



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

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

#### **Unit 11: Implementing Navigation in your Application**

This hands-on lab includes two sections. In HOL 11-1, you implement navigation in the Demo Projects application.

Breadcrumbs are very common within Web applications to allow users to easily traverse from the current page to a parent page. Use of the Back button is discouraged within Web applications, as this operation may display old ("stale") information to the user. This hands-on lab covers updating the breadcrumb entries for the following pages:

- Demo Proj Team Members
- Demo Projects
- Demo Proj Milestones
- Demo Proj Tasks

The Navigation Menu is defined as a list within Shared Components. In this hands-on lab, you update the Navigation Menu entries, and include icons for each entry.

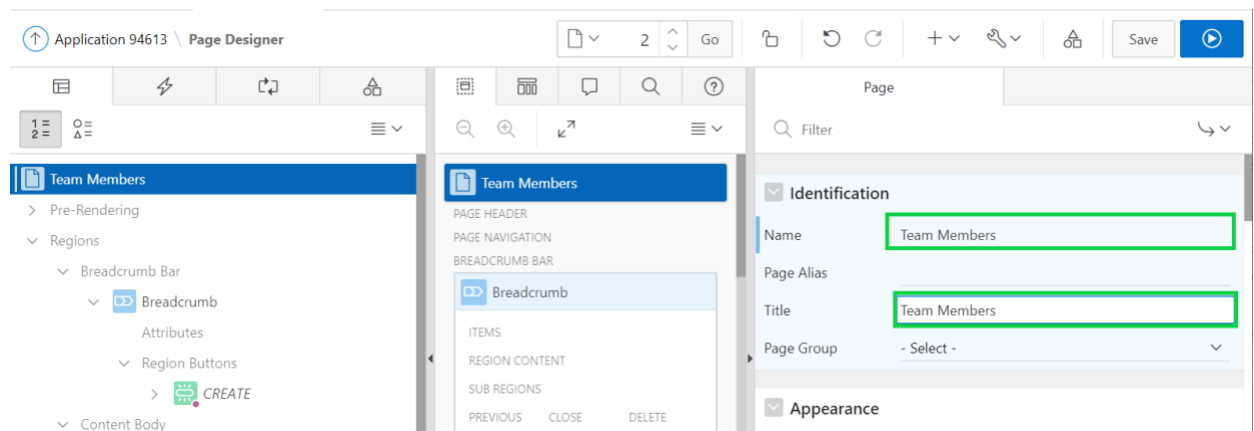
Oracle APEX enables you to create applications that integrate data from local Oracle Database tables and remote data sources. These remote data sources can be simple HTTP data feeds, and also OAuth2 or Basic Authentication–protected resources, REST services provided by Oracle REST Data Services, or even Oracle cloud applications (SaaS) REST services. In HOL 11-2, you build application that uses the iTunes Search API, which makes a request via HTTP, returns the results in JSON, and parses the results before further manipulating the results via SQL postprocessing.

## HOL 11-1: Implementing Navigation in your Application

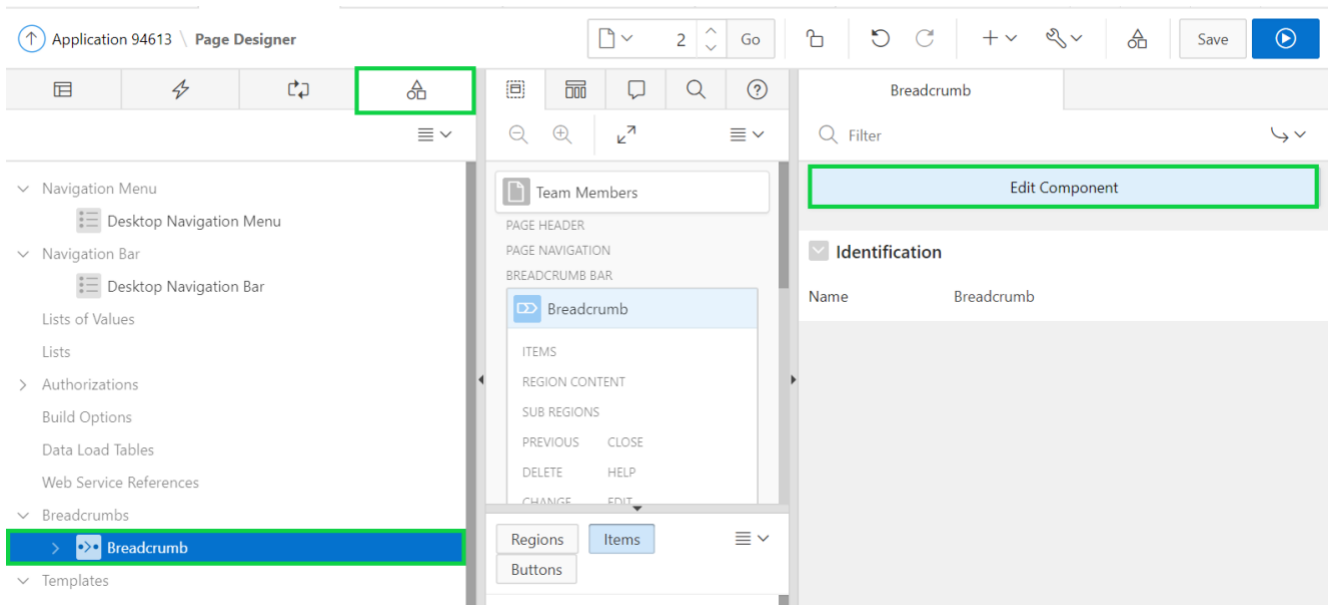
In this hands-on lab, you update breadcrumb entries for the pages in the Demo Projects application. You also update the Navigation Menu entries and add icons for each entry.

1. Navigate to **App Builder** and run the **Demo Projects** application.  
In the navigation menu, click **Demo Proj Team Members**.  
In the Developer Toolbar, click **Edit Page 2**.
2. Update the page properties from Demo Proj Team Members to Team Members. In the Property Editor:
  - Identification: Name - enter **Team Members**
  - Identification: Title - enter **Team Members**

Click **Save**.



3. Update the breadcrumb entry for the page.
  - a) In the Rendering tree, click the **Page Shared Components** tab.
  - b) Expand the Breadcrumbs node and click the **Breadcrumb** entry.
  - c) In the Property Editor, click the **Edit Component** button.



4. Click **DEMO\_PROJ\_TEAM\_MEMBERS** in the breadcrumb entry.
5. For Short Name, enter **Team Members**, and click **Apply Changes**.

Breadcrumb Entry: DEMO\_PROJ\_TEAM\_MEMBERS

Cancel Delete **Apply Changes**

Show All Breadcrumb Entry Target Conditions Authorization Configuration

Breadcrumb

Breadcrumb Breadcrumb ?

\* Page 2 ?

Entry

Sequence 10 ?

Parent Entry - Select Parent - ?

\* Short Name **Team Members** ?

Long Name ?

Target

6. To return to page designer, on the toolbar, click **Edit Page 2**.

Application 94613 \ Shared Components \ Breadcrumbs \ Entries

✓ Action processed.

Breadcrumb:  ?

Name or Target:  ?

Page:  ?

Search:

**Breadcrumb Entries**

A Breadcrumb is a hierarchical list of links that is rendered as a region. Once a Breadcrumb is created Breadcrumb Entries can be defined. Breadcrumbs can be displayed on a page by adding a breadcrumb region using the create region wizard.

- The navigation menu is still displayed as Demo Proj Team Members. Update the Navigation Menu entries and include icons for each entry.  
In the page designer, click Shared Components icon in the toolbar (not the page shared components).

