



Oracle Application Express: Developing Database Web Applications

Hands-On-Labs Guide

Unit 5: Developing Reports

This exercise includes three hands-on-labs.

HOL 5-1 Creating a Classic Report: In this hands-on-lab, you create a classic report region on the home page of the Demo Projects application.

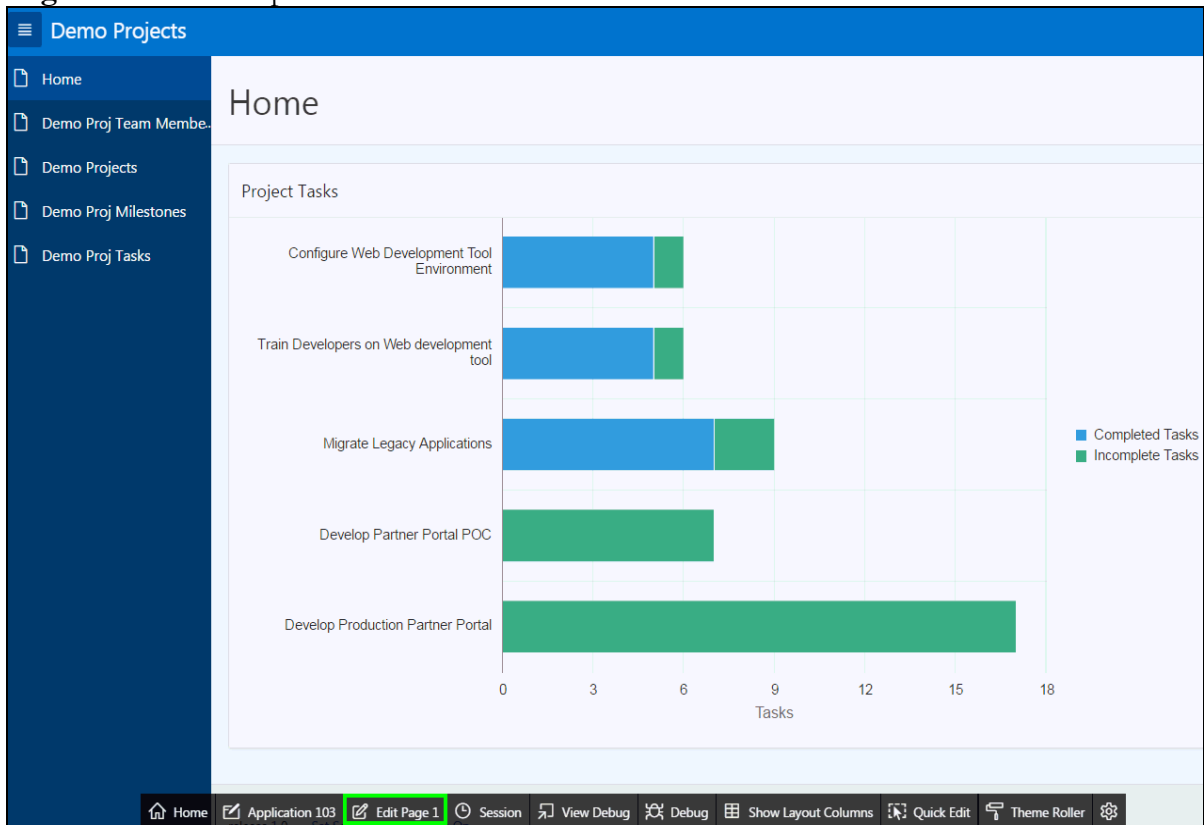
HOL 5-2 Creating an Interactive Report: In this hands-on lab, you create a new database application and then using the Create Page wizard, you add an interactive report page.

HOL 5-3 Creating an Interactive Grid: In this hands-on lab, you use the Create Page wizard and add an interactive grid page in the Budget App application.

