



## **Oracle Application Express: Developing Database Web Applications**

### **Hands-On-Labs Guide**

#### **Unit 8: Creating and Using Forms**

This exercise includes two hands-on-labs.

**HOL 8-1 Updating the Form Pages in the Demo Projects Application:** In this hands-on-lab, you update the default form pages in the Demo Projects application.

**HOL 8-2 Creating a Form on a Table and Linking a Report:** In this hands-on lab, you create a form on the PROJECT\_BUDGET table. Then, you create a classic report on the PROJECT\_BUDGET table and link this report to the form. This lab utilizes the Budget App application.

## HOL 8-1 Updating the Form Pages in the Demo Projects Application

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

1. Navigate to **App Builder** and run the **Demo Projects** application.
2. In the navigation menu, click **Demo Proj Team Members**.  
Then, click the Edit icon (pencil), next to a team member's name to view the modal form page, for the person you selected.

The screenshot shows the Oracle APEX interface for the 'Demo Projects' application. The navigation menu on the left includes 'Home', 'DEMO\_PROJ\_TEAM\_MEMBERS' (highlighted with a green box), 'DEMO\_PROJECTS', 'DEMO\_PROJ\_MILESTONES', 'DEMO\_PROJ\_TASKS', 'Dashboard', and 'Administration'. The main content area displays the 'DEMO\_PROJ\_TEAM\_MEMBERS' report. At the top of the report is a search bar, a 'Go' button, a dropdown for '1. Primary Report', an 'Actions' dropdown, a 'Reset' button, and a 'Create' button. Below this is a table with four columns: 'Username', 'Full Name', 'Email', and 'Profile'. The table contains four rows of team member data. The 'Edit' icon (pencil) next to the first row (BERNIE) is highlighted with a green box.

Username	Full Name	Email	Profile
BERNIE	Bernard Jackman	bernard.jackman@email.com	I am a great believer in the fact there is no "I" in TEAM.
DJ	Daniel James Lee	daniel.lee@email.com	I am a DJ, I am what I say. If you ask me a question and I don't answer, it is not because I'm rude, it is probably because I have my earbuds in and am rocking out to some gangsta rap.
EVA	Eva Jelinek	eva.jelinek@email.com	I will tell you directly what I think and expect you to tell me the same. If you are sensitive then it may be best you don't talk to me.
HARRY	Harold Youngblood	harold.youngblood@email.com	Providing I have my soy latte, falafel, and my MacBook - Bring It!

3. On the Developer Toolbar at the bottom of the page, click **Edit Page 3** to jump to the modal page in Page Designer.
4. In the property editor > Page > Identification, enter **Maintain Team Member** for both Name and Title.

Page

Filter

Identification

Name: Maintain Team Member

Page Alias:

Title: Maintain Team Member

Page Group: - Select -

- Under Rendering, select the **Proj\_Team\_Member** region. In the property editor, navigate to Appearance > Template Options. Click **Use Template Defaults**.

Application 94613 \ Page Designer

Rendering Dynamic Ac... Processing Page Share...

Maintain Team Member

Pre-Rendering

Regions

Dialog Header

Content Body

Proj Team Member

Attributes

Items

P3\_ID

P3\_USERNAME

P3\_FULL\_NAME

P3\_EMAIL

P3\_PROFILE

P3\_PHOTO\_FILENAME

Proj Team Member

DIALOG HEADER

CONTENT BODY

PREVIOUS

ITEMS

P3\_USERNAME

P3\_FULL\_NAME

P3\_EMAIL

Regions Items Buttons

Region

Filter

Identification

Source

Layout

Appearance

Template: Blank with Attributes

Template Options: Use Template Defaults

CSS Classes

Icon

Item Display Position: Above Content

- In the Template Options dialog, under Advanced, for Item Width, select **Stretch Form Fields** and click **OK**.