Application 94613 \ Page Designer

Page:

**Navigation Menu**

- Desktop Navigation Menu
- Navigation Bar
  - Desktop Navigation Bar
- Lists of Values
- Lists
- Authorizations
- Build Options
- Data Load Tables
- Web Service References
- Breadcrumbs

**Team Members**

PAGE HEADER

PAGE NAVIGATION

BREADCRUMB BAR

**Breadcrumb**

ITEMS

REGION CONTENT

SUB REGIONS

PREVIOUS CLOSE

DELETE HELP

CHANGE EDIT

**Identification**

Name: Team Members

Page Alias:

Title: Team Members







Page Group: - Select -

**Appearance**

User Interface: Desktop

Page Mode: Normal

- Under Shared Components, locate Navigation and click **Lists**.

Application Logic	Security	Other Components
 <a href="#">Application Definition Attributes</a>	 <a href="#">Security Attributes</a>	 <a href="#">List of Values</a>
<a href="#">Application Items</a>	<a href="#">Authentication Schemes</a>	<a href="#">Plug-ins</a>
<a href="#">Application Processes</a>	<a href="#">Authorization Schemes</a>	<a href="#">Component Settings</a>
<a href="#">Application Computations</a>	<a href="#">Application Access Control</a>	<a href="#">Shortcuts</a>
<a href="#">Application Settings</a>	<a href="#">Session State Protection</a>	<a href="#">Email Templates</a>
<a href="#">Build Options</a>	<a href="#">Web Credentials</a> >	
Navigation	User Interface	Files
 <a href="#">Lists</a>	 <a href="#">User Interface Attributes</a>	 <a href="#">Static Application Files</a>
<a href="#">Navigation Menu</a>	<a href="#">Themes</a>	<a href="#">Static Workspace Files</a>
<a href="#">Breadcrumbs</a>	<a href="#">Templates</a>	
<a href="#">Navigation Bar List</a>		

9. In the Lists report, click **Desktop Navigation Menu**.

Application 94613 \ Shared Components \ Lists

Lists

List Details

Unused

Conditional Entries

Utilization

History

Q v

Go

Actions v

Reset

Copy

Create >

Name ↑	Type	Entries	References	Updated	Navigation Bar	Navigation Menu
<a href="#">Access Control</a>	Static	2	1	13 days ago	No	No
<a href="#">Activity Reports</a>	Static	5	1	13 days ago	No	No
<a href="#">Application Configuration</a>	Static	1	1	13 days ago	No	No
<a href="#">Desktop Navigation Bar</a>	Static	8	0	13 days ago	Yes	No
<a href="#">Desktop Navigation Menu</a>	Static	7	0	13 days ago	No	Yes
<a href="#">Feedback</a>	Static	1	1	13 days ago	No	No
<a href="#">Page Navigation</a>	Static	4	1	13 days ago	No	No
<a href="#">User Interface</a>	Static	1	1	13 days ago	No	No

Lists

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

Recently Edited

[Desktop Navigation Menu](#)

[Desktop Navigation Bar](#)

[Application Configuration](#)

[Feedback](#)

[User Interface](#)

[Activity Reports](#)

10. Click **DEMO\_PROJ\_TEAM\_MEMBERS**.

Application 94613 \ Shared Components \ Lists \ List Details

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

List Desktop Navigation Menu ? Grid Edit Edit List **Create Entry >**

Q Go Rows 50 Actions

Sequence ↑	Name	Parent Entry	Target	Conditional	Updated	Level	Au
10	Home	-	f?p=&APP_ID.:1:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-
20	<b>DEMO_PROJ_TEAM_MEMBERS</b>	-	f?p=&APP_ID.:2:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-
30	DEMO_PROJECTS	-	f?p=&APP_ID.:4:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-
40	DEMO_PROJ_MILESTONES	-	f?p=&APP_ID.:6:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-
50	DEMO_PROJ_TASKS	-	f?p=&APP_ID.:8:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-

11. On the **DEMO\_PROJ\_TEAM\_MEMBERS** list entry, locate the Image/Class item. Click at the end of the field to display a list of images.

< > List Entry Cancel Delete **Apply Changes**

Show All Entry Target Current List ... Conditions Authorization Configuration Click Counti... User Define... Developer R...

Entry

List: Desktop Navigation Menu ?

Parent List Entry - No Parent List Item - ?

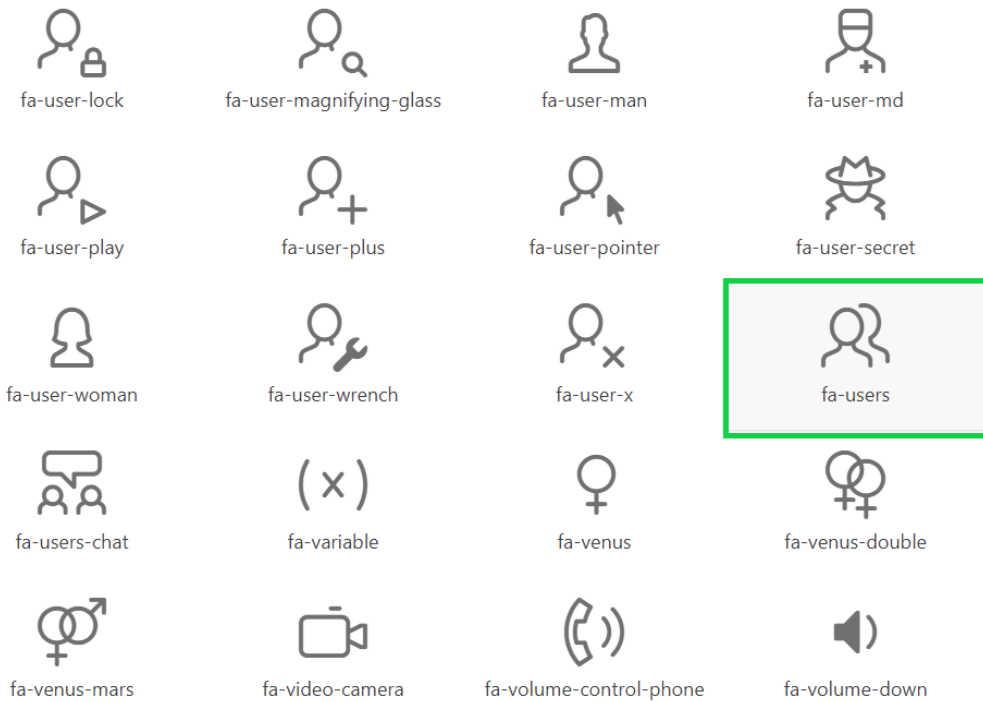
Sequence 20 ?

Image/Class fa-table ?

Attributes ?

Alt Attribute ?

12. Review the library of images, provided by Font APEX. These images can be utilized throughout the application to improve aesthetics, and provide a visual indicator, rather than just text. Locate and select **fa-users**.



13. For List Entry Label enter **Team Members**.  
Click the **Next** button (>).

< **>** List Entry Cancel Delete Apply Changes

Show All **Entry** Target Current List ... Conditions Authorization Configuration Click Counti... User Define... Developer R...

Entry

List: **Desktop Navigation Menu** ?

Parent List Entry: - No Parent List Item - ?

Sequence: 20 ?

Image/Class: fa-users ?

Attributes: ?

Alt Attribute: ?

\* List Entry Label: **Team Members** ?

14. On the **DEMO\_PROJECTS** list entry, for Image/Class enter **fa-folder**, and for List Entry Label enter **Projects**.  
Click the **Next** button (>).



**Note:** You can simply type in the image name, such as **fa-folder**, directly into the Image/Class field, rather than bringing up the library of images.