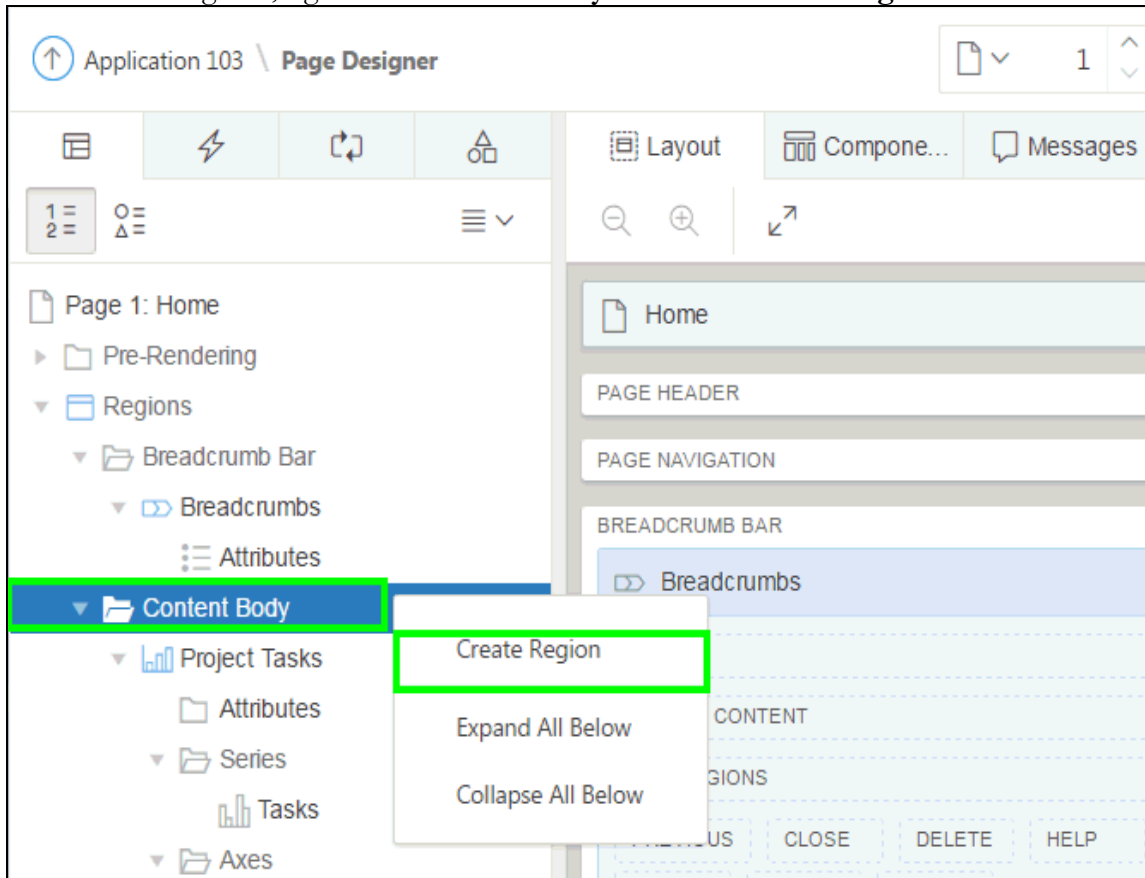
HOL 5-1 Creating a Classic Report

In the Demo Projects application, you create a report that allows each Team Member to see their outstanding tasks.

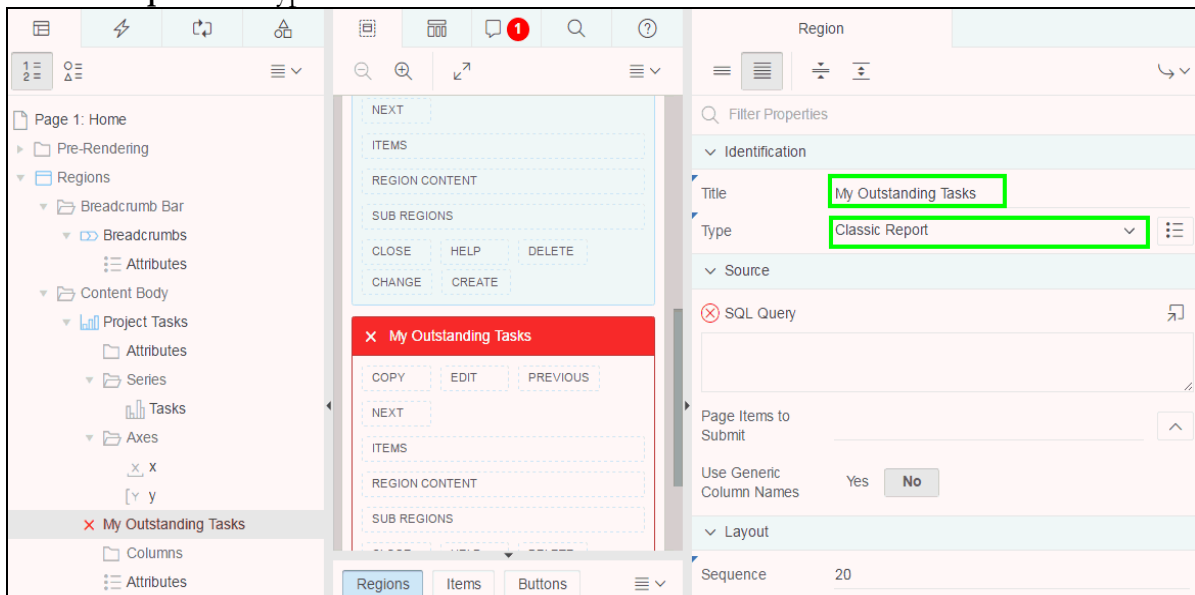
1. View the home page (Page 1) in page designer. If you are on the Home page, then click **Edit Page 1** in the Developer Toolbar.



2. In the Rendering tree, right-click **Content Body** and select **Create Region**.



3. In the property editor, under Identification, enter **My Outstanding Tasks** for Title. Select **Classic Report** for Type.



4. In the property editor, under Source, copy and paste the following code for SQL Query.

```
select p.name project
, t.name task
, t.end_date
from demo_proj_tasks t
, demo_projects p
, demo_proj_milestones m
, demo_proj_team_members tm
where p.id = t.project_id
and m.id = t.milestone_id (+)
and tm.id = t.assignee and nvl(t.is_complete_yn, 'N') = 'N'
and upper(tm.username) = upper(:APP_USER)
order by t.end_date
```

Note: The where condition of `username = :APP_USER` restricts the records to those assigned to the person running the application.

