



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

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

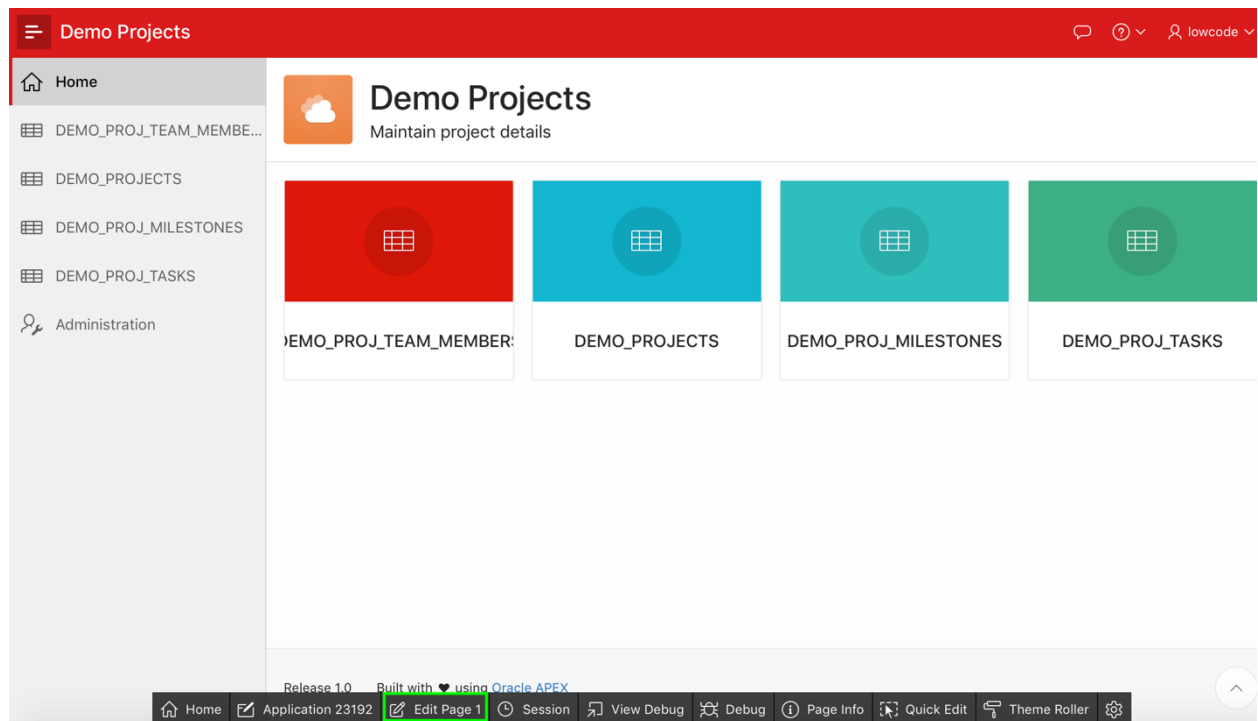
#### **Unit 4: Managing Pages in Page Designer**

In this lab, you create a dashboard by adding a new component to the Home page of the Demo Projects application. You open the home page in page designer, navigate through and review the page designer panes, add a chart region and edit the chart attributes.

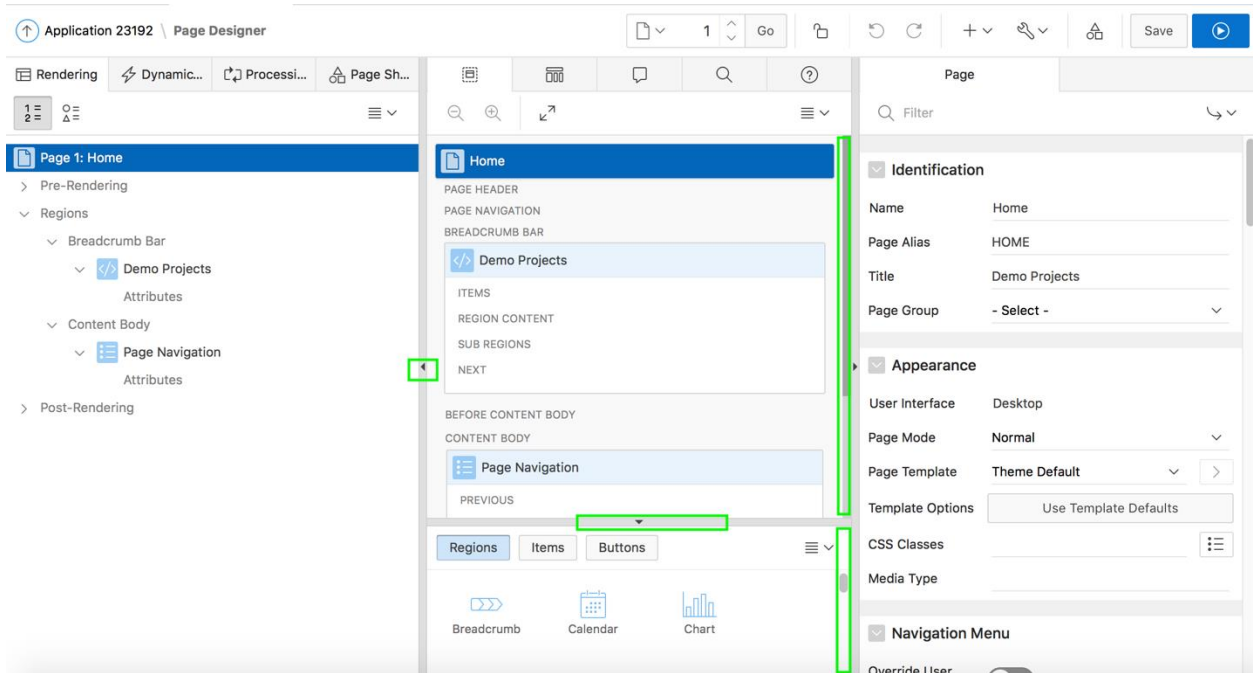
1. In the App Builder, run the Demo Projects Application. You are now in the application runtime environment.

In the Developer Toolbar, click **Edit Page 1**.