15. On the **DEMO\_PROJ\_MILESTONES** list entry, for Image/Class enter **fa-flag**, and for List Entry Label enter **Milestones**.  
Click the **Next** button (>).
16. On the **DEMO\_PROJ\_TASKS** list entry, for Image/Class enter **fa-check-square-o**, and for List Entry Label enter **Tasks**.  
Click **Apply Changes**.

The screenshot shows the 'List Entry' configuration page in Oracle APEX. The page title is 'List Entry'. At the top right are buttons for 'Cancel', 'Delete', and 'Apply Changes' (highlighted in green). Below the title bar is a tabbed interface with tabs for 'Show All', 'Entry' (selected), 'Target', 'Current List ...', 'Conditions', 'Authorization', 'Configuration', 'Click Counti...', 'User Define...', and 'Developer R...'. The 'Entry' tab is active, showing the configuration for the 'List: Desktop Navigation Menu'. The 'Parent List Entry' is set to '- No Parent List Item -'. The 'Sequence' is 50. The 'Image/Class' field is set to 'fa-check-square-o' and is highlighted with a green border. The 'Attributes' field is empty. The 'Alt Attribute' field is empty. The 'List Entry Label' field is set to 'Tasks' and is also highlighted with a green border. There are help icons (?) next to several fields.

17. Click **Run** on the toolbar to see the updated navigation menu.  
You still need to update the icon for Dashboard.  
Navigate to **Shared Components > List Details** page and click **Dashboard**.

Lists

List Details

Unused

Conditional Entries

Utilization

History

List

Desktop Navigation Menu

Grid Edit

Edit List

Create Entry >

Q

Go

Rows

50

Actions

Sequence ↑	Name	Parent Entry	Target	Conditional	Updated	Level	Authorization Scheme	Copy
10	Home	-	f?p=&APP_ID.:1:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-	
20	Team Members	-	f?p=&APP_ID.:2:&SESSION.::&DEBUG.:::	-	5 minutes ago	1	-	
30	Projects	-	f?p=&APP_ID.:4:&SESSION.::&DEBUG.:::	-	3 minutes ago	1	-	
40	Milestones	-	f?p=&APP_ID.:6:&SESSION.::&DEBUG.:::	-	2 minutes ago	1	-	
50	Tasks	-	f?p=&APP_ID.:8:&SESSION.::&DEBUG.:::	-	53 seconds ago	1	-	
60	Dashboard	-	f?p=&APP_ID.:10:&SESSION.::&DEBUG.:::	-	41 seconds ago	1	-	
10000	Administration	-	f?p=&APP_ID.:10000:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	Administration Rights	

18. For Image/Class enter **fa-dashboard**.  
Click **Apply Changes**.

19. Click **Run** on the toolbar to see the updated navigation menu.

Demo Projects

## Demo Projects

Maintain project details

Home
Team Members
Projects
Milestones
Tasks
Dashboard
Administration

MO\_PROJ\_TEAM\_MEMBE

DEMO\_PROJECTS

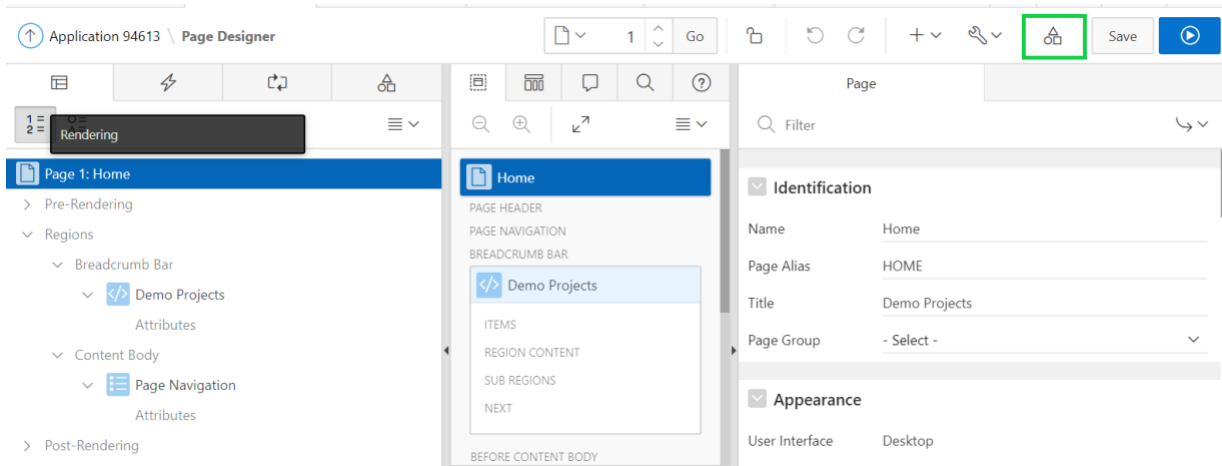
DEMO\_PROJ\_MILESTONES

DEMO\_PROJ\_TASKS

20. In step 3 above, you updated the breadcrumb entry for Team Members page. Now, update the breadcrumb entries for all of the remaining pages. Perform the following steps:

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

b) Click **Shared Components**.



c) Under Navigation, click **Breadcrumbs**.

d) Click **Breadcrumb**.

e) Now, click **DEMO\_PROJECTS**.

Application 94613 \ Shared Components \ Breadcrumbs \ Entries

Breadcrumb: Breadcrumb ?

Name or Target:  ?

Page:  ? Set

Edit Breadcrumb Name Create Breadcrumb Entry >

Search:  Go Actions

Name	Sequence	Page	Parent
Administration	10	10000	(null)
<b>DEMO_PROJECTS</b>	10	4	(null)
DEMO_PROJ_MILESTONES	10	6	(null)
DEMO_PROJ_TASKS	10	8	(null)
Home	10	1	(null)
Team Members	10	2	(null)

f) Enter **Projects** for Short Name and click **Apply Changes**.

- g) Then, click **DEMO\_PROJ\_MILESTONES**.
- h) Enter **Milestones** for Short Name and click **Apply Changes**.
- i) Click **DEMO\_PROJ\_TASKS**.
- j) Enter **Tasks** for Short Name and click **Apply Changes**.

21. Click **Run** on the toolbar.

Application 94613 \ Shared Components \ Breadcrumbs \ Entries

✓ Action processed.

Breadcrumb: Breadcrumb

Name or Target:

Page:

Set

Edit Breadcrumb Name

Create Breadcrumb Entry >

Search: Go Actions

Name	Sequence	Page	Parent
Administration	10	10000	(null)
Home	10	1	(null)
Milestones	10	6	(null)
Projects	10	4	(null)
Tasks	10	8	(null)
Team Members	10	2	(null)

1 - 6

Breadcrumb Entries

A Breadcrumb is a hierarchical list of links that is rendered as a region. Once a Breadcrumb is created Breadcrumb Entries can be defined. Breadcrumbs can be displayed on a page by adding a breadcrumb region using the create region wizard.

Tasks

Tabular View >

Reparent Entries within this Breadcrumb >

Delete Unused Breadcrumb Entries >

- 22. Click each of the pages: Projects, Milestones and Tasks to see the updated region titles.
- 23. Now, update the page properties and the breadcrumb entry for the Projects page. In the navigation menu, click **Projects**.