The screenshot shows the configuration page for a report titled 'Region'. The report is named 'My Outstanding Tasks' and is a 'Classic Report'. The source is an 'SQL Query' which is displayed in a text area at the bottom of the page. The SQL query is the same as the one shown in the previous block. The text area is highlighted with a green border.

Region

Filter Properties

Identification

Title My Outstanding Tasks

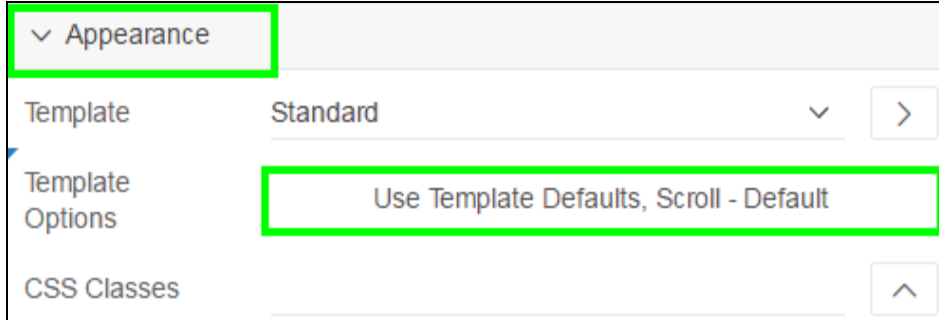
Type Classic Report

Source

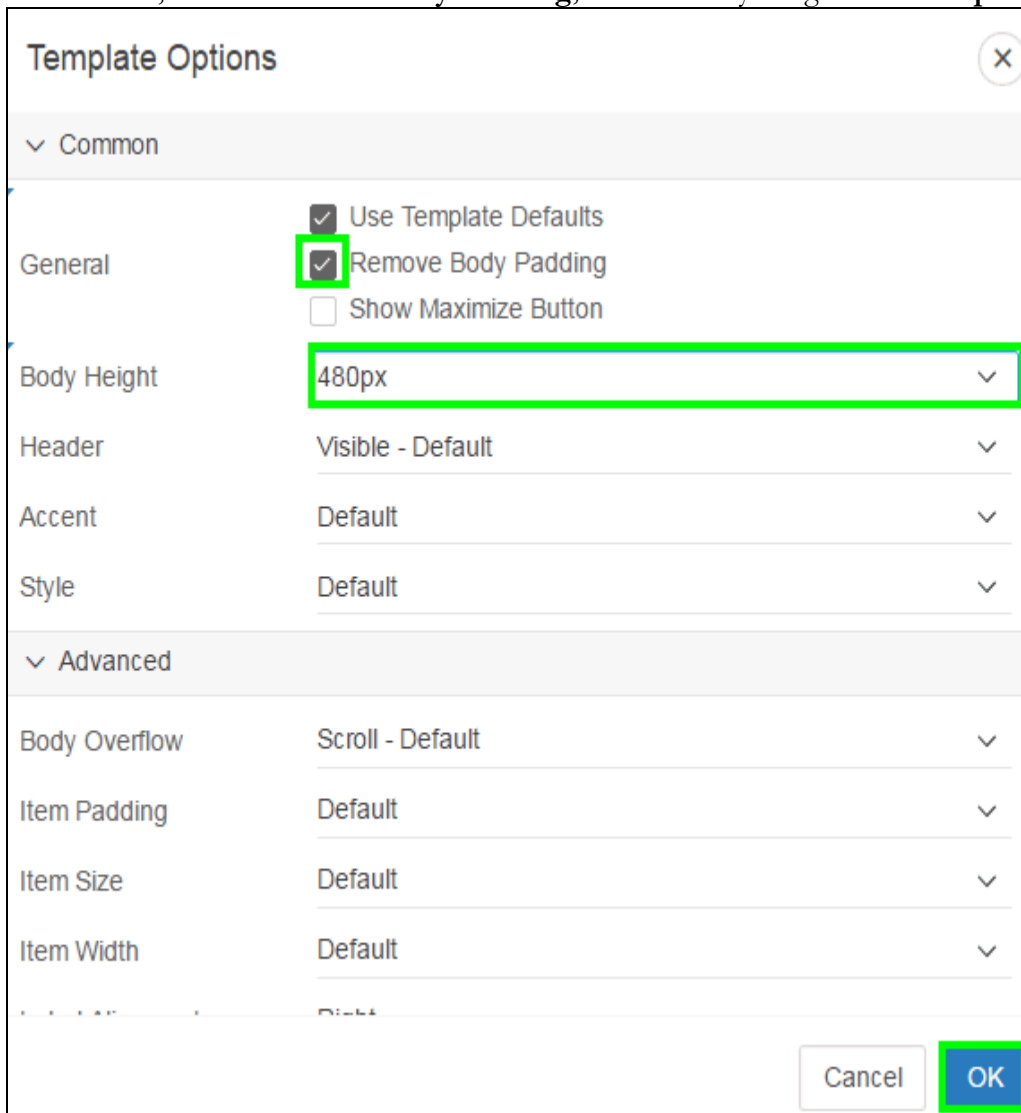
SQL Query

```
select p.name project
, t.name task
, t.end_date
from demo_proj_tasks t
, demo_projects p
, demo_proj_milestones m
, demo_proj_team_members tm
where p.id = t.project_id
and m.id = t.milestone_id (+)
and tm.id = t.assignee and nvl(t.is_complete_yn, 'N') = 'N'
and upper(tm.username) = upper(:APP_USER)
order by t.end_date
```

- In the Property Editor, locate Appearance > Template Options and click **Use Template Defaults, Scroll - Default**.

