows a list of pages: '1 - Home', '2 - T Task', '3 - T Task', and '101 - Login Page'. The page number '1 - 4' is visible in the bottom right corner.

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363

Application 363 - Udemy Task Tracker Edit Application Properties

Run Application Supporting Objects Shared Components Utilities Export / Import

Tasks

- Delete this Application
- Copy this Application

Recently Edited Pages

- 101. Login Page
- 3. T Task
- 2. T Task
- 1. Home

1 - Home 2 - T Task 3 - T Task 101 - Login Page

1 - 4

Application 363  
Application 363 - Udem...



Run Application

### Create a Page

Application: 363 - Udem... Task Tracker

\* User Interface: Desktop

Select a page type:

- Blank Page
- Report
- Form**
- Plug-ins
- Chart
- Map Chart
- Tree
- Calendar
- Wizard
- Data Loading

Cancel

Next >


### Create Page

- Form on a Table with Report** (highlighted with a red box)
- Form on a Table or View
- Master Detail Form
- Tabular Form
- Form on a Procedure
- SQL
- Summary Page
- Form on Web Service
- Form and Report on Web Service

Navigation: < Cancel Next >

Application 363

Application 363 - Udemy T...



Run Application

1 - Home

Tasks

- delete this Application >
- copy this Application >

Recently Edited Pages

- 01. Login Page
- . T Task
- . T Task
- . Home



Run Application



1 - Home

### Create

Report Page

The Report page is used to select the rows to be edited. It also includes a button to create a new row.

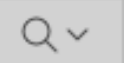
Implementation	Interactive
* Page Number	4
* Page Name	Contacts
* Page Mode	Normal
* Region Title	Contacts
Region Template	Interactive Report
Report Template	template: 42. Standard
Pagination Size	15
Breadcrumb	Breadcrumb
Parent Entry	No parent entry
* Entry Name	Contacts

< Cancel **Next** >





Run Application



1 - Home

# Create



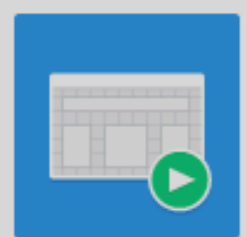
This wizard builds a two page Report and form combination on a single table or view. The first page enables users to specify the row to be updated. The second page provides users with ability to update the selected table or view. Select the schema owner who owns the database table or view.

\* Table / View Owner  ?

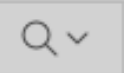
\* Table / View Name  ?

< Cancel

Next >



Run Application



1 - Home

Progress bar: [Green] [Green] [Blue] [Grey] [Grey] [Grey]

### Navigation Menu

Navigation Preference

- Do not associate this page with a navigation menu entry
- Create a new navigation menu entry**
- Identify an existing navigation menu entry for this page

\* New Navigation Menu Entry:

Parent Navigation Menu Entry: 

- No parent selected -
- Tasks

Buttons: < Cancel, Next >



- Tasks
- Delete this Application
- Copy this Application

- #### Recently Edited Pages
- 01. Login Page
  - . T Task
  - . T Task
  - . Home

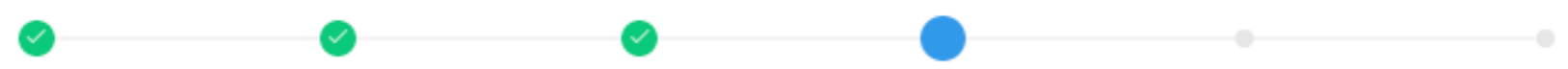


Run Application



1 - Home

# Create Form and Report



## Report Columns

Select the columns to include in the Report page. Define an optional WHERE clause to restrict the result set.

\* Select Column(s)

- ID (Number)
- NOTES (Varchar2)



- FULL\_NAME (Varchar2)
- FIRST\_NAME (Varchar2)
- LAST\_NAME (Varchar2)
- DOB (Date)



Optional WHERE clause



> Example SQL WHERE clause

< Cancel

Next >

## Create Form and Report

**Report Columns**

Select an edit link image. This image will function as a link for choosing a row to edit. Use image attributes to define the image height and width. Defining the height and width helps browsers display pages faster.