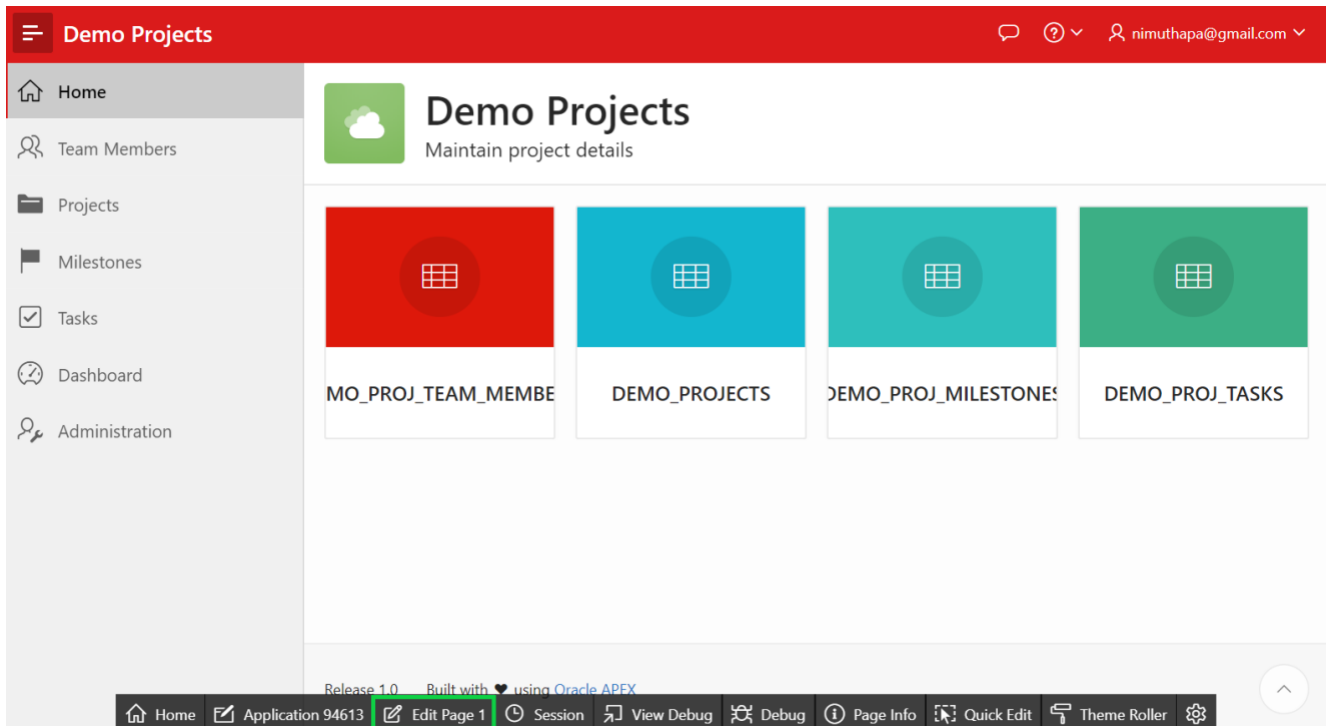
In the Developer Toolbar, click **Edit Page 4**.

24. In the Property Editor:

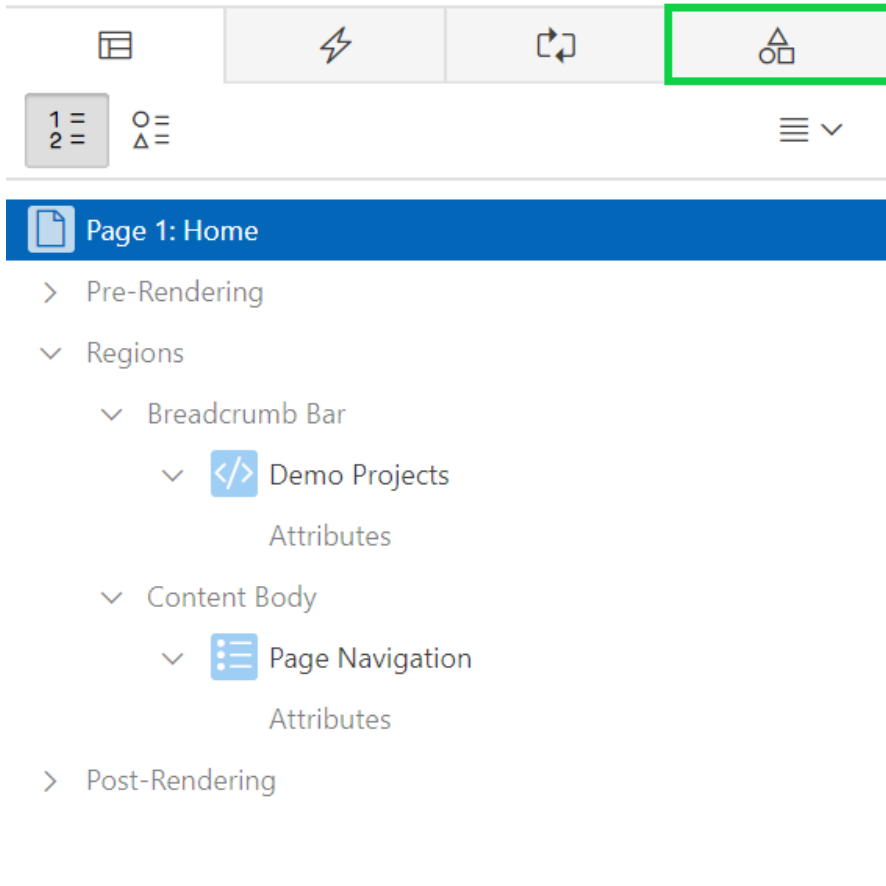
- Identification: Name - enter **Projects**
  - Identification: Title - enter **Projects**
- Click **Save**.

- 25. Now, update the page properties for the Demo Proj Milestones page.  
In the navigation menu, click **Milestones**.  
In the Developer Toolbar, click **Edit Page 6**.

26. In the Property Editor:
- Identification: Name - enter **Milestones**
  - Identification: Title - enter **Milestones**
- Click **Save**.
27. Now, update the page properties and the breadcrumb entry for the Demo Proj Tasks page. In the navigation menu, click **Tasks**.  
In the Developer Toolbar, click **Edit Page 8**.
28. In the Property Editor:
- Identification: Name - enter **Tasks**
  - Identification: Title - enter **Tasks**
- Click **Save**.
29. Now, run the application. You need to update the Home page. Click **Edit Page 1** in the Developer Toolbar.