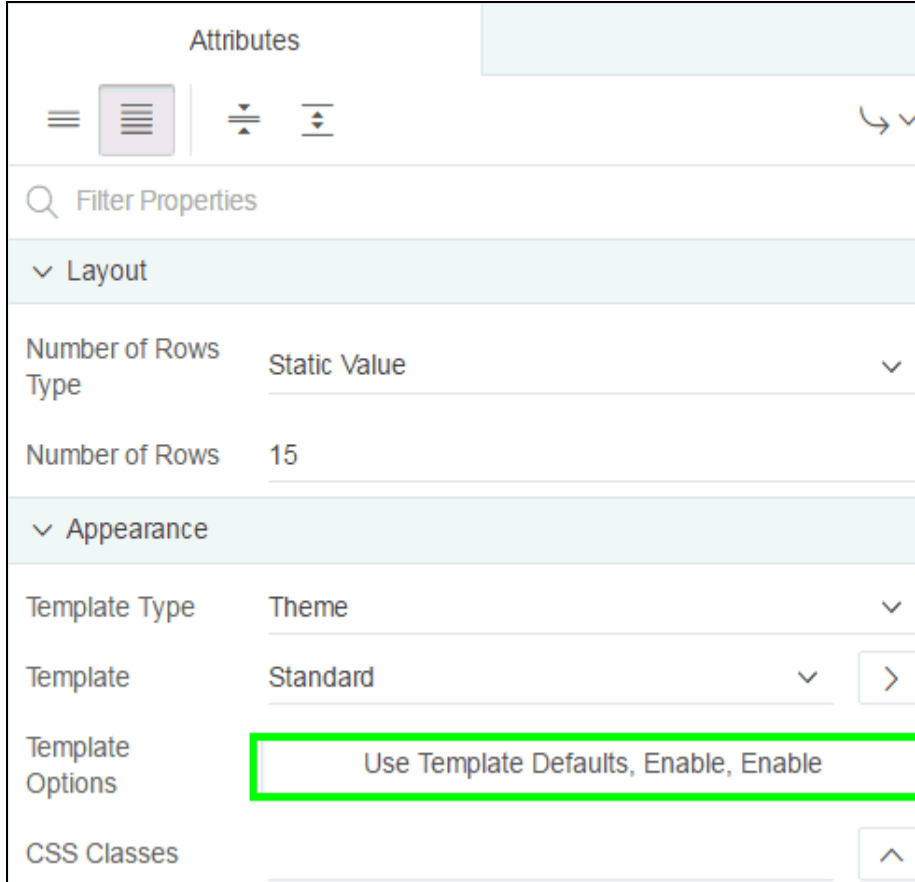


- For General, enable **Remove Body Padding**, and for Body Height select **480px**. Click **OK**.



- Locate the Rendering tree. Under the My Outstanding Tasks region, click **Attributes**.

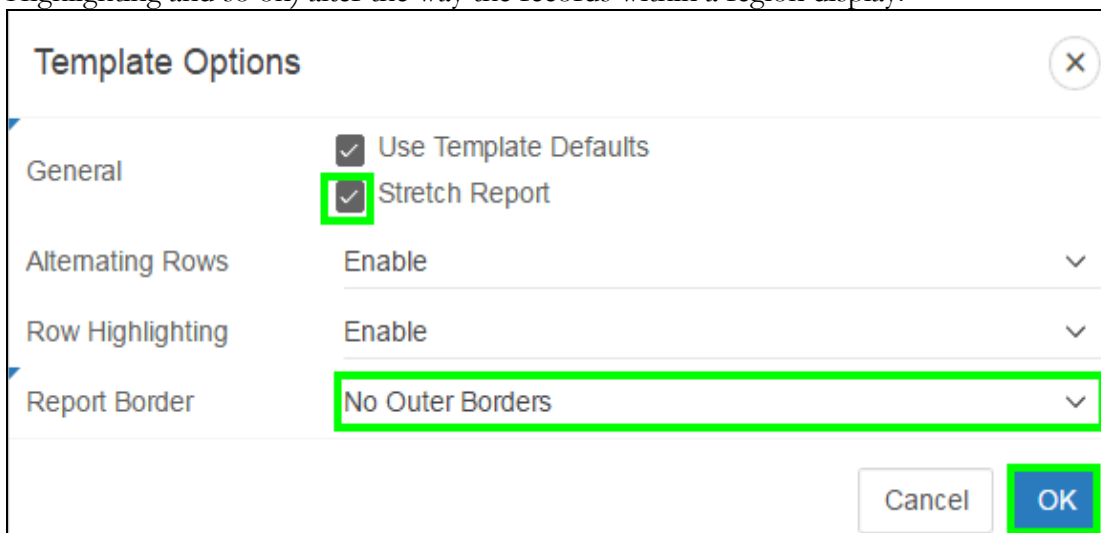
- Under Attributes, locate Template Options and click **Use Template Defaults, Enable, Enable**.



