ORACLE

APPLICATION EXPRESS

Oracle Application Express: Developing Database Web Applications

Hands-On-Labs Guide

Unit 3: Creating a Database Application

This exercise includes two hands-on-labs.

HOL 3-1 Creating a Database Application from Scratch: In this hands-on-lab, you will create a database Web application, Demo Projects. You will extend and improve this application later.

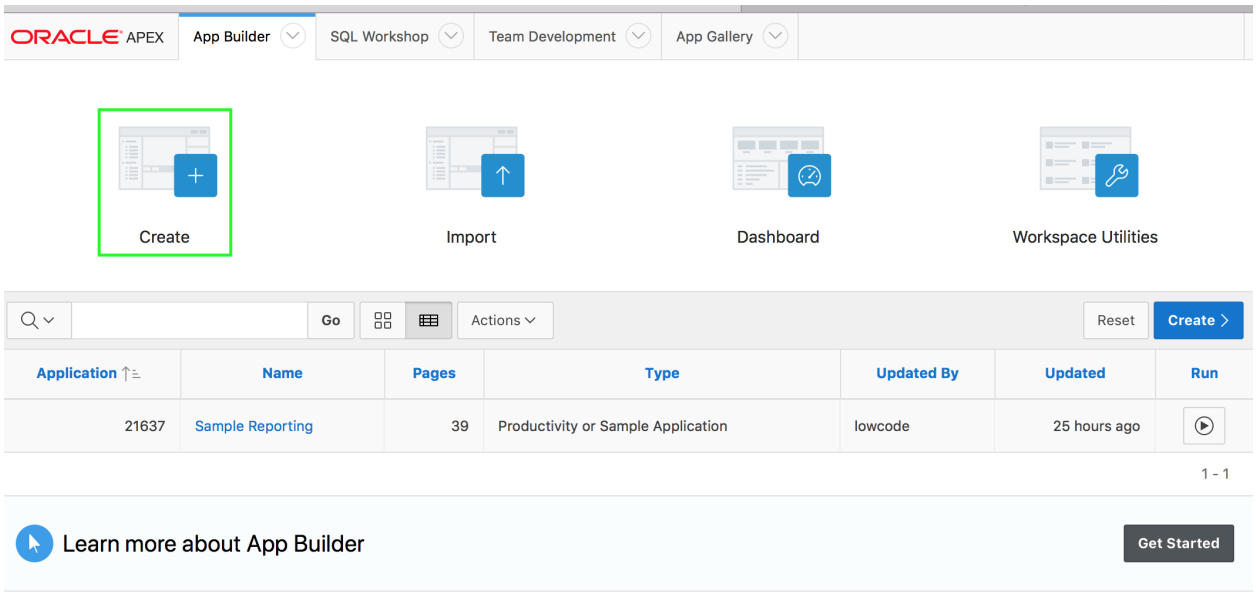
HOL 3-2 Creating a Database Application from a Spreadsheet: In this hands-on lab, you will use a spreadsheet to create a database Web application, Budget App. You do not extend this application but will use in a later exercise.

HOL 3-1: Creating a Database Application from Scratch

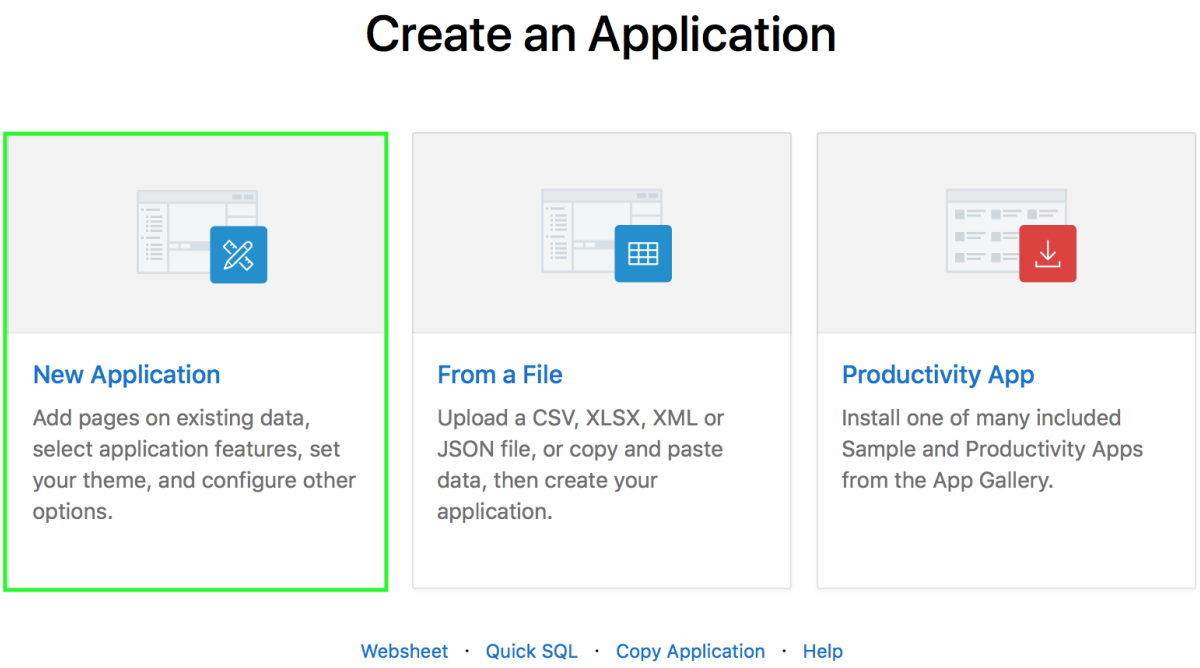
In this lab, you create the initial application using the Create Application wizard to define multiple pages. Now that you have created the underlying tables, you are ready to create a desktop application. You add reports and forms for the tables you created.