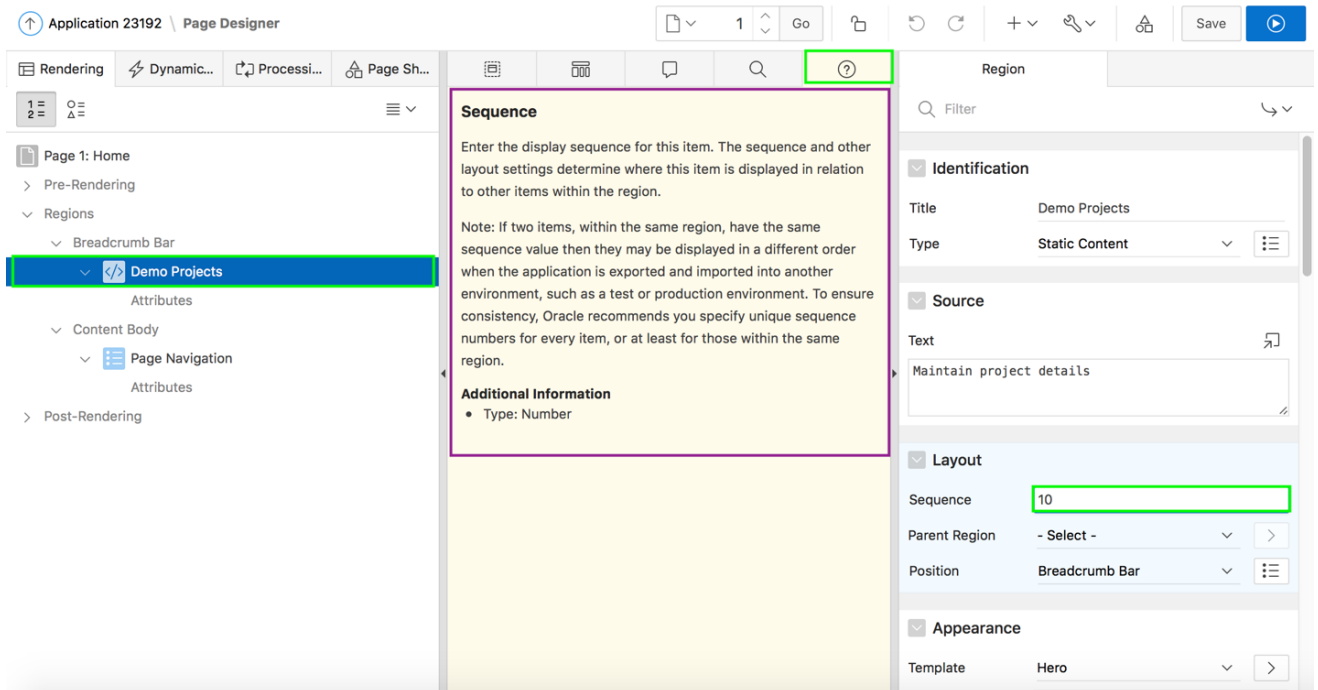
**Note:** If you are not on the Home page then the Developer Toolbar will show the current page number, and clicking on Edit Page **xx** will navigate to that page, instead of Page 1.



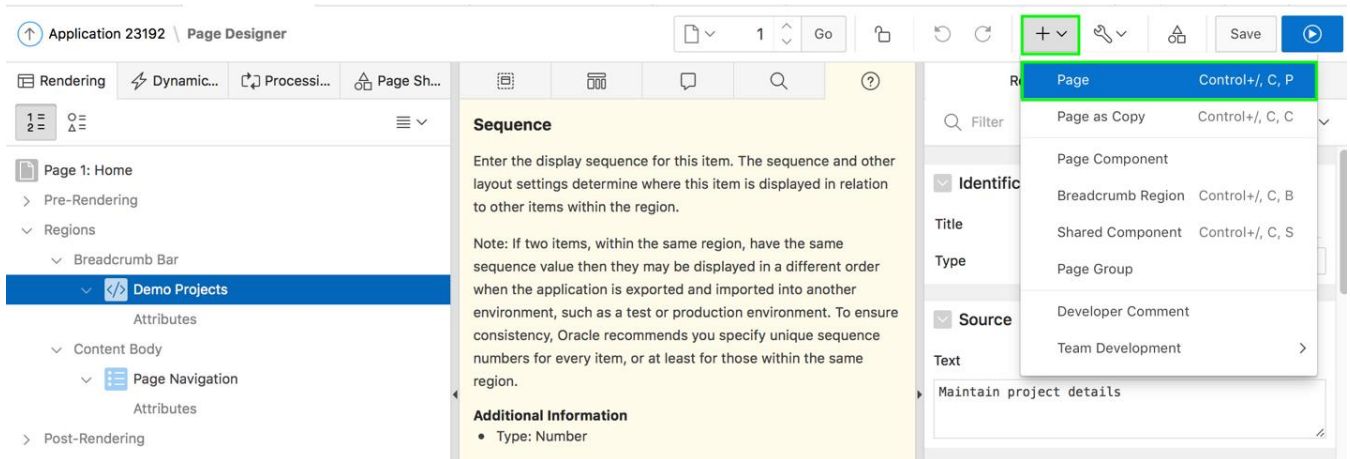
2. The Page Designer is displayed for Page 1. There are three main panes within Page Designer: Left Pane, Central Pane, and Right Pane.  
You can change the size of each pane by selecting the dividers and sliding them left or right.  
Change the size of **Grid Layout** and **Gallery** by sliding the divider between them up and down.