Edit Link Image:      **Edit**  Other Image

Use Other Image   

Image Attributes

Application 363

Application 363 - Udem...

1 - Home

Tasks

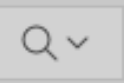
- delete this Application >
- copy this Application >

Recently Edited Pages

- 01. Login Page
- . T Task
- . T Task
- . Home



Run Application



1 - Home

## Create Form and Report



Specify page and region information for the Form Page. The Form Page is used to insert, update, and delete rows from the selected table.

\* Page Number  ?

\* Page Mode  ?

\* Page Name  ?

\* Region Title  ?

Region Template  ?

< Cancel

Next >



Run Application

## Create Form and Report

Progress indicator: 5 steps, 4th step (Form Page) is active.

**Form Page**

Forms perform insert, update and delete operations on table rows in the database. The rows are identified using either a primary key defined on the table, or the ROWID pseudo column, which uniquely identifies a row in a table. Select "Managed by Database" if you would like to use the ROWID. Otherwise select the primary key column(s) defined for your table. Forms support up to two columns in the primary key. For tables using primary keys with more than two columns, the ROWID option should be used.

\* Primary Key Type:  Managed by Database (ROWID)  **Select Primary Key Column(s)**

\* Primary Key Column 1:


Primary Key Column 2:

**Next >**



Application 363

Application 363 - Udemy T



Run Application

1 - Home

### Create Form and Report

Progress: [Green] [Green] [Green] [Green] [Blue] [Grey]

**Form Page**

Primary Key Column 1: **ID** ?

\* Source for Primary Key Column 1:  Existing trigger ?  
 Custom PL/SQL function  
 Existing sequence

\* Sequence:  ?

> Existing Triggers

> Custom PL/SQL function example

< Cancel **Next >**

Tasks

Delete this Application >

Copy this Application >

Recently Edited Pages

01. Login Page

. T Task

. T Task

. Home

Application 363

Application 363 - Udemy T



Run Application



1 - Home

# Create Form and Report



Select the columns to include in the form page.

\* Select Column(s)



- FULL\_NAME (Varchar2)
- FIRST\_NAME (Varchar2)
- LAST\_NAME (Varchar2)
- DOB (Date)
- NOTES (Varchar2)



Select Columns must be specified.

< Cancel

Next >

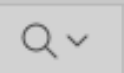


Application 363

Application 363 - Udemy T



Run Application



1 - Home

## Create Form and Report



Identify the process options for this form page. For example, to prevent users from deleting from this form page, select **No** for the delete option.

Insert	<input type="text" value="Yes"/>	<input type="button" value="⌵"/>	<input type="button" value="⌶"/>
Update	<input type="text" value="Yes"/>	<input type="button" value="⌵"/>	<input type="button" value="⌶"/>
Delete	<input type="text" value="Yes"/>	<input type="button" value="⌵"/>	<input type="button" value="⌶"/>

< Cancel

Next >



Run Application

## Create Form and Report

**Confirm**

You have requested to create form and report pages with the following attributes. Please confirm your selections.

Application	363
Report Page	4
Report Page Name	Contacts
Report Implementation	Interactive
Form Page	5
Form Page Name	Contact Details
Table / View Owner	STUETZ
Table / View Name	T_CONTACT
Primary Key Column 1	ID
Primary Key Column 2	0

< CancelCreate

Tasks

- delete this Application >
- copy this Application >

Recently Edited Pages

- 01. Login Page
- . T Task
- . T Task
- . Home

✓ Pages created successfully. [Close]

[File] 4 Go [Lock] [Refresh] [Undo] [Redo] [Add] [Help] [Save] [Run]

Rendering [1=2] [O=Δ] [List]