Generally, when developing an application, you will not know all of the pages required at the beginning. Therefore, you will only generate a select number of pages initially, and then use the wizard to add additional pages as required. However, for this exercise you will generate most of the pages required for the application up front.

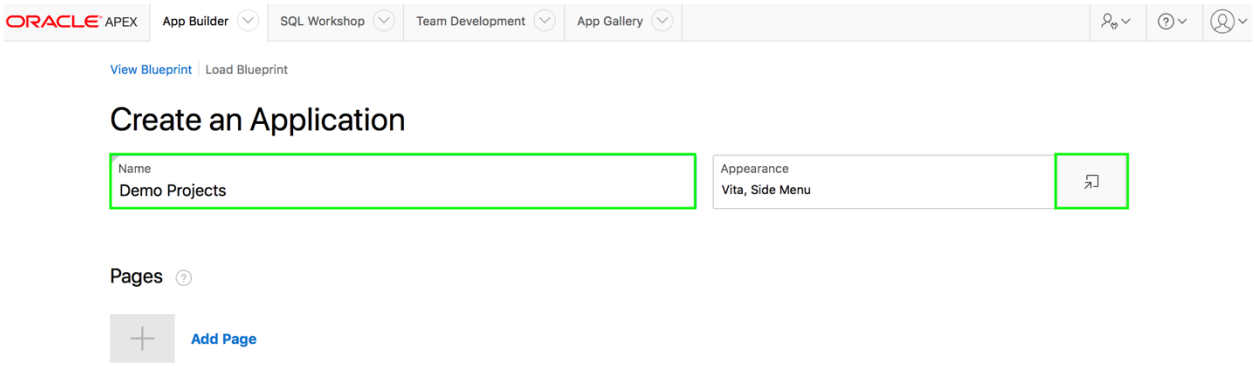
1. Using the Create Application Wizard, create the **Demo Projects** application.
   Navigate to **App Builder** and then click **Create**.



2. You want to create a new application. Click **New Application**.



3. For Name, enter **Demo Projects**. For Appearance, click the **Set Appearance** icon.



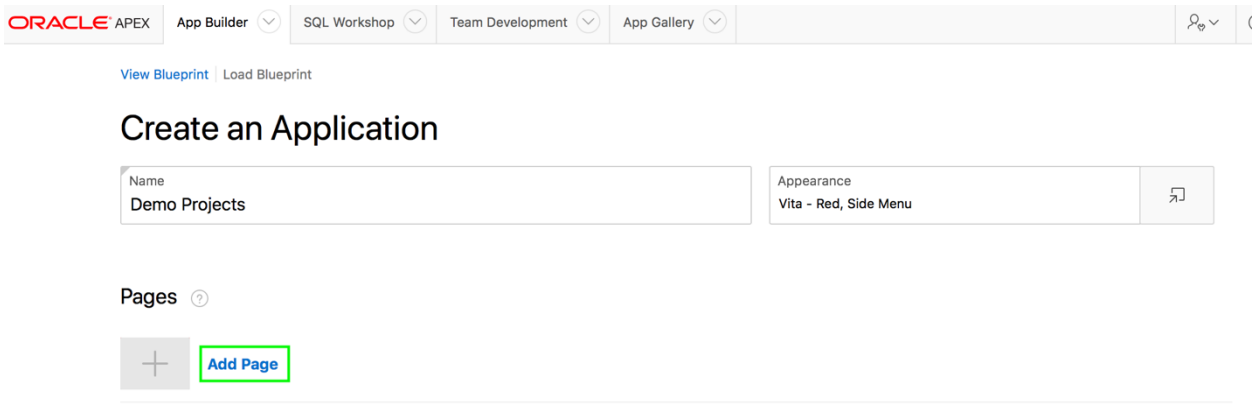
4. In the Appearance dialog, perform the following steps:

   a) For Theme Style, select **Vita**

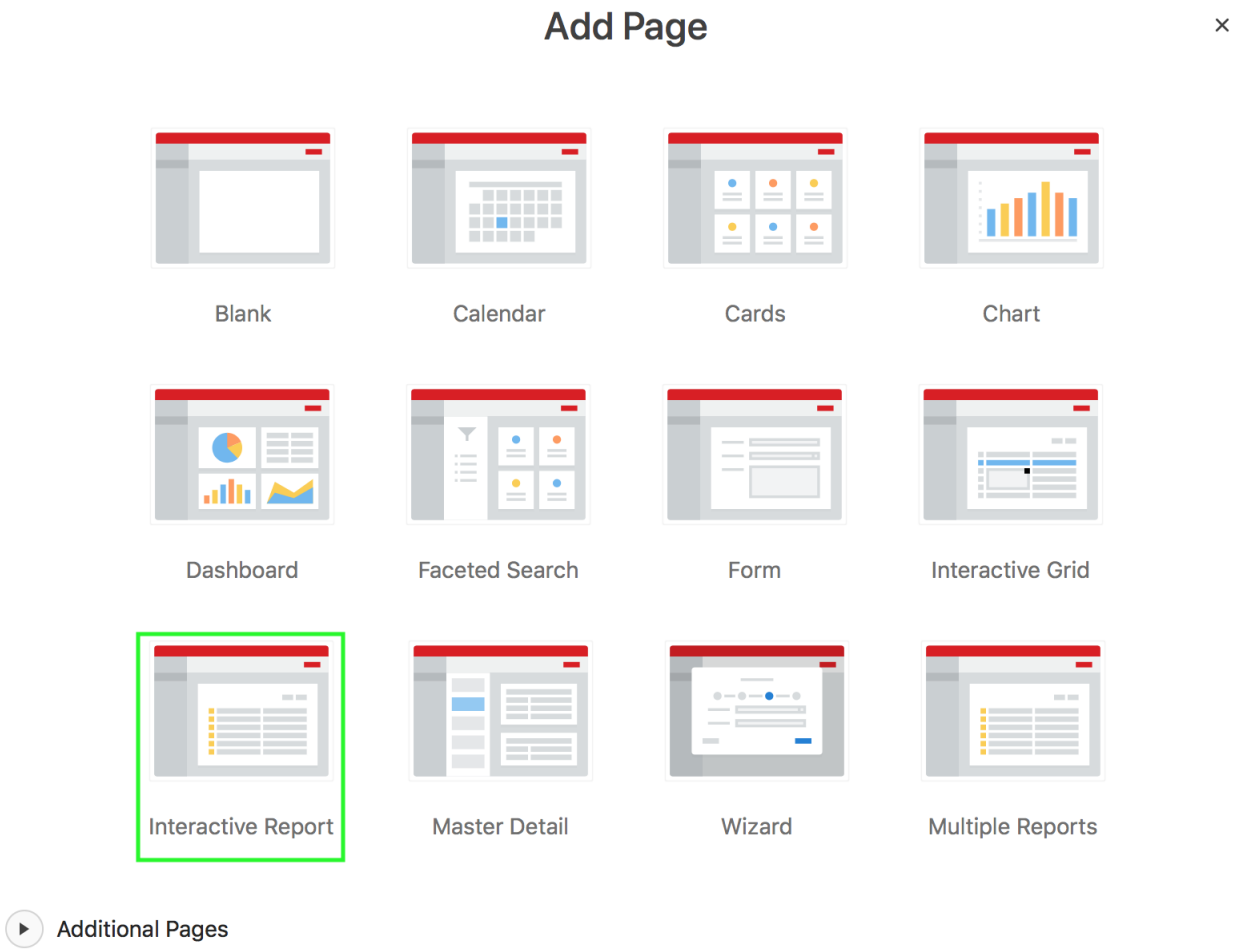
   b) Click **Save Changes**.

5. Next, add Report and Form page types for the following tables:
   - **DEMO_PROJ_TEAM_MEMBERS**
   - **DEMO_PROJECTS**
   - **DEMO_PROJ_MILESTONES**
   - **DEMO_PROJ_TASKS**