**Template Options** [X]

☒ **Common**

General ☒ Use Template Defaults

☒ **Advanced**

Item Padding	Default	▼
Item Size	Default	▼
Item Width	Stretch Form Fields	▼
Label Alignment	Right	▼
Label Position	Inline - Default	▼
Top Margin	Default	▼
Bottom Margin	Default	▼
Left Margin	Default	▼

Cancel OK

Save your changes. Click **Save**.

- Now, modify the default Project form page to be more visually appealing and consistent with how the Maintain Team Member page was improved. Navigate to the application runtime environment. In the navigation menu, click **Demo Projects**.
- Click one of the Project names, to open a modal dialog.

**DEMO\_PROJECTS**

Name	Project Lead	Status Cd	Completed Date	Milestones	Tasks
Develop Production Partner Portal	LBEATIE	Assigned	-	5	17
Train Developers on Web development tool	LBEATIE	Completed	11/29/2019	2	6
Configure Web Development Tool Environment	LOWCODE	Completed	11/14/2019	0	6
Develop Partner Portal POC	LOWCODE	In-Progress	-	2	7
Migrate Legacy Applications	MIYAZAKI	In-Progress	-	3	9
				12	45

1 - 5

Release 1.0 Built with ♥ using Oracle APEX

Home Application 23192 Edit Page 4 Session View Debug Debug Page Info Quick Edit Theme Roller

9. In the runtime environment, after selecting a project, in the Developer Toolbar, click **Edit Page 5**.

**Project**

Project Lead: LBEATIE

Name: Develop Production Partner Portal

Description: Develop the production app that partners can use to work more collaboratively with us.

Status Cd: Assigned

Completed Date: [Calendar Icon]

Cancel Delete Apply Changes

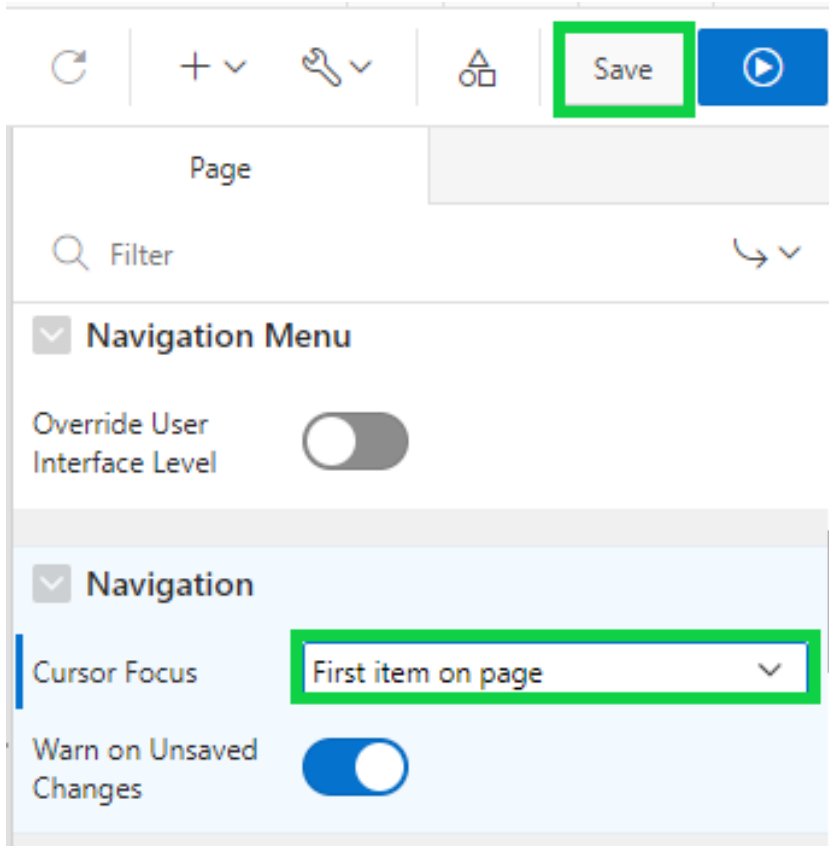
Release 1.0 Built with ♥ using Oracle APEX