The screenshot shows the 'Attributes' panel with the following settings:

- Layout: Number of Rows Type is 'Static Value', Number of Rows is '15'.
- Appearance: Template Type is 'Theme', Template is 'Standard'.
- Template Options: 'Use Template Defaults, Enable, Enable' (highlighted with a green box).
- CSS Classes: (empty)

- For General, enable Stretch Report, and for Report Border, select No Outer Borders. Click **OK**.
Note: Region Template Options (such as Body Height, Header, Style and so on) alter the overall presentation of a region. However, Attribute Template Options (such as Stretch Report, Row Highlighting and so on) alter the way the records within a region display.

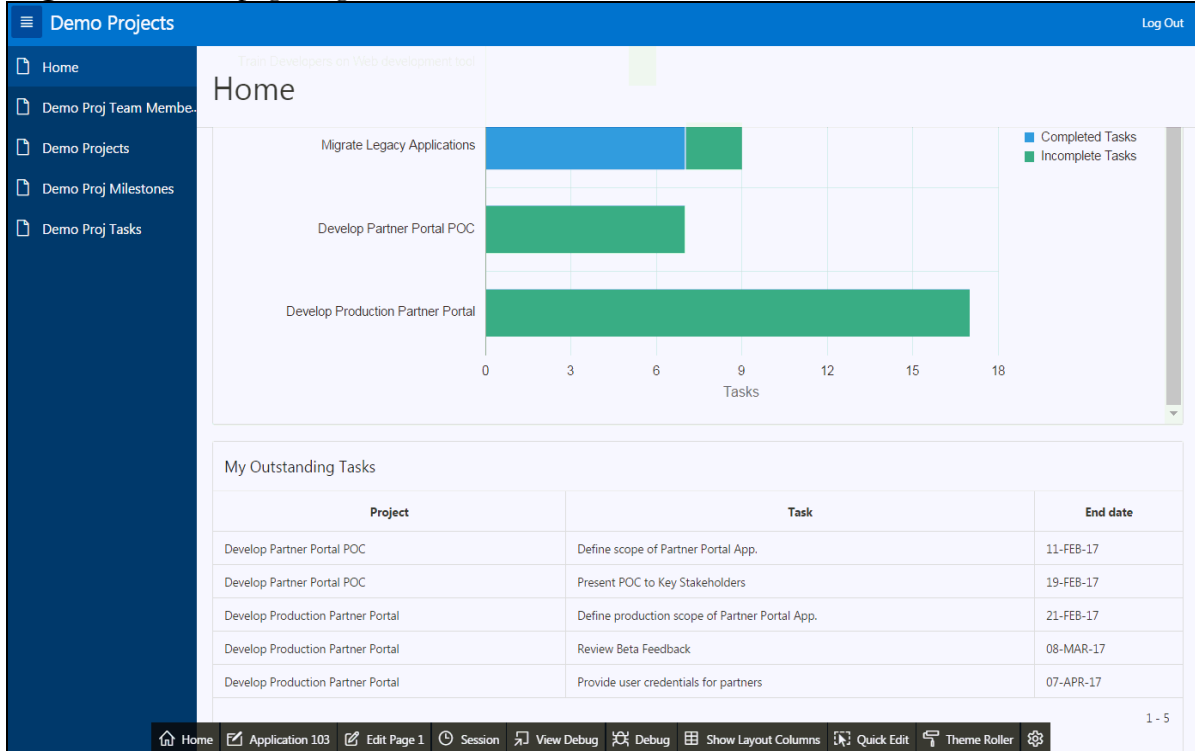


The 'Template Options' dialog box shows the following settings:

- General: Use Template Defaults, Stretch Report (highlighted with a green box).
- Alternating Rows: Enable
- Row Highlighting: Enable
- Report Border: No Outer Borders (highlighted with a green box).

Buttons: Cancel, OK (highlighted with a green box).

10. Click **Save**. Run the application to see how the Home page looks now. Click **Save and Run Page**. Your home page might look like:



In the Developer Toolbar, click **Home**.