Page 4: Contacts

- Pre-Rendering
- Regions
  - Breadcrumb Bar
    - Breadcrumb
      - Attributes
  - Content Body
    - Contacts
      - Columns
      - Attributes
      - Region Buttons
        - CREATE
      - Dynamic Actions
  - Post-Rendering

Grid Layout Messages Page Search Help

Contacts

PAGE HEADER

PAGE NAVIGATION

BREADCRUMB BAR

- Breadcrumb
  - ITEMS
  - REGION CONTENT
  - SUB REGIONS
  - PREVIOUS CLOSE DELETE HELP CHANGE EDIT COPY
  - CREATE NEXT

Regions Items Buttons

Checkbox Color Picker Date Picker Display Image Display Only

[Magnifying Glass] [Eye with X] [List] [1I] [Lock]

Page

Identification

Name: Contacts

Page Alias: [ ]

Title: Contacts

Page Group: - Select -

Appearance

User Interface: Desktop

Page Mode: Normal

Page Template: Theme Default

Template Options: Use Template Defaults

CSS Classes: [ ]

Media Type: [ ]

Navigation Menu

Override User Interface Level: Yes No

Navigation

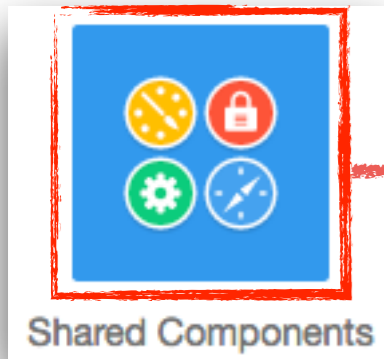
Cursor Focus: Do not focus cursor

## Contacts



No data found.

Aufgabe  
Ersetzen Sie dieses Icon durch das  
FontAwesome-Icon 'fa-user'



Navigation

- Lists**
- Navigation Menu
- Breadcrumbs
- Navigation Bar List

Application 363 > Shared Components > Lists

Lists | List Details | Unused | Conditional Entries | Utilization | History

Search: [ ] Go [ ] [ ] [ ] Actions [ ]

Name	Type	Entries	References	Entries
Desktop Navigation Bar	Static	1	0	-
<b>Desktop Navigation Menu</b>	Static	2	0	14 hours

Application 363 > Shared Components > List Details > Create / Edit

List Entry

Show All | **Entry** | Target | Current List Entry | Conditions | Authorization

Sequence	Name	Parent Entry
20	Tasks	-
30	<b>Contacts</b>	-

Sequence	Name	Parent Entry
20	Tasks	-
30	<b>Contacts</b>	-

List: **Desktop Navigation Menu**

Parent List Entry: - No Parent List Item -

Sequence: 30

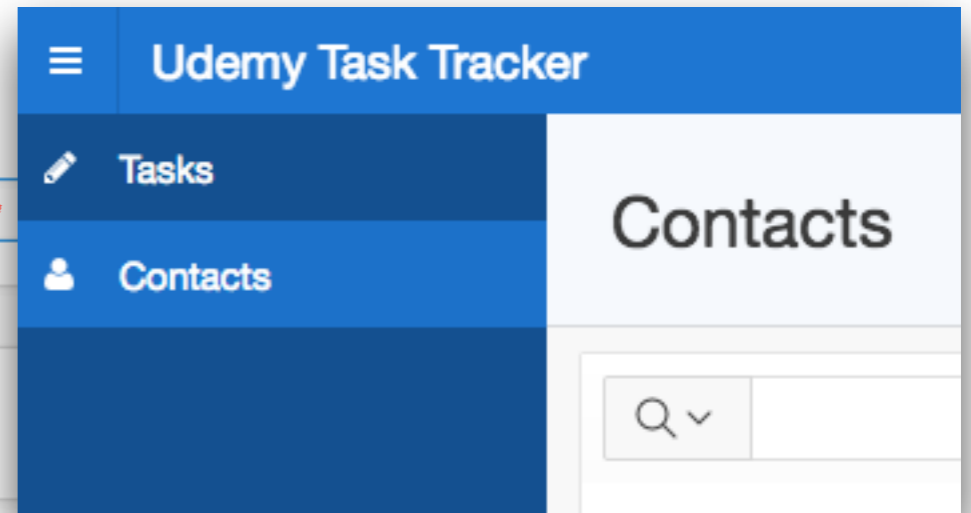
Image/Class: **fa-user**

Attributes: [ ]