Home Application 23192 **Edit Page 5** Session View Debug Debug Page Info Quick Edit Theme Roller

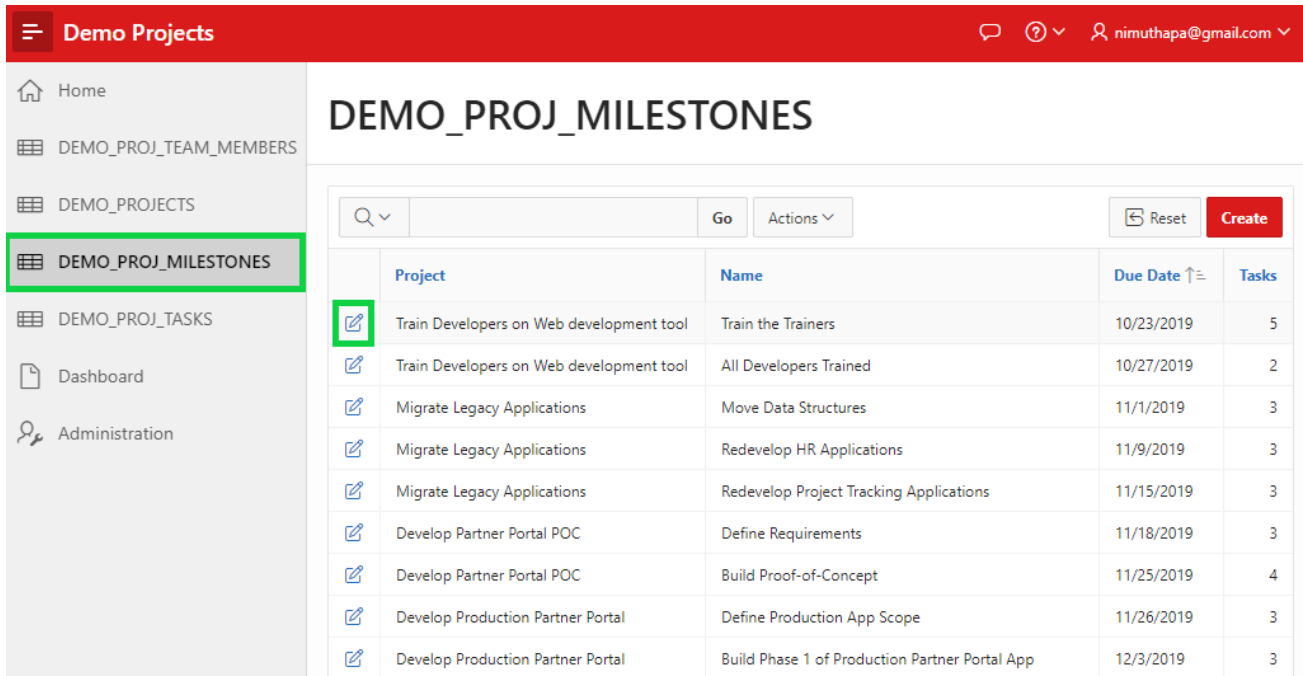
10. In the Property Editor:

- Identification: Name - enter **Maintain Project**
- Identification: Title - enter **Maintain Project**

11. Scroll down to Navigation and for Cursor Focus, select **First item on page**. Then, click **Save**.



12. Modify the default Milestone form page to be more visually appealing. In the Demo Projects runtime environment, navigate to the Demo Proj Milestones page and open one of the records by clicking the edit icon (pencil).