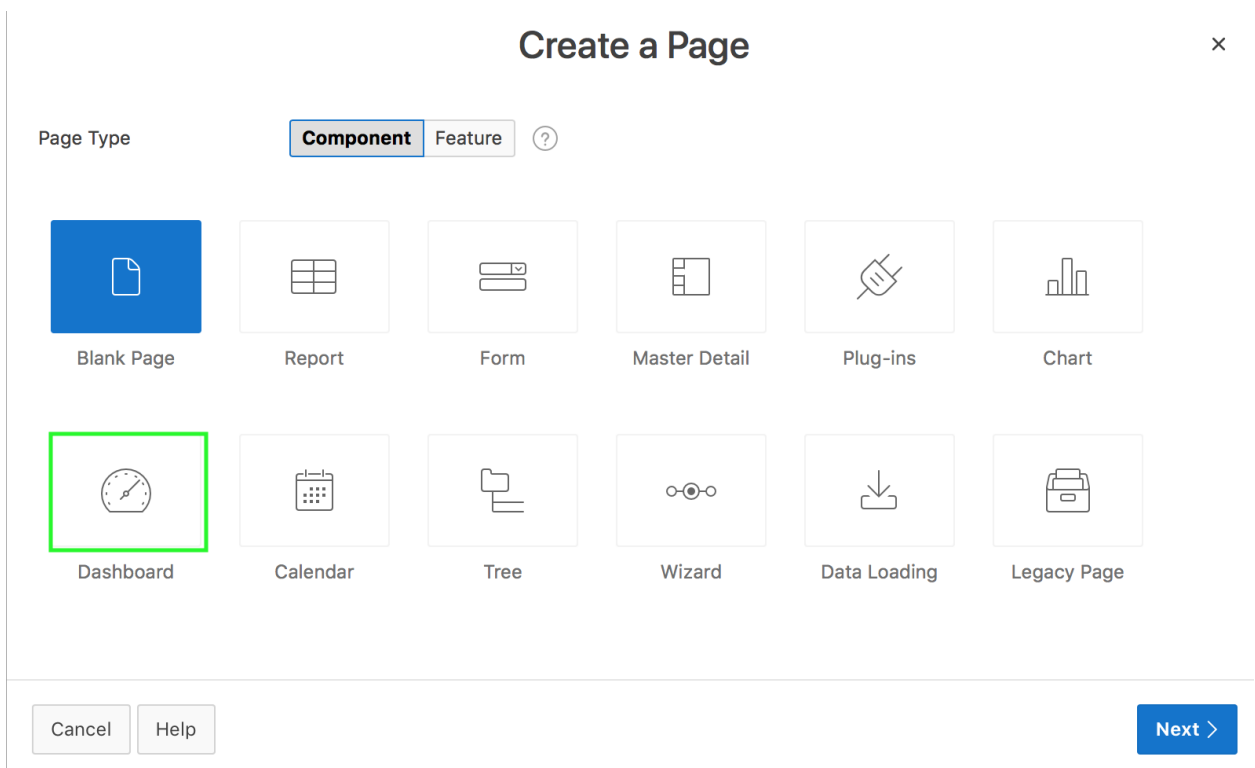
3. In the Page Designer, you can invoke help on any attribute by clicking Help icon (shown as a question mark) on the toolbar. Select a component and then select an attribute in the Property Editor to display help on that attribute. For Example, in this screenshot below, you select **Demo Projects** under Rendering, and then select **Sequence > Layout**. The help text for Sequence is displayed.



4. Add a Dashboard page and include a bar chart that shows projects with the number of tasks. In the page designer, click **Create** (the + icon) and select **Page**.



5. In the Create a Page dialog, click **Dashboard**.



6. Enter **Dashboard** for Page Name, and click **Next**.

The screenshot shows the 'Create Dashboard' wizard interface. At the top, the title 'Create Dashboard' is displayed with a close button. Below the title, the section 'Dashboard Layout' is shown. A descriptive text states: 'This wizard creates a first-cut dashboard based on sample data, that you can easily customize using Page Designer. Choose from a number of different chart layouts as the starting point for your page.' There are four layout options, each with a preview icon and a label: 'Primary and 2 secondary charts' (highlighted with a green border), 'Grid of 4 charts', 'Primary and 3 secondary charts', and 'Grid of 6 charts'. Below the layout options, a 'Navigation' section is expanded, showing four settings: 'Breadcrumb' (toggle on), 'Breadcrumb Parent Entry' (dropdown set to '- No parent entry -'), 'Navigation' (toggle on), and 'Navigation Preference' (dropdown set to 'Create a new entry'). At the bottom, there are three buttons: a back arrow, a 'Cancel' button, and a 'Create Page' button.

**Create Dashboard**

**Dashboard Layout**

This wizard creates a first-cut dashboard based on sample data, that you can easily customize using Page Designer. Choose from a number of different chart layouts as the starting point for your page.

**Primary and 2 secondary charts**

**Grid of 4 charts**

**Primary and 3 secondary charts**

**Grid of 6 charts**

**Navigation**

Breadcrumb ☒ ?

Breadcrumb Parent Entry **- No parent entry -** ?

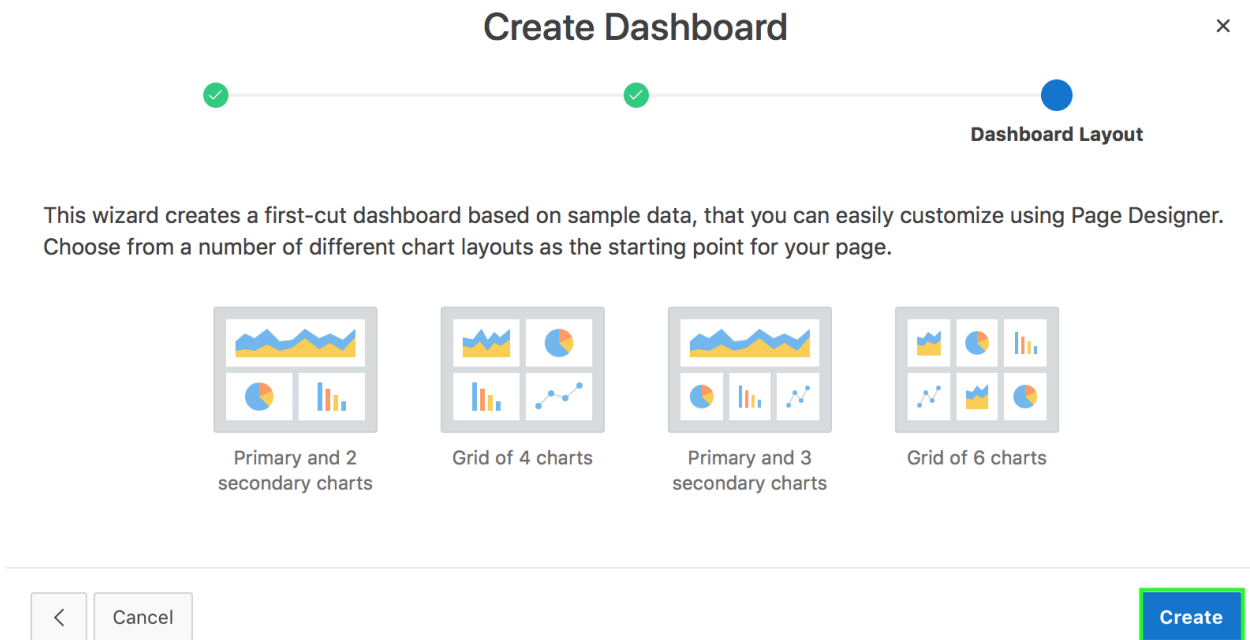
Navigation ☒ ?