HOL 5-2 Creating an Interactive Report

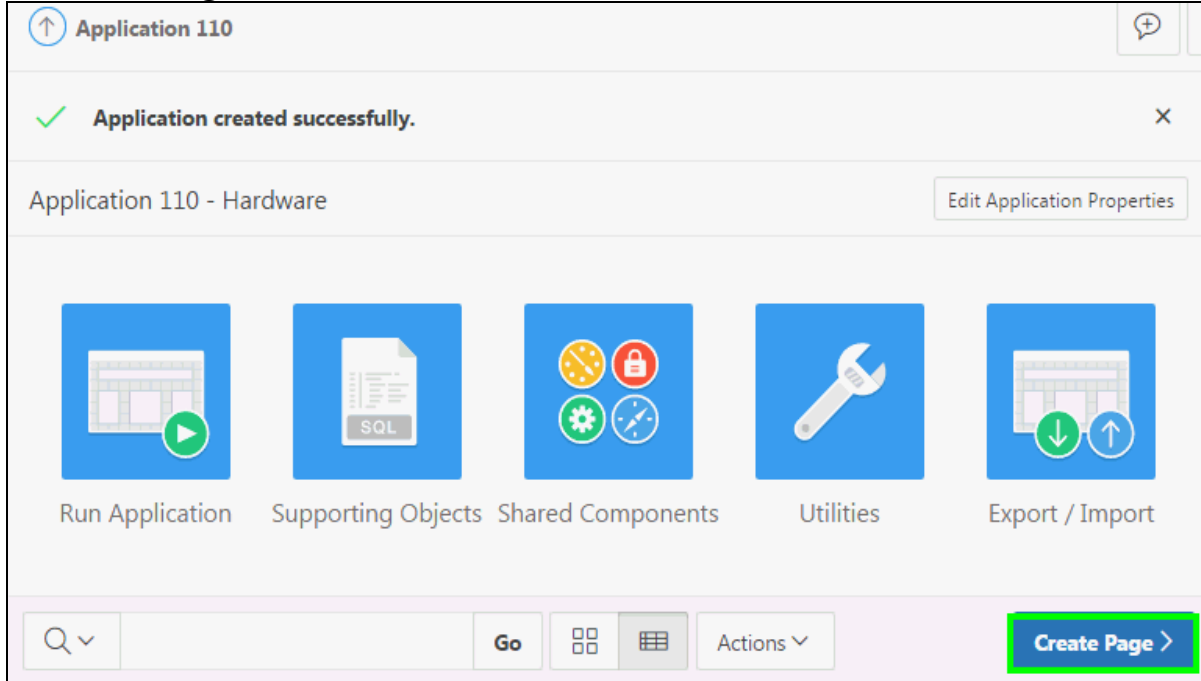
In this lab, you create an interactive report on the `HARDWARE` table. You created this table in HOL 2-2. First, you create a database application and then you create the interactive report page.

1. Create a database application. Perform the following steps:
 - a) Navigate to Application Builder. Click **Create**.
 - b) Click **Desktop**.
 - c) Enter **Hardware** for Name and click **Create Application**.

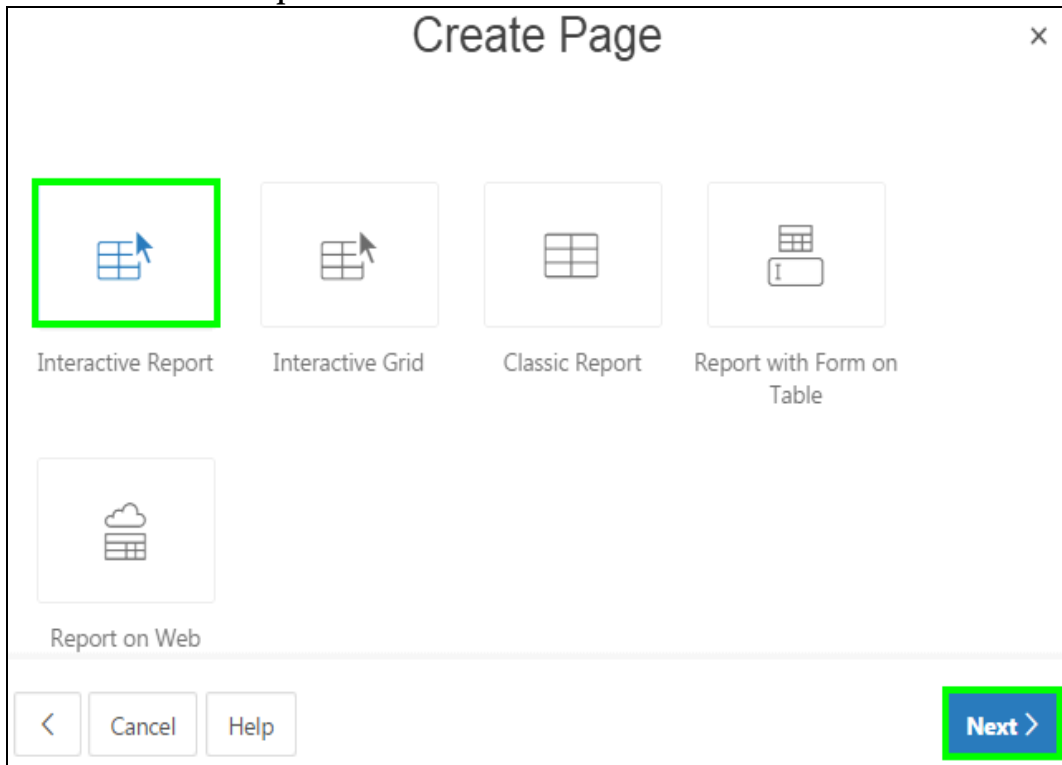
The screenshot shows the 'Create an Application' dialog in Oracle APEX. The dialog has a title bar with the text 'Create an Application'. Below the title bar, there are several fields and buttons. The 'Name' field is highlighted with a green border and contains the text 'Hardware'. The 'User Interface' field is set to 'Desktop'. The 'Schema' field is set to 'APEX_DEMO'. The 'Application' field is set to '110'. The 'Theme' field is set to 'Universal Theme (42)'. The 'Theme Style' field is set to 'Vita (Accessibility Tested)'. There are three buttons at the bottom: 'Cancel', 'Create Application', and 'Next >'. The 'Create Application' button is highlighted with a green border.

-
-
-
- d) Click **Create Application**.

- Now, create an interactive report on the `HARDWARE` table. On the application home page, click **Create Page**.



- Select **Report** for Page Type, and click **Next**.
- Select **Interactive Report** and click **Next**.