**DEMO\_PROJ\_MILESTONES**

Project	Name	Due Date ↑	Tasks
Train Developers on Web development tool	Train the Trainers	10/23/2019	5
Train Developers on Web development tool	All Developers Trained	10/27/2019	2
Migrate Legacy Applications	Move Data Structures	11/1/2019	3
Migrate Legacy Applications	Redevelop HR Applications	11/9/2019	3
Migrate Legacy Applications	Redevelop Project Tracking Applications	11/15/2019	3
Develop Partner Portal POC	Define Requirements	11/18/2019	3
Develop Partner Portal POC	Build Proof-of-Concept	11/25/2019	4
Develop Production Partner Portal	Define Production App Scope	11/26/2019	3
Develop Production Partner Portal	Build Phase 1 of Production Partner Portal App	12/3/2019	3

13. In the Developer Toolbar, click **Edit Page 7**.

14. In the Property Editor:

- Identification: Name - enter **Maintain Milestone**
- Identification: Title - enter **Maintain Milestone**

15. Scroll down to Navigation and for Cursor Focus, select **First item on page**. Then, click **Save**.

16. Modify the default Task form page to be more visually appealing. In the Demo Projects runtime environment, navigate to the Demo Proj Tasks page and open one of the records by clicking the edit icon (pencil).



**DEMO\_PROJ\_TASKS**

Search:  Go Actions:

▼ ☒ Project ☒ Milestone

**Project : Configure Web Development Tool Environment, Milestone :**

	Assignee	Name	Start Date ↑	End Date	Is Complete
	NIMUTHAPA@GMAIL.COM	Identify Server Requirements	10/13/2019	10/14/2019	Y
	MEIYU	Install Web development tool	10/15/2019	10/15/2019	Y
	HARRY	Configure Web Listeners	10/15/2019	10/15/2019	Y
	BERNIE	Configure Web development tool Instance Administration Settings	10/16/2019	10/16/2019	Y
	HARRY	Assign Workspace Administrators	10/17/2019	10/17/2019	N

17. In the Developer Toolbar, click **Edit Page 9**.

18. In the Property Editor:

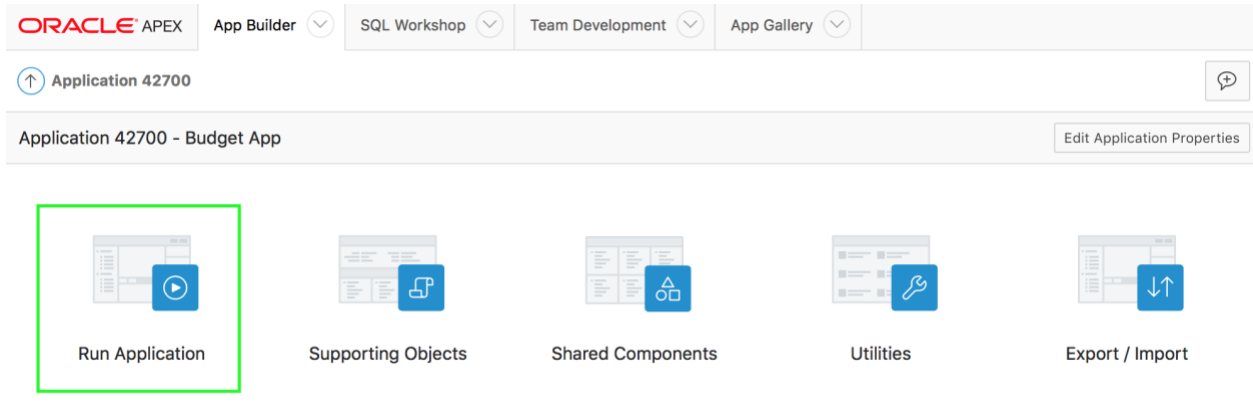
- Identification: Name - enter **Maintain Task**
- Identification: Title - enter **Maintain Task**

19. Scroll down to Navigation and for Cursor Focus, select **First item on page**.  
Then, click **Save**.

## HOL 8-2: Creating a Form on a Table and Linking a Report

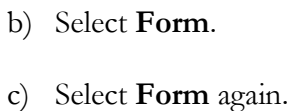
In this lab, you first create a classic report on the PROJECT\_BUDGET table. Then, you create a form on the PROJECT\_BUDGET table. Finally, you link the classic report to the form.