Navigation Preference **Create a new entry** ?

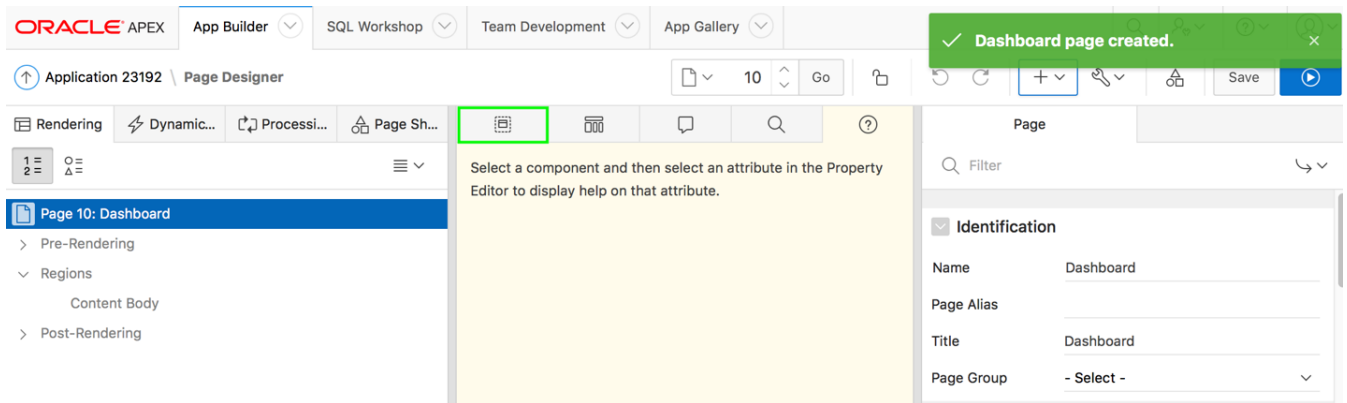
**Create Page**

7. For Navigation Preference, select **Create a new navigation menu entry**. Click **Next**.

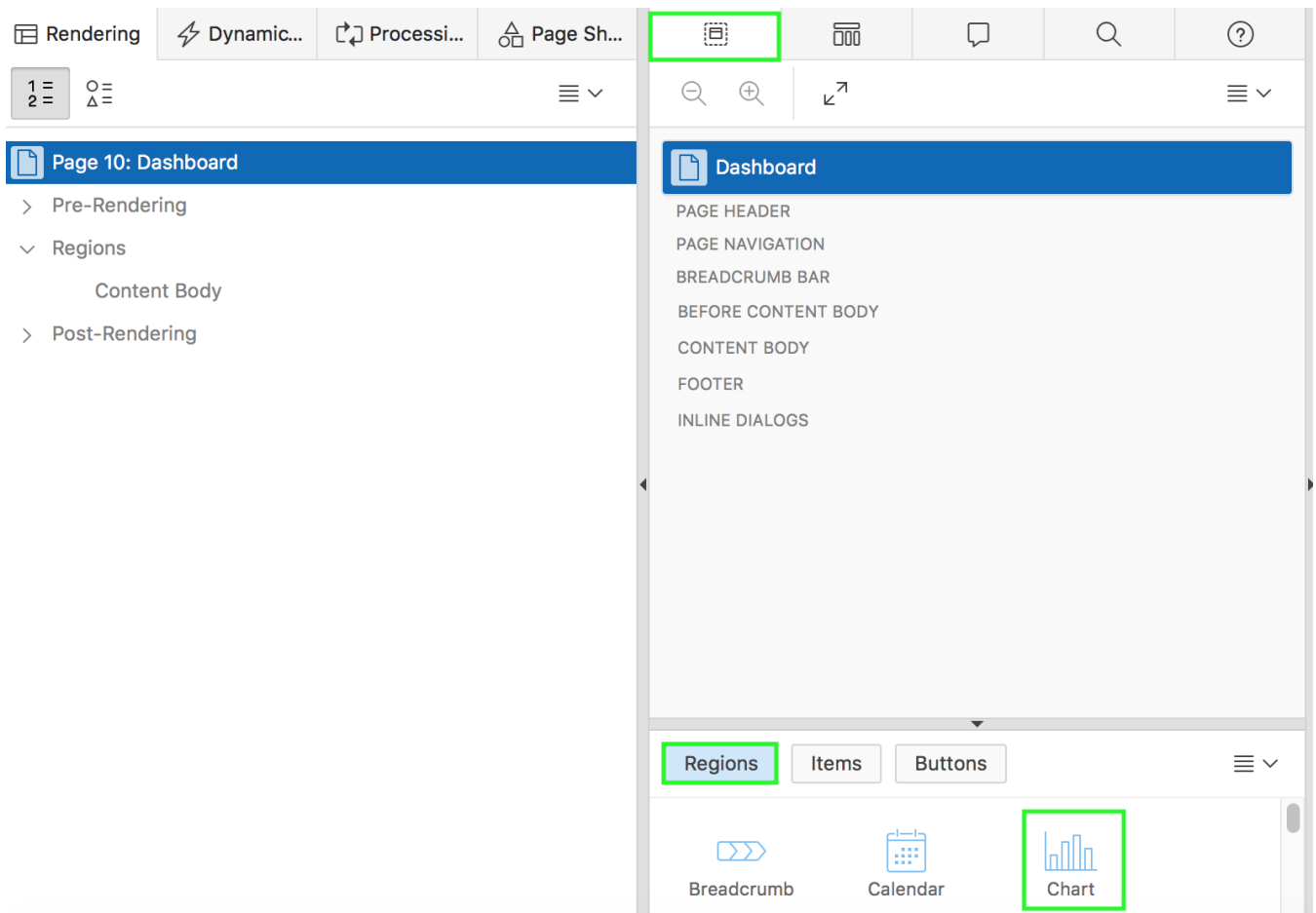
8. Click **Create**.