Alt Attribute: [ ]

\* List Entry Label: **Contacts**

**Run Application**



## Contacts


### Contact Details

[Contacts /](#) **Contact Details**

Full Name

First Name

Last Name

Dob  

Notes

Dieses Breadcrumb lassen wir noch verschwinden

Rendering

Page 5: Contact Details

- Pre-Rendering
- Regions
  - Dialog Header
    - Breadcrumb**
  - Content Body
    - Contact Details
      - Attributes
      - Items
        - P5\_ID
        - P5\_FULL\_NAME
        - P5\_FIRST\_NAME
        - P5\_LAST\_NAME
        - P5\_DOB
        - P5\_NOTES
    - Dialog Footer
      - Buttons
        - CANCEL
        - DELETE
        - SAVE

Grid Layout

Contact Details

DIALOG HEADER

- Breadcrumb**
- ITEMS
- REGION CONTENT
- SUB REGIONS
- PREVIOUS CLOSE DELETE HELP CHANGE EDIT COPY
- CREATE NEXT

CONTENT BODY

Contact Details

Regions Items Buttons

- Checkbox
- Color Picker
- Date Picker
- Display Image
- Display Only
- File Browse...
- Hidden
- List Manager
- Number Field
- Password

Region

- Identification
- Source
- Layout
- Appearance
- Advanced
- Header and Footer
- Condition

Type

- Read Only
- Security
- Configuration
- Server Cache
- Customization
- Comments
- Audit Information

Item is NOT in colon delimited list  
User Preference = Value  
User Preference != Value  
Current Page = Page  
Current Page != Page  
Current Page is in comma delimited list  
Current Page is NOT in comma delimited list  
Current Page is in Printer Friendly Mode  
Current page is NOT in Printer Friendly Mode  
Page/Region is Read Only  
Page/Region is NOT Read Only  
User is Authenticated (not public)  
User is the Public User (user has not authenticated)  
Inline Validation Errors displayed  
Inline Validation Errors NOT displayed  
Current Language = Value  
Current Language != Value  
Current Language is contained in Value  
Current Language is NOT contained in Value  
**Never**




## Contacts

### Contact Details ✕

Full Name

First Name

Last Name

Dob  

Notes

Cancel Create

Nun werden die Eingabefelder noch etwas überarbeitet



Rendering

1 = 2 = O = A =

Page 5: Contact Details

- Pre-Rendering
- Regions
  - Dialog Header
    - Breadcrumb
      - Attributes
  - Content Body
    - Contact Details
      - Attributes
      - Items
        - P5\_ID
        - P5\_FULL\_NAME
        - P5\_FIRST\_NAME
        - P5\_LAST\_NAME
        - P5\_DOB**
        - P5\_NOTES

- Dialog Footer
  - Buttons
    - Attributes
    - Region Buttons
      - CANCEL
      - DELETE
      - SAVE