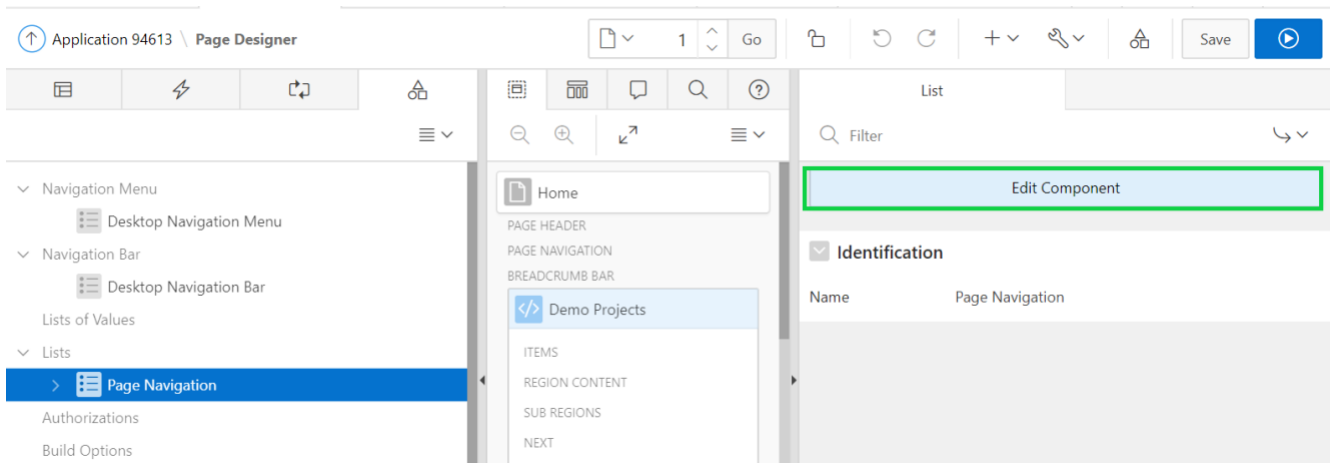


30. In the Page Designer, click **Page Shared Components**.



31. Expand **Lists** and click **Page Navigation**.

32. In the Property Editor, click **Edit Component**.



33. Now, you need to edit each of the list entries. First, click **DEMO\_PROJ\_TEAM\_MEMBERS**.

Application 94613 \ Shared Components \ Lists \ List Details

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

List Page Navigation ? Grid Edit Edit List **Create Entry >**

Q Go Rows 50 Actions

Sequence ↑	Name	Parent Entry	Target	Conditional	Updated	Level	Authoriz Scher
20	<b>DEMO_PROJ_TEAM_MEMBERS</b>	-	f? p=&APP_ID.:2:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-
30	DEMO_PROJECTS	-	f? p=&APP_ID.:4:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-
40	DEMO_PROJ_MILESTONES	-	f? p=&APP_ID.:6:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-
50	DEMO_PROJ_TASKS	-	f? p=&APP_ID.:8:&APP_SESSION.::&DEBUG.:	-	13 days ago	1	-

34. Replace the text in the List Entry Label with **Team Members** and click >.

< **>** List Entry Cancel Delete **Apply Changes**

Show All Entry Target Current List ... Conditions Authorization Configuration Click Counti... User Define... Developer R...

Entry

List: **Page Navigation** ?

Parent List Entry - No Parent List Item - ?

Sequence 20 ?

Image/Class fa-table ?

Attributes ?

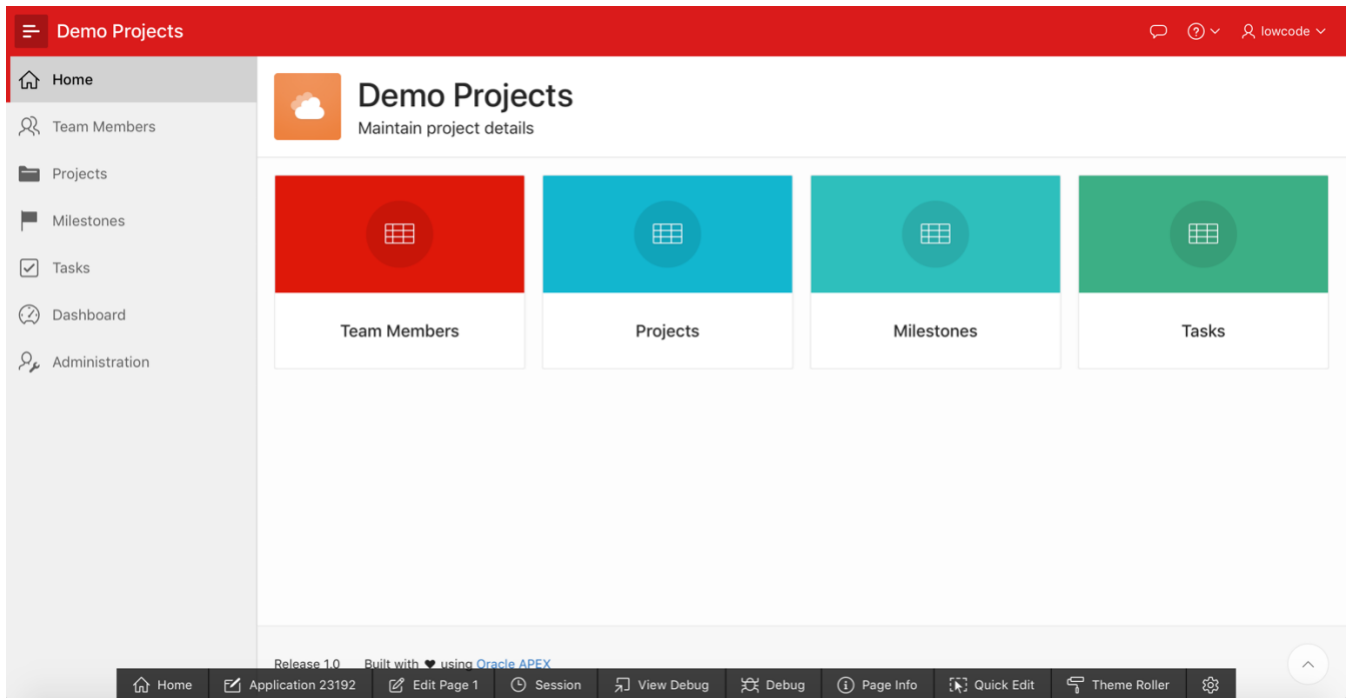
Alt Attribute ?

\* List Entry Label **Team Members** ?

35. Replace the text in the List Entry Label with **Projects** and click >.

36. Replace the text in the List Entry Label with **Milestones** and click >.

37. Replace the text in the List Entry Label with **Tasks** and click **Apply Changes**.
38. Click **Run Page 1** icon on the toolbar to see the updated Home page.

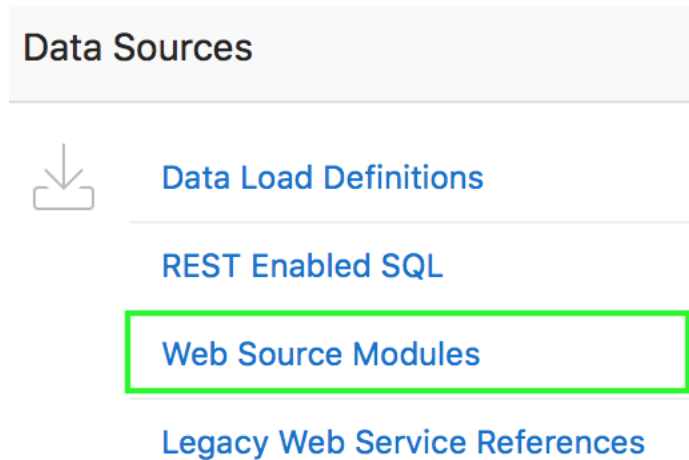




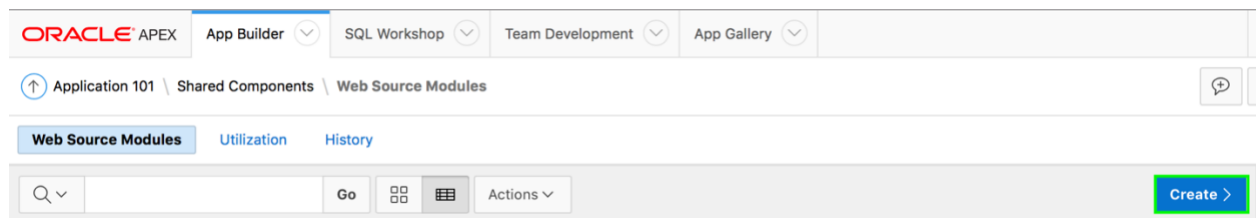
## HOL 11-2: Integrating Application Data from Remote Data Sources

Oracle APEX allows you to build powerful, feature-rich applications against remote, web, and REST data sources. In this lab, you build a web application on top of the Apple iTunes Search API, which is a simple API over HTTP that takes input arguments via parameters in the URL. First, you create a report against the iTunes music video catalog. Next, you simplify the report to include a preview of the music video and a link to watch a clip of the music video.