9. Click **Layout** in the Central Pane.

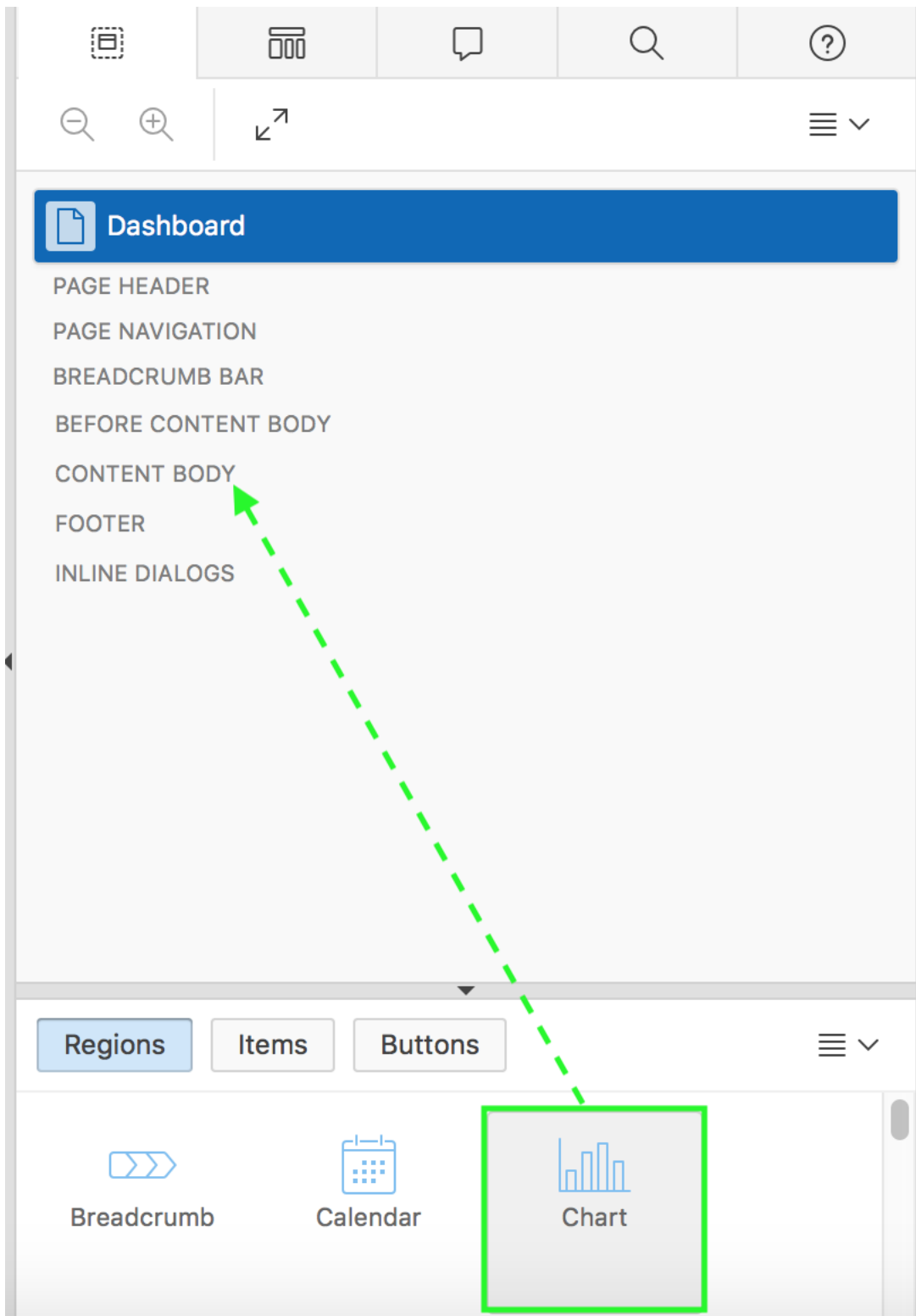


10. In the Gallery (directly below the Grid Layout), click **Regions**, and locate **Chart**.



11. Click and hold **Chart** and drag it to the **Content Body** region. It should appear as a darkened tile before you drop it into place.

**Note:** When you drag the region up, and hover over the small yellow section, below Content Body, the yellow section will expand. A darker yellow section will indicate where the region will be placed.



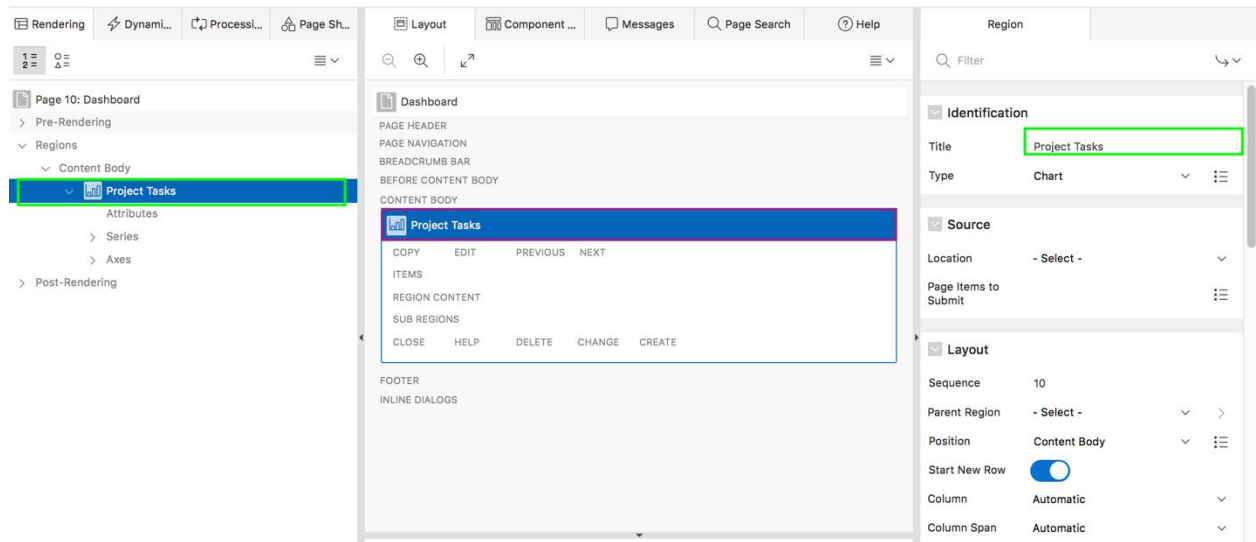
12. Now you modify the properties for a region, such as the Title and Template Options. When you first create a region, it is created with default properties, such as a Title of **New**. Use the



Property Editor to edit attributes for the currently selected component.