Click **Add Page.**

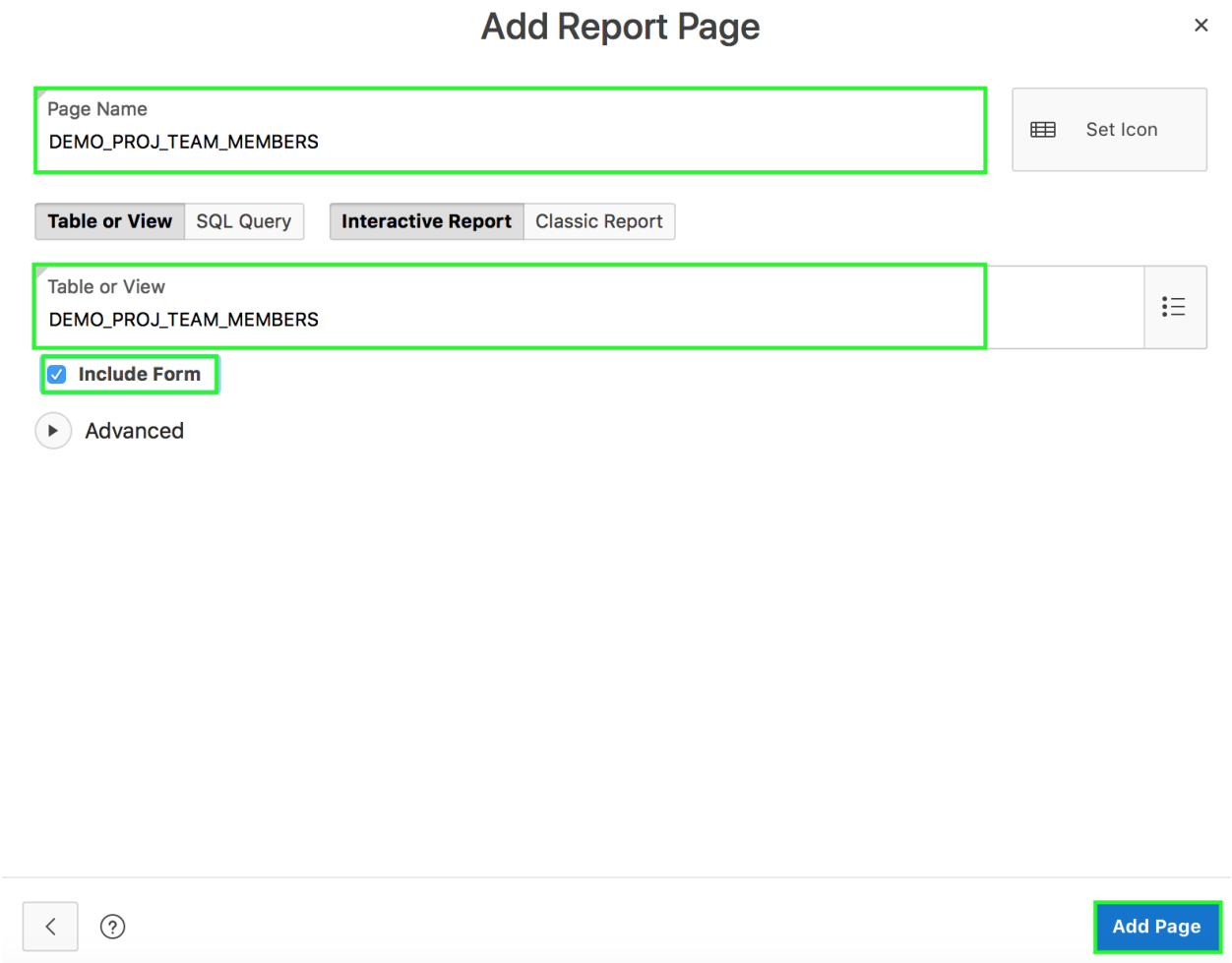


6. In the Add Page dialog, click **Interactive Report**.

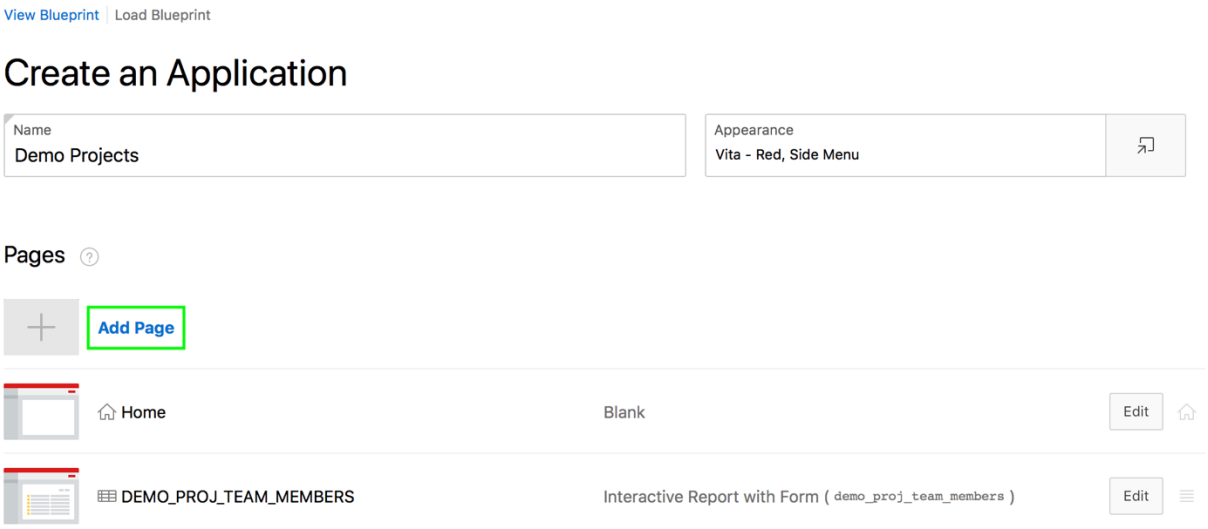


7. In the Add Report Page dialog, select / enter the following and then, click **Add Page**.
   - Page Name: **DEMO_PROJ_TEAM_MEMBERS**.

- Table or View: **DEMO_PROJ_TEAM_MEMBERS**.
- **Include Form** checkbox



8. Add Report and Form page type for the DEMO_PROJECTS table.
   Click **Add Page**.



9. In the Add Page dialog, click **Interactive Report**.

10. In the Add Report Page dialog, select / enter the following and then, click **Add Page**.
    - Page Name: **DEMO_PROJECTS**.
    - Table or View: **DEMO_PROJECTS**
    - **Include Form** checkbox

11. Add Report and Form page type for the DEMO_PROJ_MILESTONES table.
    Click **Add Page**.

12. In the Add Page dialog, click **Interactive Report**.

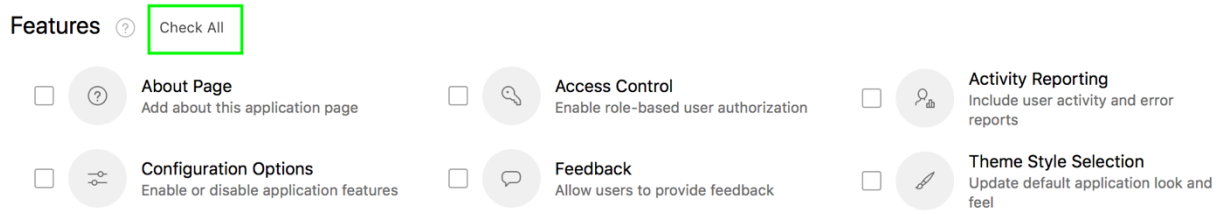
13. In the Add Report Page dialog, select / enter the following and then, click **Add Page**.
    - Page Name: **DEMO_PROJ_MILESTONES**
    - Table or View: **DEMO_PROJ_MILESTONES**
    - **Include Form** checkbox