1. Navigate to **App Builder** and click **Create**.
2. Click **New Application**.
3. Enter **APEX and REST** for Name and click **Create Application**.
4. In the Application home page, click **Shared Components**.
5. Under **Data Sources**, click **Web Source Modules**.



6. Click **Create**.



7. Select **From Scratch** and click **Next**.
8. For Web Source Type accept the default selection of **Simple HTTP**. Enter **iTunes Search** for Name, and for URL End Point, copy and paste the URL **https://itunes.apple.com/search**. Click **Next**.

### Create Web Source

General

Web Source Type ☒ Simple HTTP ?  
☐ Oracle REST Data Services  
☐ Oracle Cloud Applications (SaaS) REST Service

\* Name  ?

\* URL Endpoint  ?

< Next >

9. Oracle APEX parses the into its Base URL and Service URL path.  
Click **Next**.

### Create Web Source - Remote Server

Remote Server

Remote Server  ?

\* Base URL  ?

\* Service URL Path  ?

< Next >

10. You do not need authentication for this API. Accept the default selection of **No** and click **Advanced**.

Authentication

\* Authentication Required Yes No ?

< Create Module Manually Advanced > Discover >

11. For Parameters, select the following and click **Discover**.
- Parameter Type: **Query String Variable**, Parameter Name: ***term***, Value: ***beyonce***, Is Static: **No**
  - Parameter Type: **Query String Variable**, Parameter Name: ***entity***, Value: ***musicVideo***, Is Static: **Yes**

### Parameters ×

Parameter Type	Parameter Name	Value	Is Static
Query String variable	term	beyonce	<div>Yes</div> <div>No</div>
Query String variable	entity	musicVideo	<div>Yes</div> <div>No</div>
- Select -			<div>Yes</div> <div>No</div>

Response Sample ?  

Choose File

 no file selected

Row Selector (leave empty for auto-detection) ?

<

Create Module Manually

Discover >

12. Oracle APEX invokes the REST API and attempts to parse the results and creates a data profile. Click the **Data Profile** subtab to view the entities parsed from the JSON result and see how they will be mapped to specific column names and data types.

## Web Source Discovery ×

Preview

Data
Data Profile

Kind ↑	Country	Trackid	Artistid	Currency	Disccount	Trackname	Artistname	Discnumber
music-video	USA	939779783	1419227	USD	2	1+1	Beyoncé	2
music-video	USA	780334329	1419227	USD	1	Credits (Video)	Beyoncé	1
music-video	USA	780330422	1419227	USD	1	Pretty Hurts (Video)	Beyoncé	1

<

More Detail
Create Web Source

13. Click **Create Web Source**.

## Web Source Discovery ×

Preview

Data
Data Profile

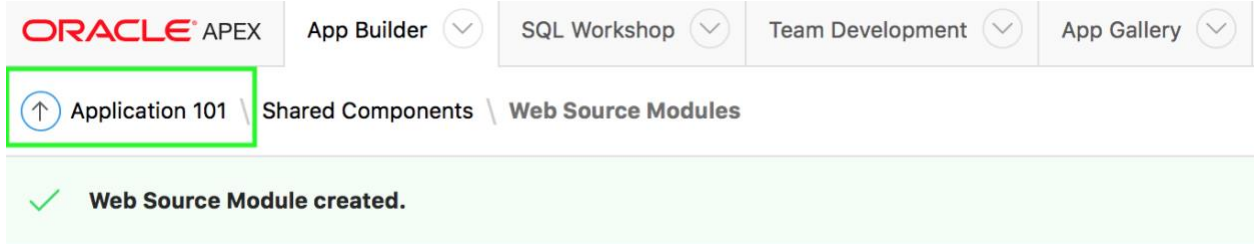
Response Type		Row Selector				Returns	
JSON		results				Table	

Sequence	Name	Primary Key	Data type	Max Length	Format Mask	Has Time Zone	Selector
1	KIND	No	VARCHAR2	4000	-	No	kind
2	COUNTRY	No	VARCHAR2	4000	-	No	country
3	TRACKID	No	NUMBER	-	-	No	trackId

<

More Detail
Create Web Source

14. Click the **Application <n>** breadcrumb.



15. Click **Create Page**.

16. Click **Report**. Then, click **Classic Report**.

17. Enter iTunes for Page Name and click **Next**.

18. Select **Create a new navigation menu entry** and click **Next**.

19. For Data Source, select **Web Source**. Then select **iTunes Search** for Web Source Module. Click **Create**.

### Create Classic Report

×

✓ ✓ ●

Report Source

Data Source: Local Database REST Enabled SQL Service Web Source ⓘ

Web Source Module: iTunes Search ▼

\* Select Columns ⓘ

⌕

KIND (Varchar2)  
 COUNTRY (Varchar2)  
 TRACKID (Number)  
 ARTISTID (Number)  
 CURRENCY (Varchar2)  
 DISCOUNT (Number)  
 TRACKNAME (Varchar2)  
 ARTISTNAME (Varchar2)

>>><<<

↑  
↑  
↓  
↓

<
Cancel
Create

20. Click **Create**.

### Web Source Parameters

✓

✓

✓

●

Web Source Parameters

	Name	Value type	Value
	term	Static	beyonce

1 rows selectedTotal 1

<

Create

21. You are now in the page designer. Click **Save and Run Page**. Log in to the application using your Workspace Username and Password.  
Your screen should look like:

The screenshot shows the Oracle APEX Developer Toolbar at the bottom of the page. The 'Edit Page <n>' button is highlighted with a green box. The toolbar includes buttons for Home, Application 101, Edit Page <n>, Session, View Debug, Debug, Page Info, Quick Edit, Theme Roller, and a search icon. The background shows a report titled 'Report 1' with columns: Kind, Country, Trackid, Artistid, Currency, Discount, Trackname, Artistname, Discnumber, and Previewurl. The data rows show music videos by Beyoncé.

In the Developer Toolbar, click **Edit Page <n>**.

22. Under Rendering, select **Report1**.  
In the Property Editor, for Local Processing, select **SQL Query**.

The screenshot shows the Oracle APEX Property Editor. The 'Local Post Processing' section is expanded, and the 'Type' dropdown menu is open, showing 'SQL Query' selected. The 'Layout' section is also expanded, showing 'PL/SQL Function Body returning SQL Query'. The 'Sequence' is set to 10, 'Parent Region' is '- Select -', 'Position' is 'Content Body', and 'Start New Row' is 'Yes'.