Grid Layout Messages Page Search Help

</> Contact Details

PREVIOUS

ITEMS

P5\_FULL\_NAME

P5\_FIRST\_NAME

P5\_LAST\_NAME

**P5\_DOB**

P5\_NOTES

REGION CONTENT

SUB REGIONS

Regions Items Buttons

Checkbox Color Picker Date Picker Display Image Display Only

File Browse... Hidden List Manager Number Field Password

Page Item

Identification

Label

Settings

Highlighted Date

Minimum Date

Maximum Date

Show **On focus**

Show other Months Yes No

Navigation List for None

Layout

Grid

Appearance

Validation

Advanced

Source

Default

# Optionen für Datumsfeld

Grid Layout Messages Page Search Help

</> Contact Detail

PREVIOUS

ITEMS

- P5\_FULL\_NAME
- P5\_FIRST\_NAME
- P5\_LAST\_NAME
- P5\_DOB
- P5\_NOTES

REGION CONTENT

Regions Items Buttons

Page Item

Identification

Highlighted Date

Minimum Date

Maximum Date

Show On focus

Show other Months Yes No

Navigation List for Month and Year

Year Range



Zur schnelleren Navigation zwischen Monaten und Jahren

Dob

Notes

Apr 2017

Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

# Dynamic Actions

Contact Details ✕

Full Name

First Name

Last Name

Dob

Notes

Bei Eingabe von firstname und lastname soll automatisch fullname eingetragen werden

# Create Dynamic Action

The screenshot displays the Oracle APEX Page Designer interface. At the top, the navigation bar includes 'ORACLE Application Express', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Packaged Apps'. Below this, the breadcrumb shows 'Application 363 > Page Designer'. The main workspace is divided into several panels:

- Dynamic Actions Panel (Left):** Contains a lightning bolt icon (highlighted with a red box) and a list of actions: 'Expand All Below' and 'Collapse All Below'. The 'Create Dynamic Action' option is highlighted with a red box, and a red arrow points from it to the 'Change' context menu.
- Grid Layout Panel (Center):** Shows a 'Contact Details' dialog with sections for 'DIALOG HEADER', 'ITEMS', 'REGION CONTENT', and 'SUB REGIONS'. A context menu is open over the 'Change' folder, with 'New' and 'Show' options highlighted.
- Property Editor Panel (Right):** Displays a warning icon and the text 'No components currently selected.'

At the bottom, there are tabs for 'Regions', 'Items', and 'Buttons', and a toolbar with icons for 'Checkbox', 'Color Picker', 'Date Picker', 'Display Image', and 'Display Only'.

Grid Layout   Messages **2**   Page Search   Help

**Dynamic Action** → **New** → **When** → **Selection Type**  
Is required!

**Action** → **Show** → **Affected Elements** → **Item(s)**  
Is required!

Hier werden alle Aktionen dargestellt, die noch durchzuführen sind

ORACLE Application Express   Application Builder   SQL Workshop   Team Development   Packaged Apps

Application 363 > Page Designer

Dynamic Actions

- Actions Fired on Page Load
- Events
  - Page Load
  - Change
    - Concatenate First and Last Name**
      - True
      - Show**
      - False
    - Click
      - Cancel Dialog
      - Dialog Closed

Grid Layout   Messages **2**   Page Search   Help

Contact Details

DIALOG HEADER

Breadcrumb

ITEMS

REGION CONTENT

SUB REGIONS

PREVIOUS   CLOSE   DELETE   HELP   CHANGE   EDIT   COPY

CREATE   NEXT

CONTENT BODY

Contact Details

Regions   Items   Buttons

Checkbox   Color Picker   Date Picker   Display Image   Display Only

Dynamic Action

Identification

Name: **Concatenate First and Last Name**

Execution Options

Sequence: 20

When

Event: Change

**Selection Type**: - Select -

Advanced

Condition

Security

Configuration

Comments

Audit Information

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363 Page Designer

Dynamic Actions

- Actions Fired on Page Load
- Events
  - Page Load
  - Change
    - Concatenate First and Last Name**
      - True
        - Show
      - False
    - Click
      - Cancel Dialog
      - Dialog Closed

Pick Item(s)

Current Page Global Page

search

Name	Label
P5_ID	
P5_FULL_NAME	Full Name
<b>P5_FIRST_NAME</b>	First Name
<b>P5_LAST_NAME</b>	Last Name
P5_DOB	Dob
P5_NOTES	Notes