14. Add Report and Form page type for the DEMO_PROJ_TASKS table.
    Click **Add Page**.

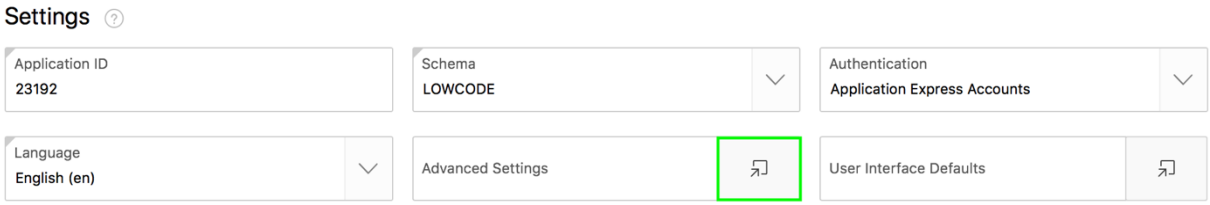
15. In the Add Page dialog, click **Interactive Report**.

16. In the Add Report Page dialog, select / enter the following and then, click **Add Page**.
    - Page Name: **DEMO_PROJ_TASKS**
    - Table or View: **DEMO_PROJ_TASKS**
    - **Include Form** checkbox

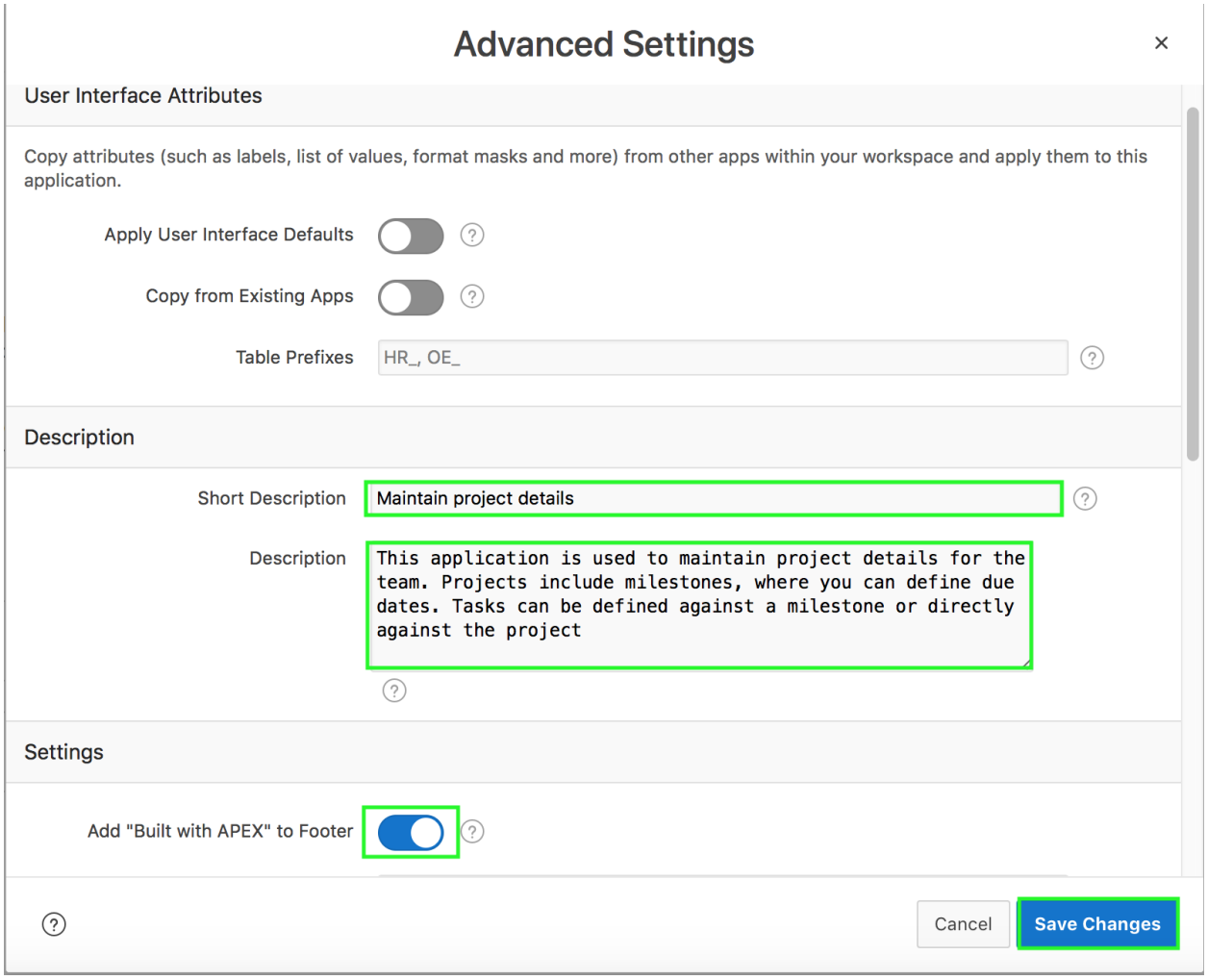
17. Click **Check All** next to Features.