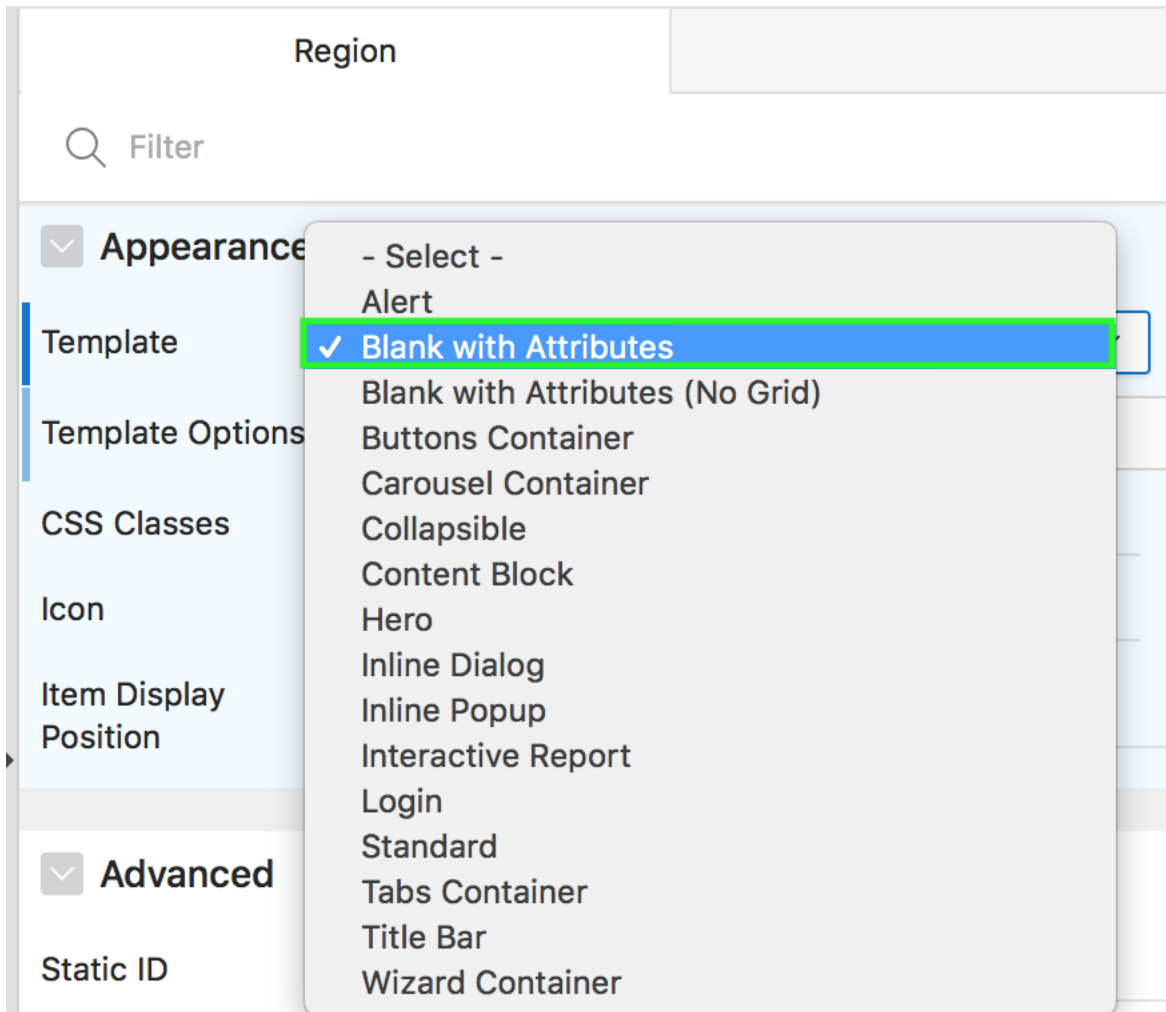
23. In the SQL Query region, replace the existing SQL with the following SQL:



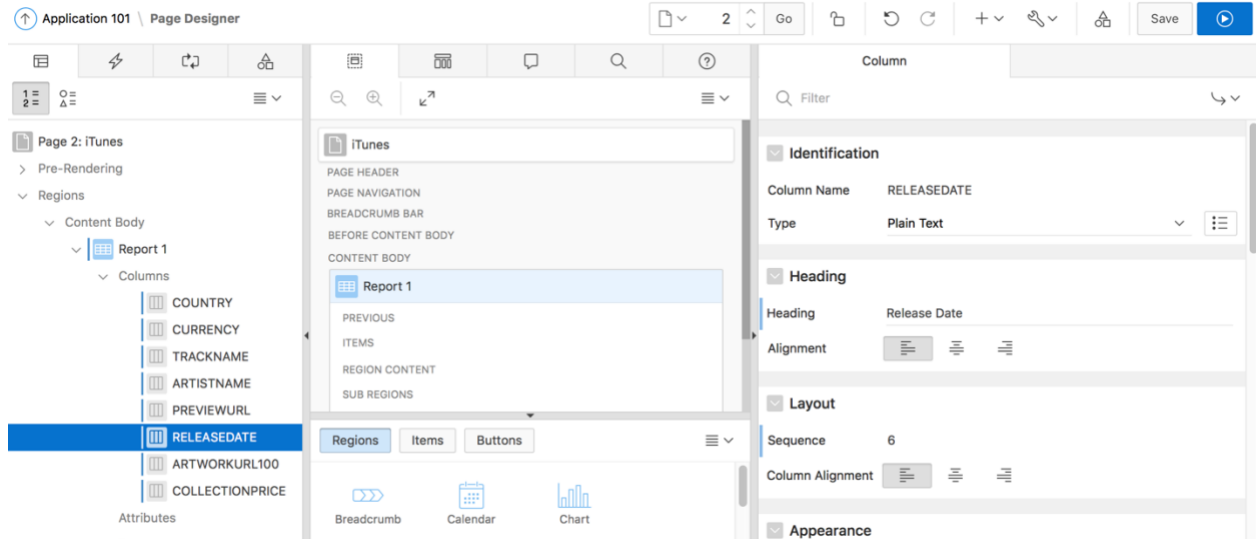
```
select ARTISTNAME,  
       TRACKNAME,  
       PREVIEWURL,  
       ARTWORKURL100,  
       COLLECTIONPRICE,  
       RELEASEDATE,  
       COUNTRY,  
       CURRENCY  
from #APEX$SOURCE_DATA#
```

The screenshot shows the Oracle APEX Property Editor interface. At the top, there is a 'Region' label and a search bar with the text 'Filter'. Below this, a section titled 'Local Post Processing' is expanded, showing a 'Type' dropdown set to 'SQL Query'. The 'SQL Query' section is highlighted with a green border and contains the same SQL query as shown in the first block. A small icon in the top right corner of the SQL Query section indicates a copy or paste function.

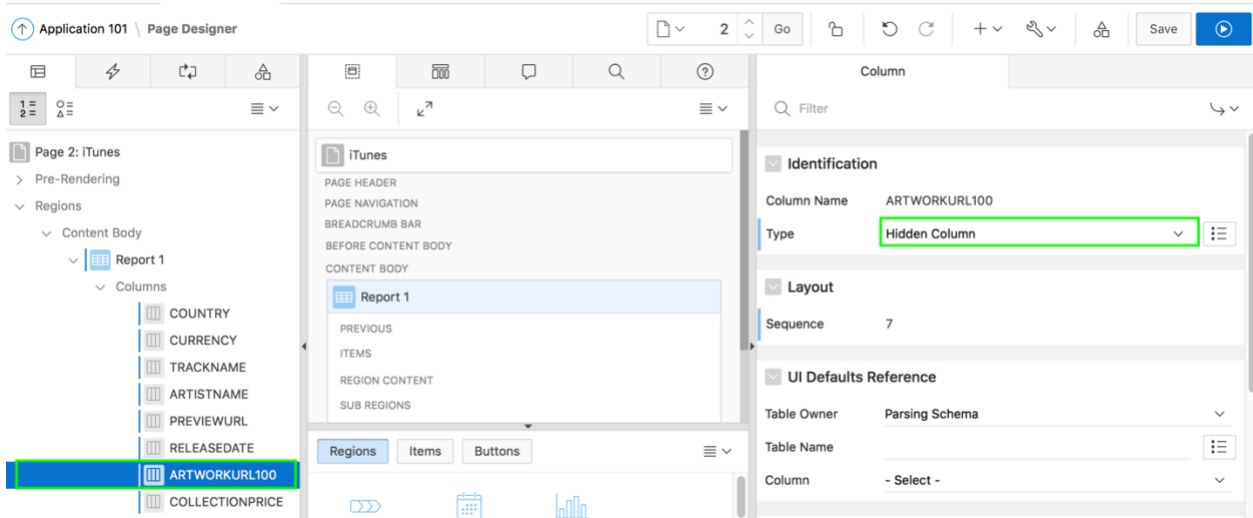
24. In the Property Editor, under Appearance, select **Blank with Attributes** for Template.