In the **Property Editor**, under Identification, for Title - enter **Project Tasks**.

Note: The region name in the Rendering tree (left pane) and the Grid Layout (central pane) are updated to reflect the new title, as soon as you navigate out of the Title attribute in the Property Editor.



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

The screenshot shows the 'Region' configuration dialog in Oracle APEX. The 'Appearance' tab is selected and highlighted with a green box. Below the tab, the 'Template' is set to 'Standard'. The 'Template Options' section is highlighted with a green box and shows the option 'Use Template Defaults, Scroll - Default'. Other visible options include 'CSS Classes', 'Icon', and 'Item Display Position' set to 'Above Content'.

Region

Filter

Appearance

Template Standard

Template Options Use Template Defaults, Scroll - Default

CSS Classes

Icon

Item Display Position Above Content

14. In the Template Options dialog, select **480px** for Body Height.  
Click **OK**.

×

Template Options

▼ Common

General

☒ Use Template Defaults

☐ Remove Body Padding

☐ Show Maximize Button

☐ Show Region Icon

Body Height

480px

Header

Visible - Default

Accent

Default

Style

Default

▼ Advanced

Body Overflow

Scroll - Default

Item Padding

Default

Item Size

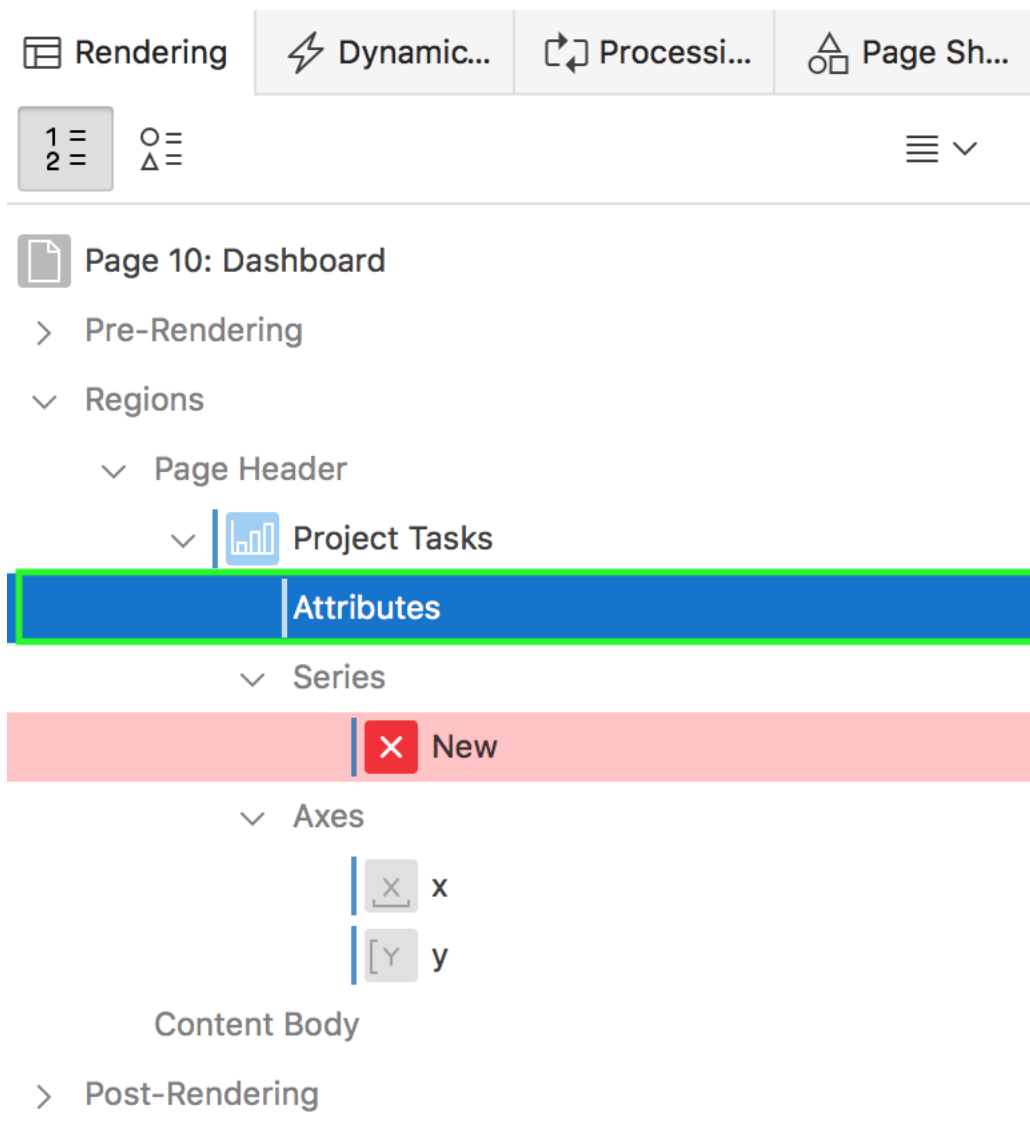
Default

Cancel

OK

15. For certain region types, such as Charts, there are also Attribute properties. The region properties determine how the region is displayed, whereas, the Attributes for a region (where available) are used to define the characteristics of the region, and how the contents of the region are displayed.

Locate the Rendering tree. Under the **Project Tasks** region, click **Attributes**.