1. Navigate to **App Builder** and run the **Budget App** application.



2. Click **Application xxxx** in the Developer toolbar, it will navigate you the Application homepage. Now, create a Classic Report on the PROJECT\_BUDGET table. Click **Create Page** and then perform the following steps:
  - a) Select **Report**.
  - b) Select **Classic Report**.
  - c) Enter **Project Budget Classic Report** for Page Name and click **Next**
  - d) For Navigation, select **Create a new navigation menu entry** and click **Next**
  - e) Accept the defaults for Data Source and Source Type.  
Select **PROJECT\_BUDGET** for Table / View Name and click **Create**.

- a) In the page designer toolbar, click **Create** and select **Page**.



- d) Enter **Project Budget Classic Details** for Name, select **Modal Dialog** for Page Mode and click **Next**.

The screenshot shows the 'Create Form' wizard in Oracle APEX. The 'Page Attributes' step is active, indicated by a blue dot on the progress bar. The form contains the following fields:

- Page Number:** 9
- Page Name:** Project Budget Classic Details
- Page Mode:** Modal Dialog
- Page Group:** - Select Page Group -
- Breadcrumb:** - do not add breadcrumb region to page -

At the bottom, there are buttons for '< Cancel' and 'Next >'. The 'Next >' button is highlighted with a green border.

- e) Click **Next**.
- f) Select **PROJECT\_BUDGET** for Table / View Name and click **Next**.
- g) For Primary Key Type, make sure **Select Primary Key Column(s)** is selected, and select **ID** for Primary Key Column.
- h) Click **Create**.

### Create Form - Columns and Primary Key ×

\* Select Columns to be displayed in the form ?

⏮
ID (Number)

>>
PROJECT (Varchar2)

>
TASK\_NAME (Varchar2)

<
START\_DATE (Date)

<<
END\_DATE (Date)

STATUS (Varchar2)

ASSIGNED\_TO (Varchar2)

COST (Number)

Primary Key Type
☐ Managed by Database (ROWID)
☒ **Select Primary Key Column(s)**