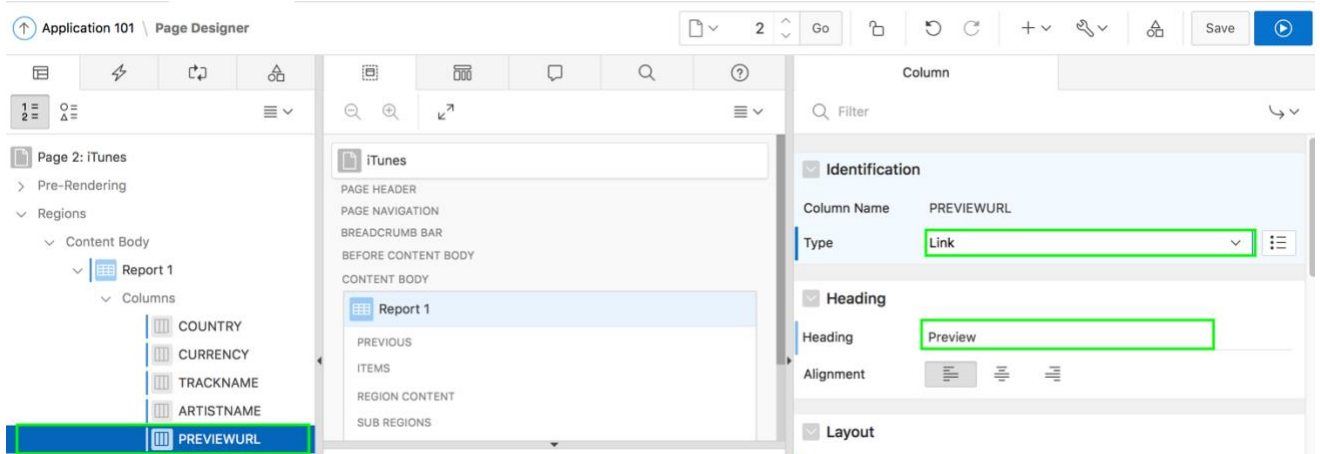
25. Under Rendering, navigate to Report1 and expand **Columns**.
26. Select each of the columns and adjust their corresponding Heading in the property editor.
  - ARTISTNAME: Artist
  - TRACKNAME: Track
  - COLLECTIONPRICE: Price
  - RELEASEDATE: Release Date



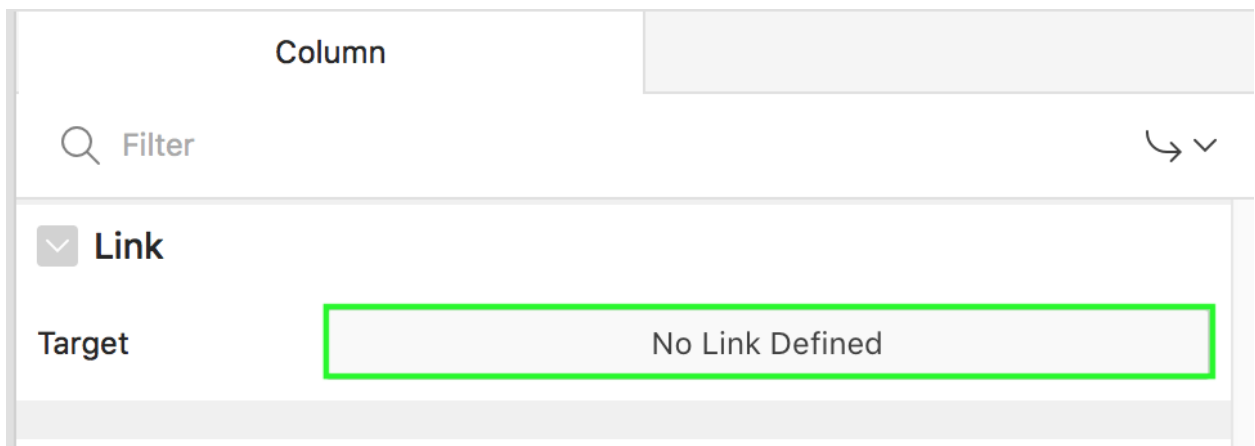
27. Select **CURRENCY** and in the Property Editor, under Identification > Type, select **Hidden Column**.
28. Select **ARTWORKURL100** and in the Property Editor, under Identification > Type, select **Hidden Column**.



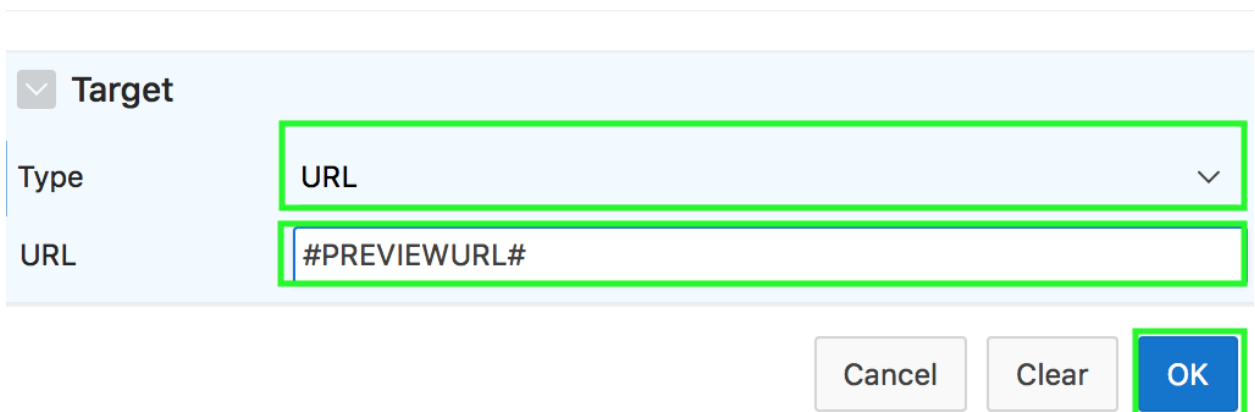
29. Select the PREVIEWURL column. In the property editor, for Heading, replace the existing text with **Preview**.  
Under Identification > Type, select **Link**.



30. In the property editor, navigate to Link region and click **No Link Defined** for Target.



31. In the Link Builder – Target dialog, select **URL** for Type.  
In the URL attribute, enter **#PREVIEWURL#**. This will create an HTML anchor to the value of the Preview URL returned in the REST results.  
Click **OK**.



32. For Link Text, enter ``. This will display the image returned in the value of the Artwork column in the REST results.
33. For Link Attributes, enter `target="_new"`. This will cause the video preview to open in a new browser tab when clicked.

Column

Filter

Link

Target: #PREVIEWURL#

Link Text: ``

Link Attributes: `target="_new"`

34. Under Rendering, navigate to Report1 > Columns and select **COLLECTIONPRICE**. In the property editor, for Column Formatting > HTML Expression enter `#COLLECTIONPRICE# #CURRENCY#`.

Column

Filter

Appearance

Column Formatting

HTML Expression: `#COLLECTIONPRICE# #CURRENCY#`

35. Click **Save and Run Page**.

36. Your application now includes a much-better-looking report, with an image of the video preview. Additionally, if you click the image, it should open a new tab in your browser and start playing the video.



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Oracle Corporation  
World Headquarters  
500 Oracle Parkway  
Redwood Shores, CA 94065  
U.S.A.

Worldwide Inquiries:  
Phone: +1.650.506.7000  
Fax: +1.650.506.7200  
[oracle.com](http://oracle.com)

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