16. In the Property Editor:

- Chart: Type - select **Bar**
- Appearance: Orientation - select **Horizontal**
- Appearance: Stack - select **Yes**
- Layout: Height - enter **480**

The screenshot displays the 'Attributes' panel in the Oracle APEX property editor. It is organized into four expandable sections: Chart, Title, Appearance, and Layout. The 'Chart' section has a 'Type' dropdown set to 'Bar'. The 'Title' section has an empty 'Title' text field. The 'Appearance' section includes 'Orientation' set to 'Horizontal', a 'Stack' toggle switch that is turned on, and a 'Stack Label' toggle switch that is turned off. The 'Layout' section has 'Maximum Width' with a text field and 'pixels' label, and 'Height' with a text field containing '480' and a 'pixels' label. Green rectangular boxes highlight the 'Bar' dropdown, the 'Horizontal' dropdown, the 'Stack' toggle, and the '480' text input.

Attributes

Filter

Chart

Type Bar

Title

Title

Appearance

Orientation Horizontal

Stack ☒

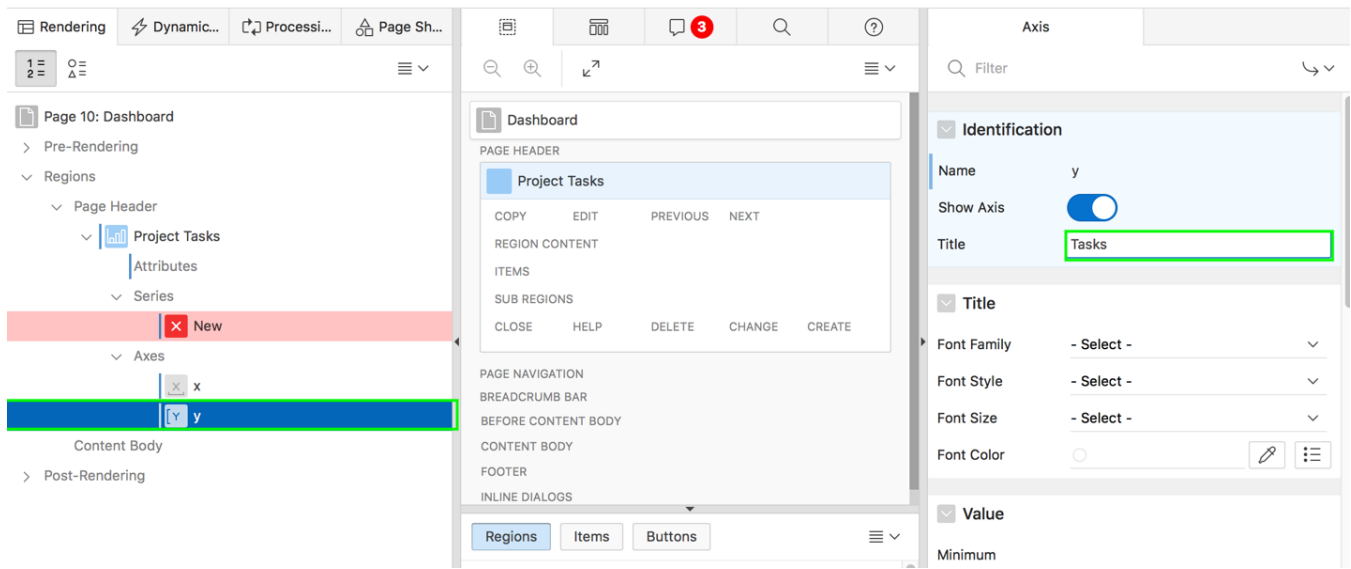
Stack Label ☐

Layout

Maximum Width pixels

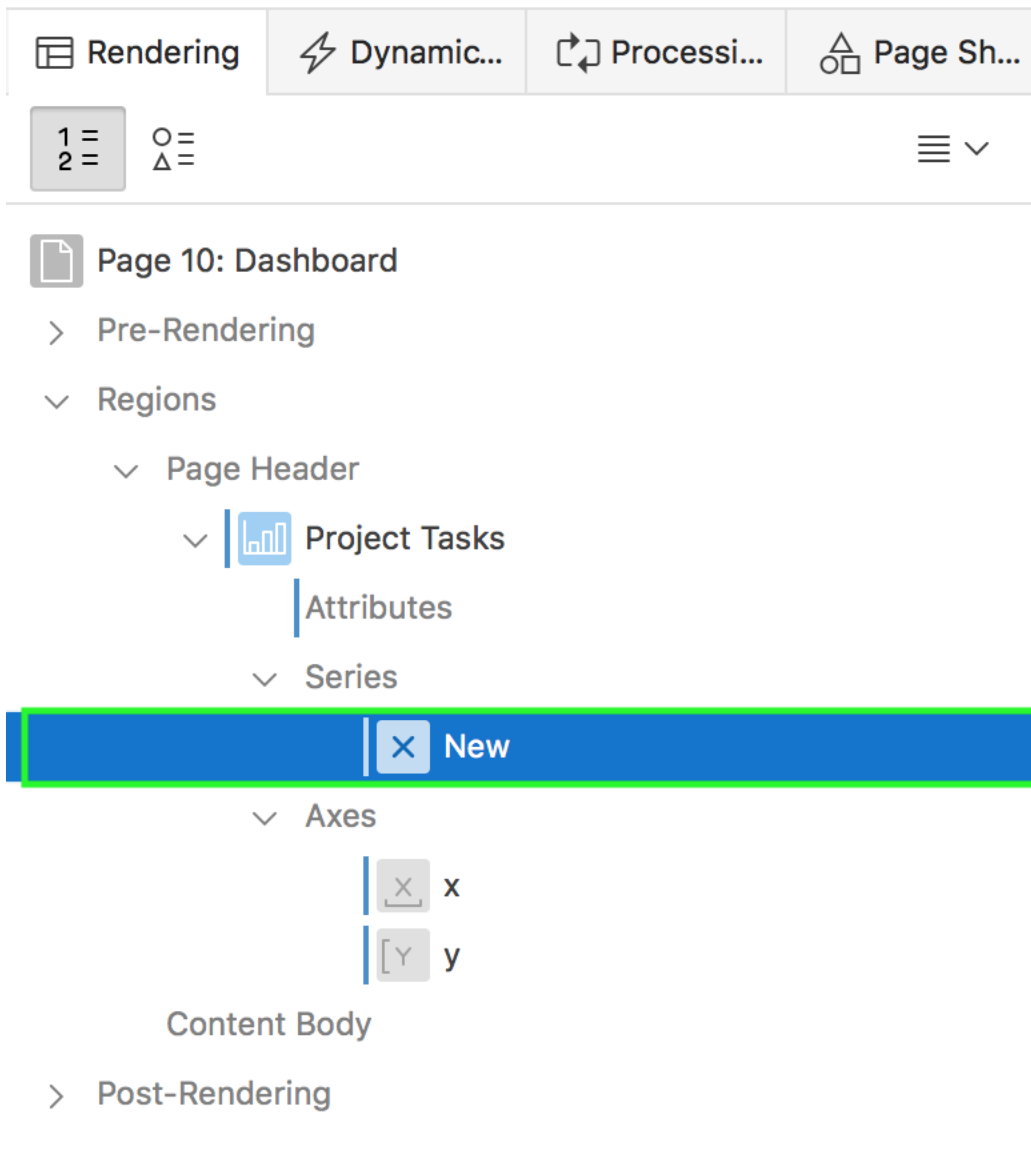
Height 480 pixels

17. Under Rendering > Project Tasks region, navigate to **Axes** and select **y**.  
In the property editor, enter **Tasks** for Title.



18. The DEMO\_PROJ\_TASKS table includes a column called IS\_COMPLETE\_YN. This column is populated by users to indicate that a task is complete. Next, enter chart series details for completed and incomplete tasks within a project.

In the Rendering tree, nested under the Project Tasks region, click Series **X New**.