5. For Page Attributes:
 - Page Name: Enter **Hardware Interactive Report**
 - Breadcrumb: Select Breadcrumb
 - Parent Entry: Home
 Click **Next**.

6. For Navigation Menu:
 - Navigation Preference: Select **Create a new navigation menu entry**
 - Parent Navigation Menu Entry: **Home**
 Click **Next**.

7. Select **Hardware** for Table / View Name and click **Create**.

8. Click **Save and Run Page**.

9. Enter your Workspace username and password. Click **Sign In**. Your interactive report might look like:

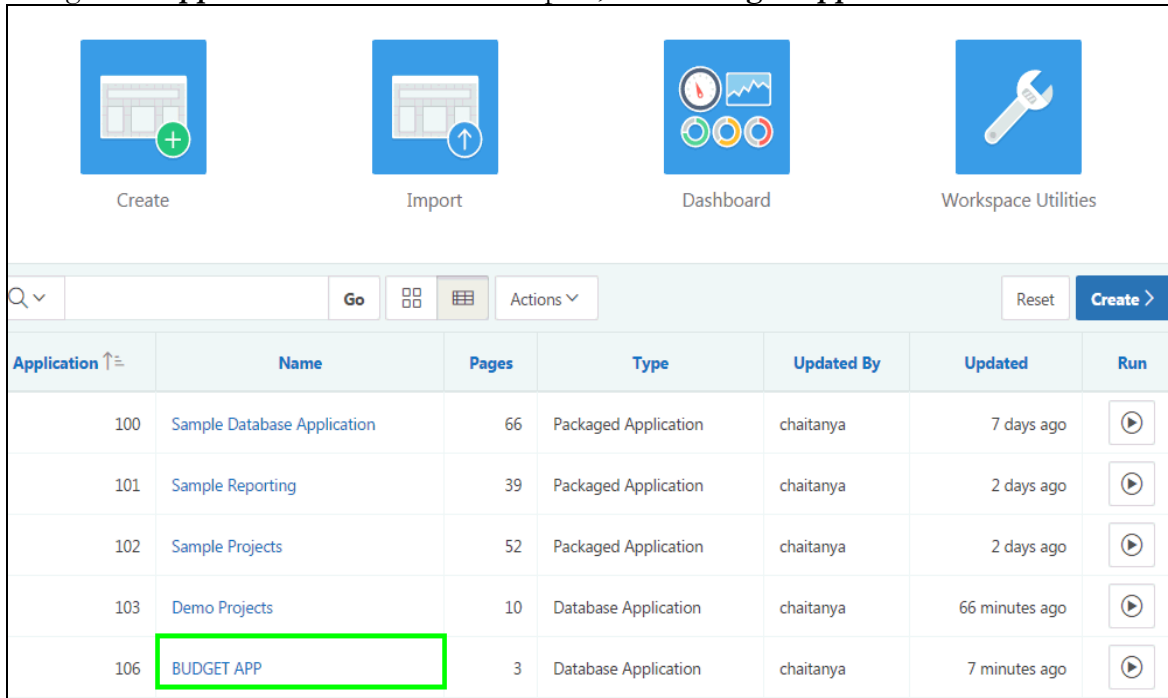
Id	Serial	Cpu Type	Cpu Speed	Purchase Date	Brand	Model	Form Factor	Purchase Price	Department Id
1	0C8765T	Pentium I	200	09-OCT-98	Dell	Optiplex	D	2343	2
2	1U09CM2423	Pentium II	667	01-JUN-99	Dell	Optiplex	D	3256	2
3	OKBU4	Pentium III	1000	12-MAY-01	Dell	Optiplex	L	4532	6
4	51214246AB	Pentium III	450	14-JUN-01	Dell	Optiplex	L	5401	3
5	HQMHC12	Pentium IV	1700	15-JUN-02	Dell	Optiplex	D	6588	5
6	W112FGHZ456	Pentium III	800	12-JAN-01	Dell	Optiplex	D	5330	1
7	2DLP1	Celeron	366	01-APR-99	Dell	Optiplex	D	1399	3
8	6ZQ11	Pentium I	200	24-OCT-96	Dell	Optiplex	D	2378	2
9	59785246GH	Pentium III	650	20-MAR-00	Dell	Optiplex	L	5122	1
10	12375936YT	Pentium I	166	01-MAR-97	Dell	Optiplex	L	2266	3
11	LTS5133	Pentium I	100	01-JAN-96	Dell	Optiplex	L	2188	6
12	A492CSLZE265	Pentium III	750	23-JUN-99	Dell	Optiplex	D	5066	4
13	3J17JZL1345	Pentium III	850	17-AUG-01	Dell	Optiplex	L	5119	4
14	UV103GAJQ105	PowerPC G3	466	02-NOV-01	Dell	Optiplex	L	2900	3

In the Developer Toolbar, click **Home**.

HOL 5-3 Creating an Interactive Grid

In this lab, you create an interactive grid on the `PROJECT_BUDGET` table. You already created the Budget App application in HOL 3-2. Now, you create an interactive grid in the Budget App application.