Dynamic Action

Identification

Name Concatenate First and Last Name

Execution Options

Sequence 20

When

Event Change

Selection Type **Item(s)**

Item(s) **P5\_FIRST\_NAME**

Condition - Select -

Advanced

Condition

Security

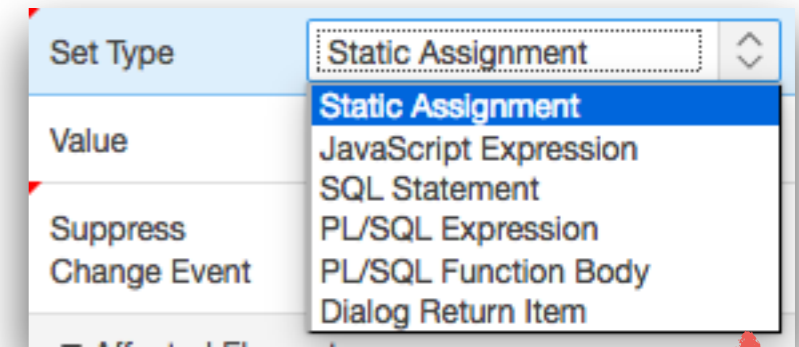
Configuration

Comments

Audit Information

Event: Change; Selection Type Item(s), Items:  
P5\_FIRST\_NAME, P5\_LAST\_NAME  
Bei jeder Änderung der beiden Items wird eine Action  
ausgeführt (siehe nächste Folie)

# Erstellen der Action



ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Application 363 Page Designer

Dynamic Actions

- Actions Fired on Page Load
- Events
  - Page Load
  - Change
    - Concatenate First and Last Name
    - True
  - Click
    - Cancel Dialog
    - Dialog Closed

Grid Layout Messages Page Search Help

PREVIOUS

ITEMS

P5\_FULL\_NAME

Action

Set Value

Identification

Settings

Set Type PL/SQL Expression

PL/SQL Expression

:P5\_FIRST\_NAME || ' ' || :P5\_LAST\_NAME

Page Items to Submit P5\_FIRST\_NAME, P5\_LAS

Escape Special Characters Yes No

Suppress Change Event Yes No

Affected Elements

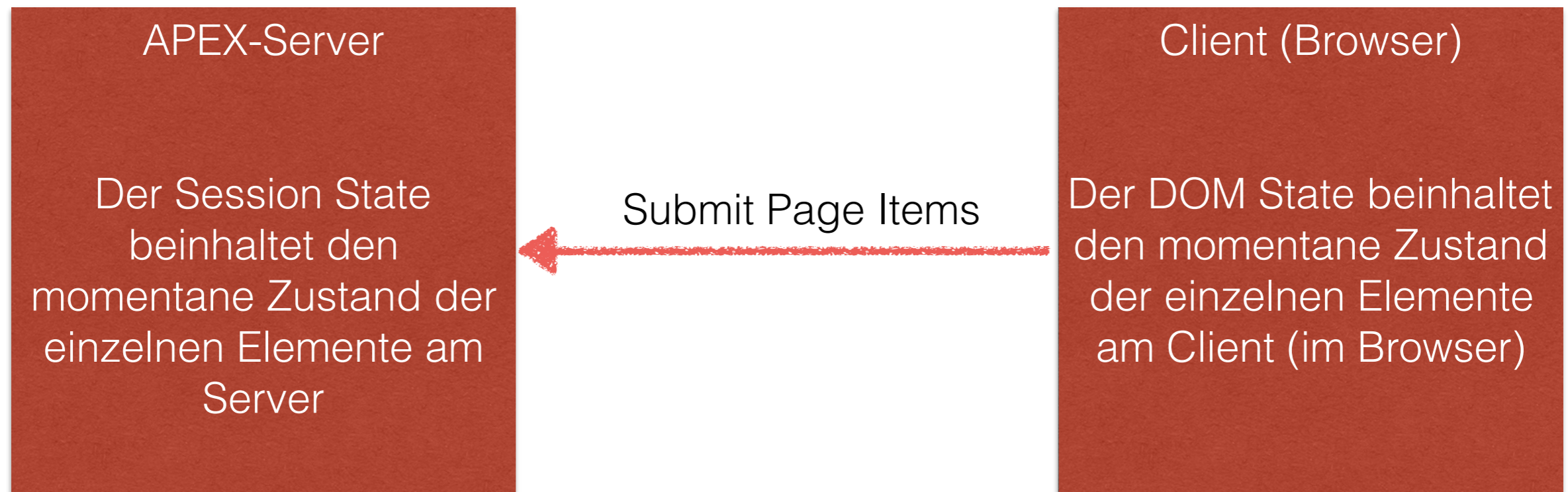
Selection Type Item(s)