Primary Key Column

ID (Number) ▼

Secondary Key Column

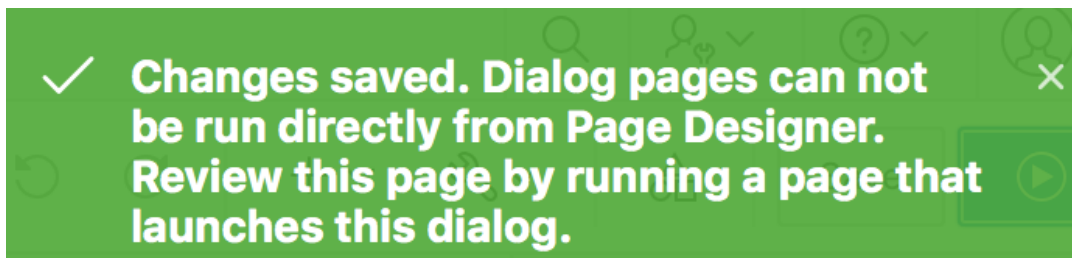
- Select Column - ▼

<
Cancel

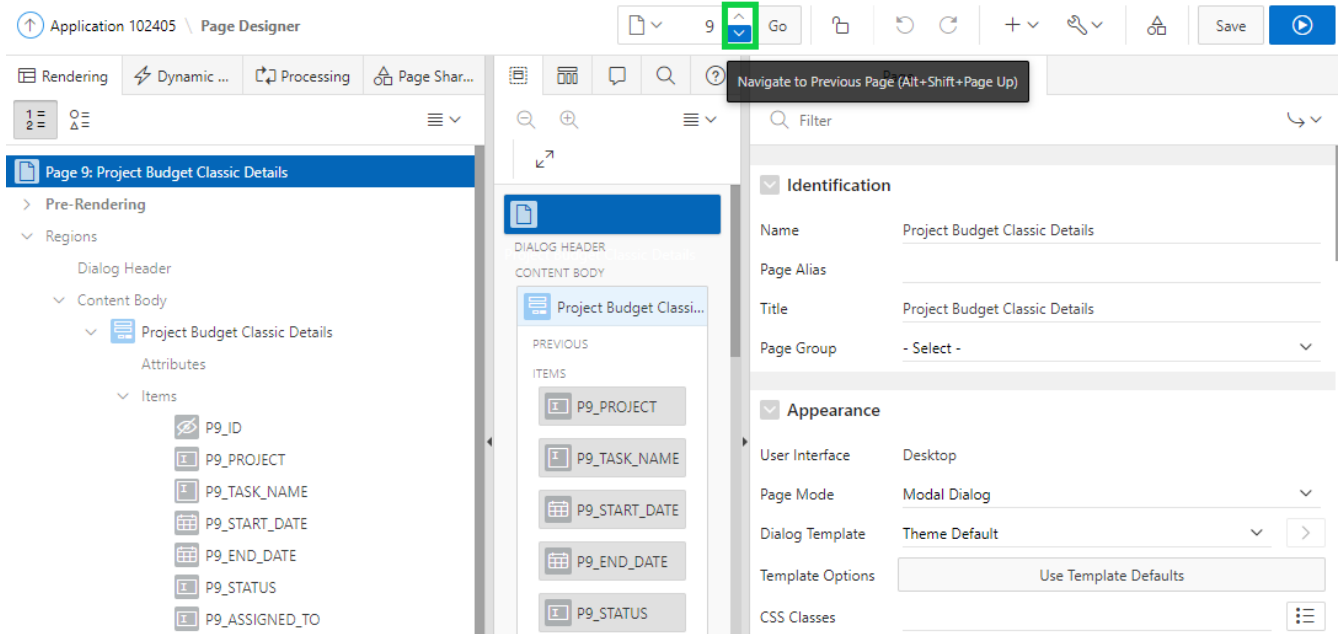
Create

The form page is created successfully.

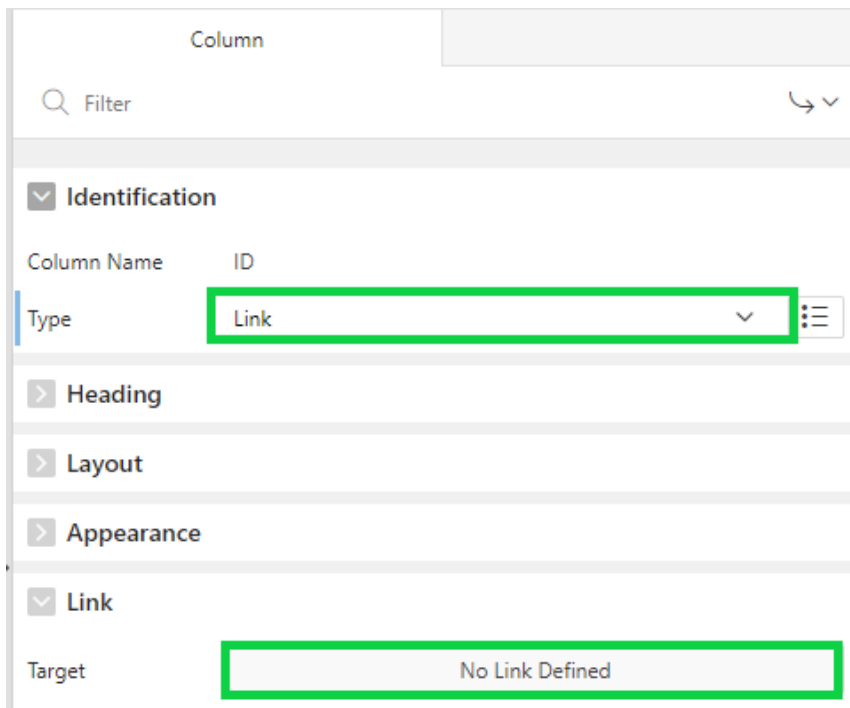
4. The form you just created is a dialog page and so you cannot run it directly. If you click the Save and Run Page, you see this message:



5. You want to navigate to the Project Budget Report page in the page designer. In the toolbar, click the Navigate to previous page arrow (down arrow).



6. Under Rendering > Regions, select **Report 1**. In the property editor, replace the existing title with **Project Budget Report**.
7. Under Rendering, expand **Columns** and select **ID**.
8. In the property editor, under **Identification** select **Link** for Type. Scroll down and locate Link > Target. Click **No Link Defined**.



9. In the Link Builder – Target dialog, select the following:
- Target > Page: Select the form page, **Project Budget Classic Details**
  - Set Items > Name: **P9\_ID**
  - Set Items > Value: **#ID#**
- Click **OK**.

**Link Builder - Target**

☒ **Target**

Type: Page in this application

Page: 9

☒ **Set Items**

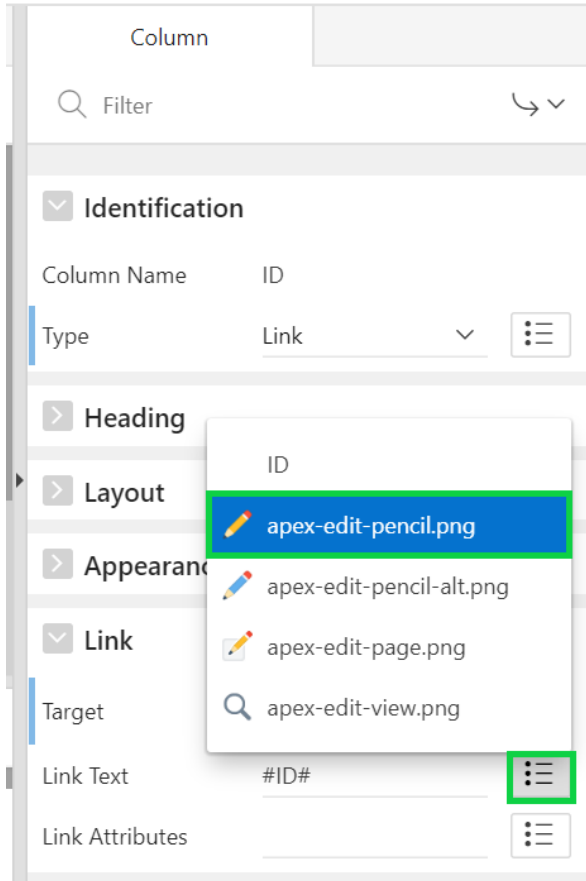
Name	Value
P9_ID	#ID#

☒ **Clear Session State**

Clear Cache

Reset Pagination: ☒

10. In the property editor, navigate to Link. For Link Text, click the Quick Pick and select **apex-edit-pencil.png**.



11. Click **Save and Run Page**.

12. The Project Budget Classic Report page is displayed.

**Note:** You might have to log in to the application using username and password. Then, in the navigation menu, click Project Budget Report.

Click the Edit icon (pencil) for any row, and you see that the form dialog page is displayed.



**Project Budget Classic Details**

Project: ACME Web Express Configuration

Task Name: Identify server requirements

Start Date: 1/26/2019

End Date: 1/27/2019

Status: Closed

Assigned To: John Watson

Cost: 300

Buttons: Cancel, Delete, Apply Changes



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