1. Navigate to **Application Builder**. In the report, select **Budget App**.





The screenshot shows the Oracle Application Builder interface. At the top, there are four main action buttons: 'Create' (with a plus sign icon), 'Import' (with an upward arrow icon), 'Dashboard' (with a dashboard icon), and 'Workspace Utilities' (with a wrench icon). Below these is a search bar with a 'Go' button, a view toggle (grid/list), and an 'Actions' dropdown. A 'Reset' button and a 'Create >' button are also visible. The main area displays a table of applications. The 'BUDGET APP' entry is highlighted with a green box.


Application ↑	Name	Pages	Type	Updated By	Updated	Run
100	Sample Database Application	66	Packaged Application	chaitanya	7 days ago	
101	Sample Reporting	39	Packaged Application	chaitanya	2 days ago	
102	Sample Projects	52	Packaged Application	chaitanya	2 days ago	
103	Demo Projects	10	Database Application	chaitanya	66 minutes ago	
106	BUDGET APP	3	Database Application	chaitanya	7 minutes ago	


- Click **Create Page**.


Application 106 - BUDGET APP Edit Application Properties


Run Application


Supporting Objects


Shared Components


Utilities


Export / Import


Go


Grid
Table


Actions
Create Page >


Page ↑	Name	Updated	Updated By	Page Type	Group	User Interface	Lock	Run
1	Project Budget	8 minutes ago	chaitanya	Home	Unassigned	Desktop		
2	Project Budget	9 minutes ago	chaitanya	DML Form	Unassigned	Desktop		
101	Login Page	9 minutes ago	chaitanya	Login	Unassigned	Desktop		


- Select **Report** and click **Next**.
- Select **Interactive Grid** and click **Next**.


Interactive Report


Interactive Grid


Classic Report


Report with Form on Table


Report on Web Service

- For Page Attributes, Enter **Project Budget Interactive Grid** for Page Name and click **Next**.
- For Navigation Menu:
 - Navigation Preference: Select **Create a new navigation menu entry**
 - New Navigation Menu Entry: **Interactive Grid**

Click **Next**.

7. On the Report Source dialog, note that you can set the Editing Enabled to Yes or No. In this lab, you accept the default, **No**.
Select **Project Budget** for Table / View Name and click **Create**.

Create Interactive Grid [Close]

Editing Enabled: Yes **No** [?]

* Source Type: **Table** SQL Query [?]

* Table / View Owner: APEX_DEMO [?]

* Table / View Name: **PROJECT_BUDGET (table)** [?]

* Select Columns [?]

<input type="checkbox"/>	ID (Number)	↑
<input type="checkbox"/>	PROJECT (Varchar2)	↑
<input type="checkbox"/>	TASK_NAME (Varchar2)	↓
<input type="checkbox"/>	START_DATE (Date)	↓
<input type="checkbox"/>	END_DATE (Date)	↓
<input type="checkbox"/>	STATUS (Varchar2)	↓
<input type="checkbox"/>	ASSIGNED_TO (Varchar2)	↓
<input type="checkbox"/>	COST (Number)	↓

< Cancel **Create**

8. Click **Save and Run Page**. The interactive grid displays. Your screen might look like:

The screenshot displays the Oracle APEX Developer Toolbar at the bottom of the page. The 'Home' button, represented by a house icon, is highlighted with a green border. Other buttons in the toolbar include 'Application 106', 'Edit Page 3', 'Session', 'View Debug', 'Debug', 'Show Layout Columns', 'Quick Edit', 'Theme Roller', and 'Total 35'.

The background shows the 'Project Budget Interactive Grid' with the following data:

Id	Project	Task Name	Start Date	End Date	Status	Assigned To	Cost
1	ACME Web Ex...	Create pilot w...	02-FEB-17	02-FEB-17	Closed	John Watson	100
2	ACME Web Ex...	Specify securit...	02-JUL-17	02-JUL-17	Open	John Watson	200
3	ACME Web Ex...	Configure Wo...	02-AUG-17	02-AUG-17	Open	John Watson	200
4	Bug Tracker	Document qu...	12-DEC-16	15-DEC-16	Closed	Myra Sutcliff	3000
5	Bug Tracker	Review autom...	16-DEC-16	18-DEC-16	Closed	Myra Sutcliff	750
6	Bug Tracker	Implement bu...	31-DEC-16	31-DEC-16	Closed	Myra Sutcliff	100
7	Bug Tracker	Train develop...	01-JUL-17	01-DEC-17	On-Hold	Myra Sutcliff	1000
8	Convert Sprea...	Create ACME ...	02-MAY-17	02-SEP-17	Open	Pam King	6000
9	Convert Sprea...	Send links to p...	02-NOV-17	02-NOV-17	Pending	Pam King	0
10	Discussion For...	Identify owners	01-JAN-17	01-JAN-17	Closed	Hank Davis	250
11	Discussion For...	Install ACME ...	01-JUL-17	01-JUL-17	Closed	Hank Davis	100
12	Discussion For...	Monitor partic...	02-JUN-17	02-JUL-17	Open	Hank Davis	450
13	Email Integrat...	Get RFPs for n...	02-APR-17	02-MAY-17	Closed	Bob Niile	2000
14	Employee Sati...	Complete que...	01-NOV-17	01-DEC-17	Closed	Irene Jones	1200
15	Client Server C...	Plan migration...	02-JAN-17	02-JAN-17	Closed	Pam King	1000
16	Client Server C...	Migrate Client...	02-JUN-17	02-SEP-17	Open	Pam King	300

In the Developer Toolbar, click **Home**.



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