Item(s) P5\_FULL\_NAME

Execution Options

1. Action auswählen: Set Value
2. Aktionstyp auswählen: PL/SQL Expression
3. PL/SQL Expression eingeben
4. Page Items to Submit: siehe folgende Folie
5. Das betroffene Item wählen, in dem der geänderte Wert eingetragen wird

# Session State vs DOM State



- Um Dynamic Actions **am Server** korrekt ausführen zu können, muss man die betroffenen Items (hier P5\_FIRST\_NAME und P5\_LAST\_NAME) an den Server übertragen. Das geschieht mit „Page Items to Submit“



# Probelauf

Udemy Task Tracker Log Out

Tasks

Contacts

## Contacts

### Contact Details

Full Name

First Name

Last Name

Dob

Notes



## Contacts

### Contact Details ✕

Full Name

First Name

Last Name

Dob

Notes

Create	
Dob	
01-06-1926	
15-04-1938	
22-10-1943	
1 - 3	

## Contacts

	Full Name	First Name	Last Name	Dob
<a href="#">Edit</a>	Marilyn Monroe	Marilyn	Monroe	01-06-1926
<a href="#">Edit</a>	Claudia Cardinale	Claudia	Cardinale	15-04-1938
<a href="#">Edit</a>	Catherine Deneuve	Catherine	Deneuve	22-10-1943

1 - 3

Diese zwei Spalten brauchen wir wohl nun nicht mehr

Rendering

1 = 2 =

Page 4: Contacts

- Pre-Rendering
- Regions
  - Breadcrumb Bar
    - Breadcrumb
      - Attributes
  - Content Body
    - Contacts
      - Columns
        - ID
        - FULL\_NAME
        - FIRST\_NAME**
        - LAST\_NAME**
        - DOB
      - Attributes
      - Region Buttons
        - CREATE
      - Dynamic Actions
  - Post-Rendering

Grid Layout Messages Page Search Help

Contacts

PAGE HEADER

PAGE NAVIGATION

BREADCRUMB BAR

- Breadcrumb
  - ITEMS
  - REGION CONTENT
  - SUB REGIONS
  - PREVIOUS CLOSE DELETE HELP CHANGE EDIT COPY
  - CREATE NEXT

Regions Items Buttons

Breadcrumb Calendar Chart Classic Report Classic Report (based on)

Column

Identification

Column Name FIRST\_NAME

Type **Hidden Column**

Heading

Comments

Audit Information

FIRST\_NAME und LAST\_NAME werden als „Hidden Column“ definiert

	Full Name	Dob
Edit	Marilyn Monroe	01-06-1926
Edit	Claudia Cardinale	15-04-1938
Edit	Catherine Deneuve	22-10-1943

1 - 3

### Task Details

Title 

Due Date 

Notes 

Priority

Priority
High
Low

1 - 2

Wir wollen in diesem Bereich ein Multi-Select für Kontakte erstellen

# Neue Spalte anlegen

ORACLE Application Express Application Builder SQL Workshop Team Development Packaged Apps