19. In the property editor, under Identification > Name, enter **Tasks**.  
Under Source, for Type, select **SQL Query**.  
Then click the **Code Editor** icon.

Series

Filter

▼ Identification

Name

▼ Execution Options

Sequence

▼ Source

Location

Type

✖ SQL Query

20. For SQL Query, copy and paste the following code, click the **validate icon** and then click **OK**.

```
select p.id
, p.name as label
, (select count('x') from demo_proj_tasks t
where p.id = t.project_id
and nvl(t.is_complete_yn, 'N') = 'Y'
) value
, 'Completed Tasks' series
, p.created
```



```

from demo_projects p
UNION ALL
select p.id
, p.name as label
, (select count('x') from demo_proj_tasks t
where p.id = t.project_id
and nvl(t.is_complete_yn, 'N') = 'N'
) value
, 'Incomplete Tasks' series
, p.created
from demo_projects p
order by 5

```



21. Under Column Mapping, select:

- Series Name: **SERIES**
- Label: **LABEL**
- Value: **VALUE**

Click **Save and Run Page**.

Save

Series

Filter

, 'Completed Tasks' series  
, p.created  
from demo\_projects p  
UNION ALL  
select p.id

Page Items to Submit

Optimizer Hint

Column Mapping

Series Name

SERIES

Label

LABEL

Value

VALUE

Z

- Select -

Custom Tooltip

- Select -

Legend Tooltip

- Select -

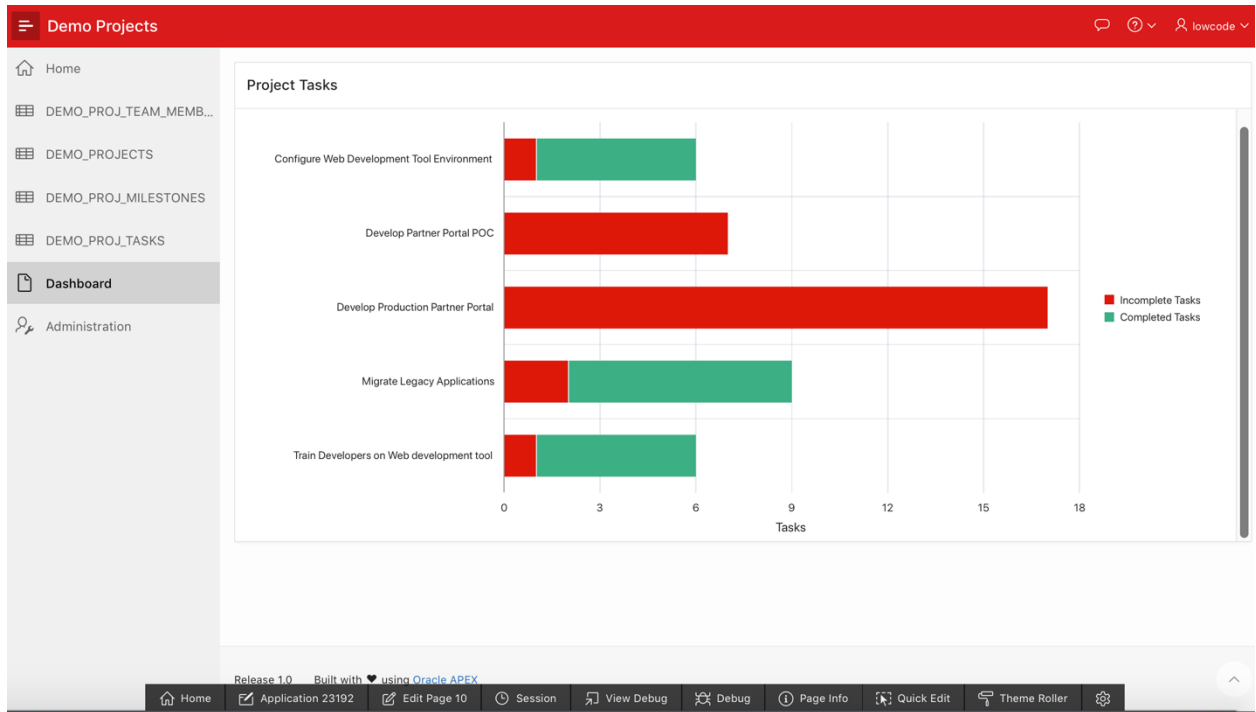
Label Tooltip

- Select -

Custom Column

- Select -

22. You might have to log in using Workspace username and password. The Demo Projects application Dashboard page now looks like:



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