18. Under Settings, select **Advanced Settings**.

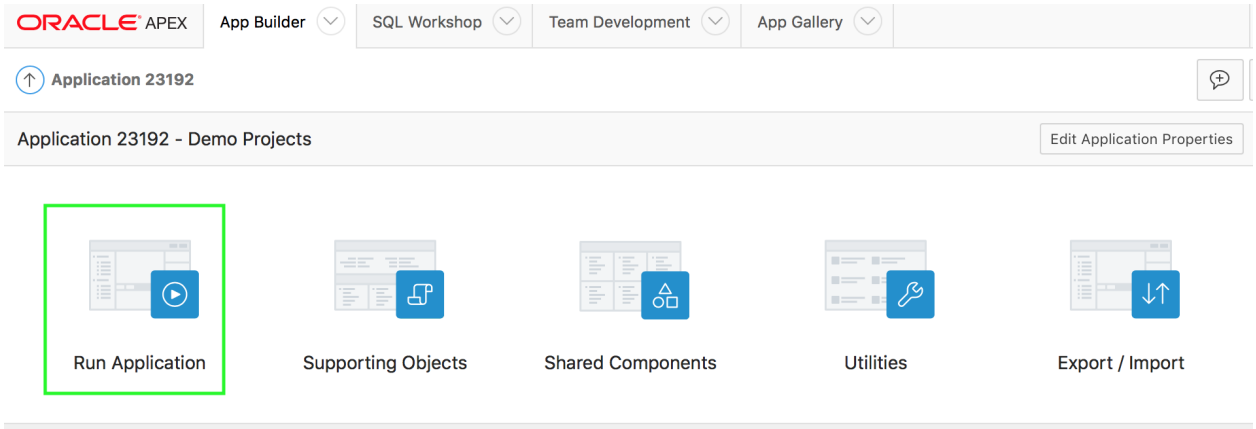


19. Enter / select the following in advanced settings and then click **Save Changes**.
    - Short Description - **Maintain project details**.
    - Description - **This application is used to maintain project details for the team. Projects include milestones, where you can define due dates. Tasks can be defined against a milestone or directly against the project**.
    - Add "Built with APEX" to Footer: Yes