Object Browser Schema **STUETZ**

Tables

- BNK\_KONTOTYP
- BNK\_VIEW
- BNK\_ZAHLUNG
- BONUS
- CRYPTO
- CUSTOMER
- DEPT
- DUMMY
- EMP
- ITEM
- ORD
- PRICE
- PRODUCT
- SALGRADE
- SW\_CUSTOMER
- SW\_ITEM
- SW\_ORDERING
- SW\_PRODUCT
- T\_TASK**
- VEHICLE

**T\_TASK**

Add Column

Schema: **STUETZ**

Table: **T\_TASK**

\* Add Column **CONTACTS**

Preserve Case

Type **VARCHAR2**

Length **1000**

Precision

Scale

Nullable **NULL (do not require a value)**

Cancel **Next >**

Existing Columns

Rendering

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Page 3: T Task

- Pre-Rendering
- Regions
  - Dialog Header
  - Content Body
    - Edit Task Details
      - Attributes
      - Items
        - P3\_ID
        - P3\_TITLE
        - P3\_DUE\_DATE
        - P3\_NOTES
        - P3\_PRIORITY
  - Dialog Footer
    - Buttons
      - Attributes
      - Region Buttons
        - CANCEL
        - DELETE
        - SAVE
        - CREATE
  - Post-Rendering

Grid Layout Messages Page Search Help

Search, Zoom, Rotate, List icons

ITEMS

- P3\_TITLE
- P3\_DUE\_DATE
- P3\_NOTES
- P3\_PRIORITY

REGION CONTENT

SUB REGIONS

NEXT

List Manager

Regions Items Buttons

File Browse... Hidden List Manager Number Field Password

Page

Identification

Name: T Task

Page Alias

Title: Task Details

Page Group: - Select -

Appearance

User Interface: Desktop

Page Mode: Modal Dialog

Dialog Template: Theme Default

Template Options: Use Template Defaults

CSS Classes

Media Type

Dialog

Width

Height

Maximum



Rendering 1 2 3 4

Page 3: T Task
Pre-Rendering
Regions
Dialog Header
Content Body
Edit Task Details
Attributes
Items
P3\_ID
P3\_TITLE
P3\_DUE\_DATE
P3\_NOTES
P3\_PRIORITY
P3\_NEW

Dialog Footer
Buttons
Attributes
Region Buttons
CANCEL
DELETE
SAVE
CREATE

Grid Layout Messages 2 Page Search Help

ITEMS
P3\_TITLE
P3\_DUE\_DATE
P3\_NOTES
P3\_PRIORITY
P3\_NEW
REGION CONTENT
Label: New
Type: List Manager
Start New Row: Yes

Regions Items Buttons
File Browse... Hidden List Manager Number Field Password

Page Item

Identification
Name: P3\_NEW
Type: List Manager
Label: New
Settings
Fetch: Fetch First Rowset
Preserve Case: Yes No
Layout
Sequence: 60
Region: Edit Task Details
Grid
Start New Row: Yes No
Column: Automatic
Column Span: Automatic
Label Column Span: Page Template Default



Application 363

### Code Editor - SQL Query

```
1 select FULL_NAME as D,  
2     FULL_NAME as R  
3 from T_CONTACT
```

Is required!

Cancel OK

Page Item

Name P3\_CONTACTS

Type List Manager

Type SQL Query

SQL Query

Display Extra Values Yes No

Cascading LOV Parent Item(s)

Beachte: Die korrekte Source wird aufgrund des Namens automatisch eingetragen

Home / Tasks

### Task Details

Title:  ?

Due Date:  ?

Notes:  ?

Priority:  ▾

Contacts:  ^ Add Remove

Search Dialog

https://delphi.htl-leonding.ac.at:8

Search Close

Marilyn Monroe

Claudia Cardinale

Catherine Deneuve

Row(s) 1 - 3

Contacts:  ^ Add Remove

Marilyn Monroe



Noch  
Fragen?