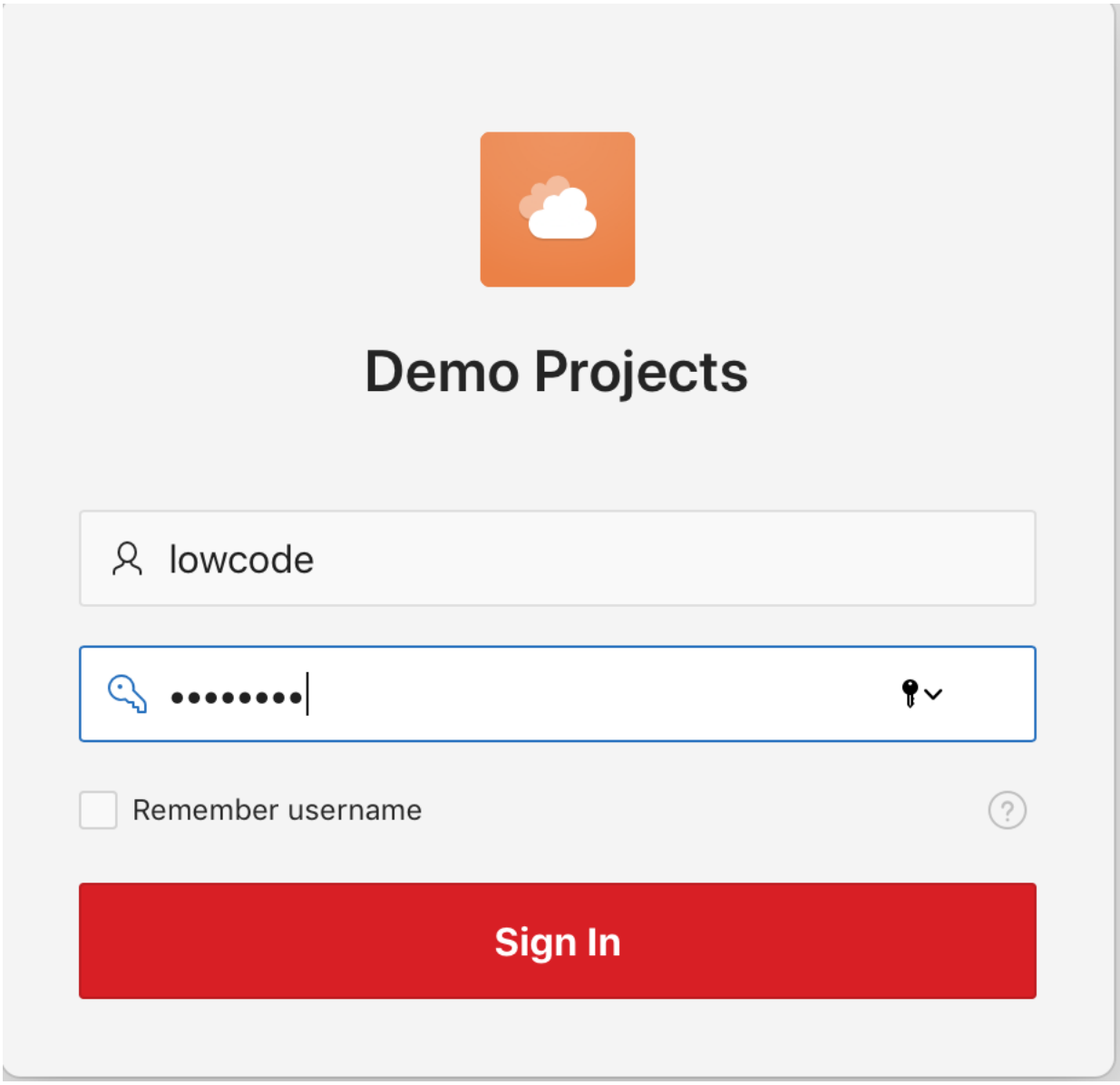


20. Click **Create Application**. Notice the application creation progress.

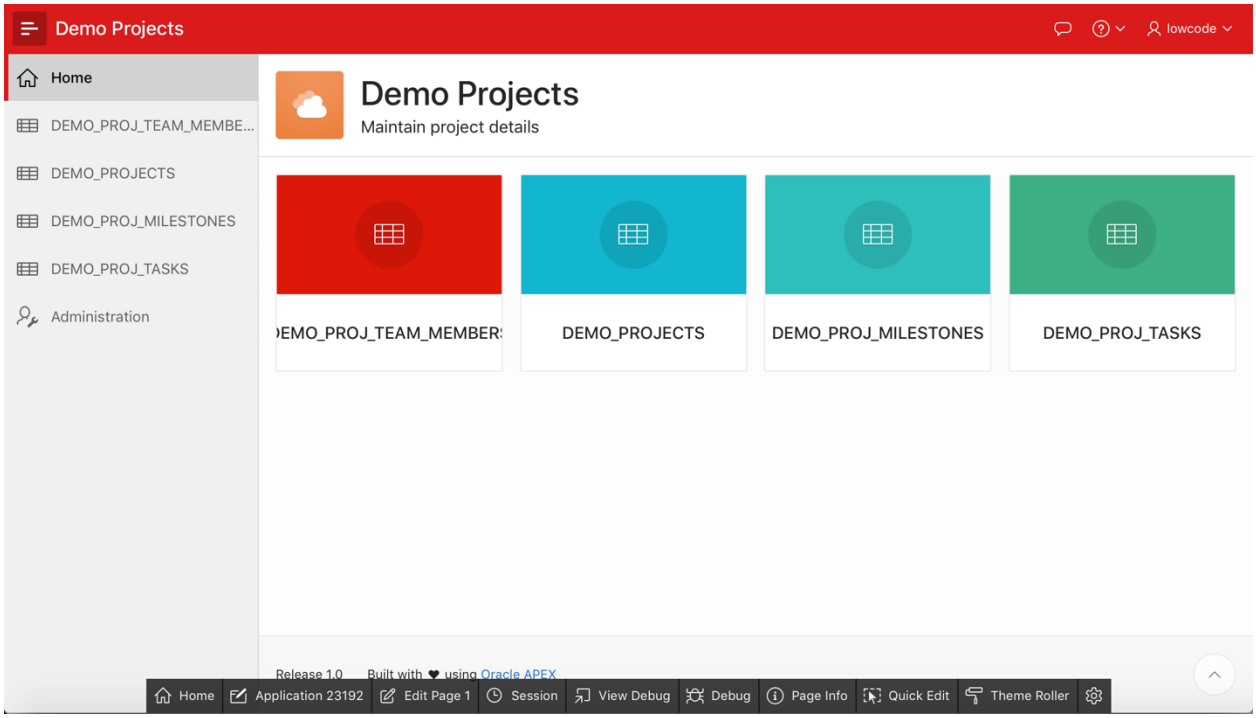
21. The Demo Projects application is now created. Click **Run Application**.



22. Log in using your Workspace **username** and **password**. Click **Sign In**.



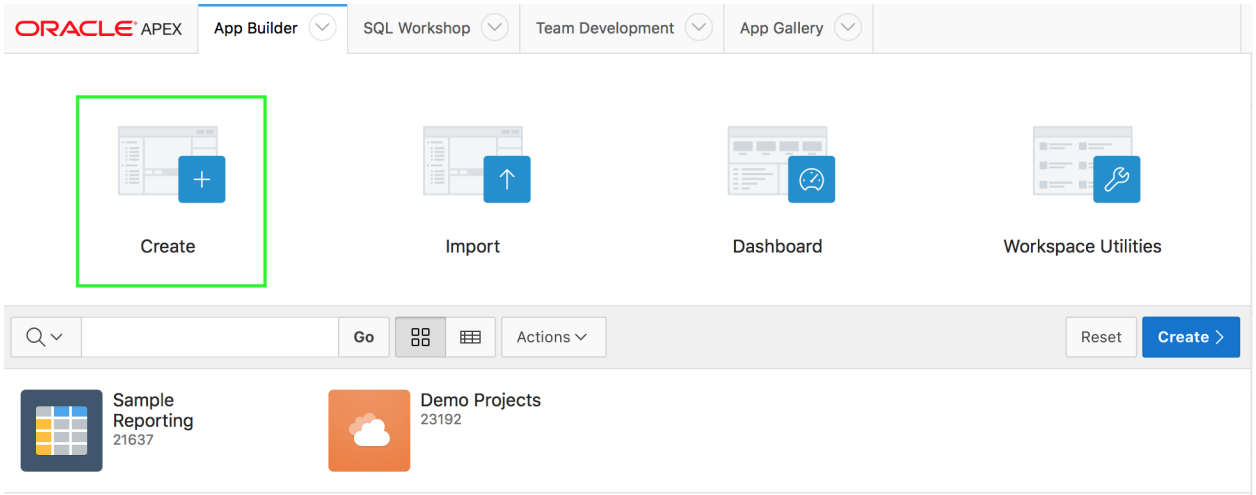
23. Your screen should look like the following:


Demo Projects
lowcode
Home
DEMO_PROJ_TEAM_MEMBE...
DEMO_PROJECTS
DEMO_PROJ_MILESTONES
DEMO_PROJ_TASKS
Administration
Demo Projects
Maintain project details
DEMO_PROJ_TEAM_MEMBER
DEMO_PROJECTS
DEMO_PROJ_MILESTONES
DEMO_PROJ_TASKS
Release 1.0
Built with ❤ using Oracle APEX
Home
Application 23192
Edit Page 1
Session
View Debug
Debug
Page Info
Quick Edit
Theme Roller

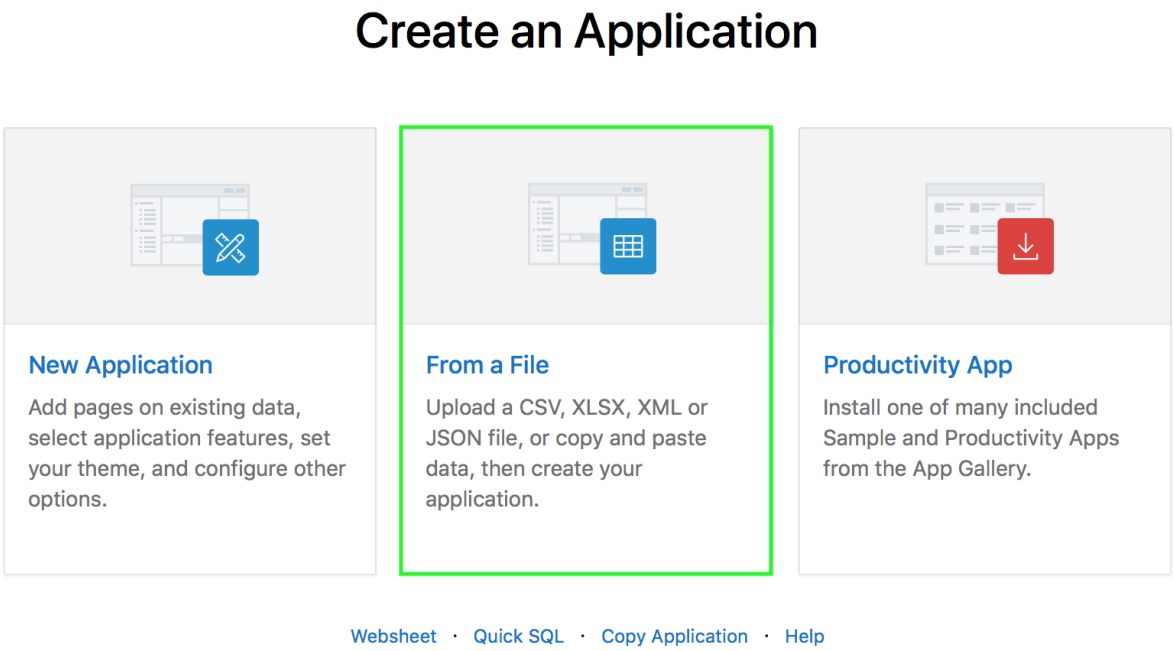
HOL 3-2: Creating a Database Application from a Spreadsheet

In this lab, you use a spreadsheet to create a database application.

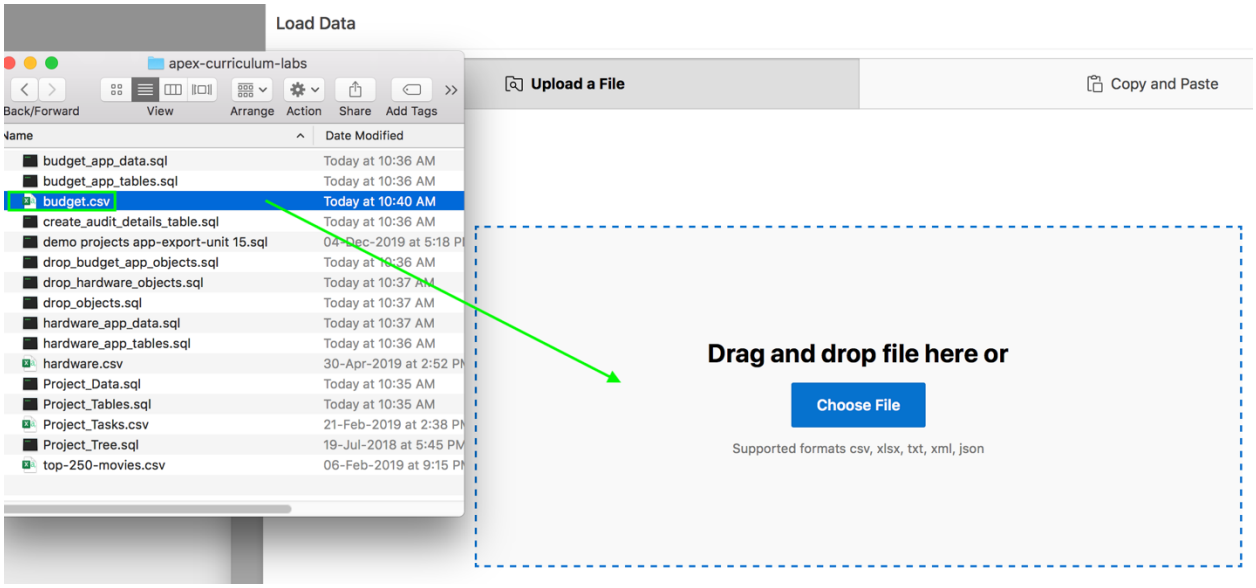
1. Navigate to **App Builder** and click **Create**.



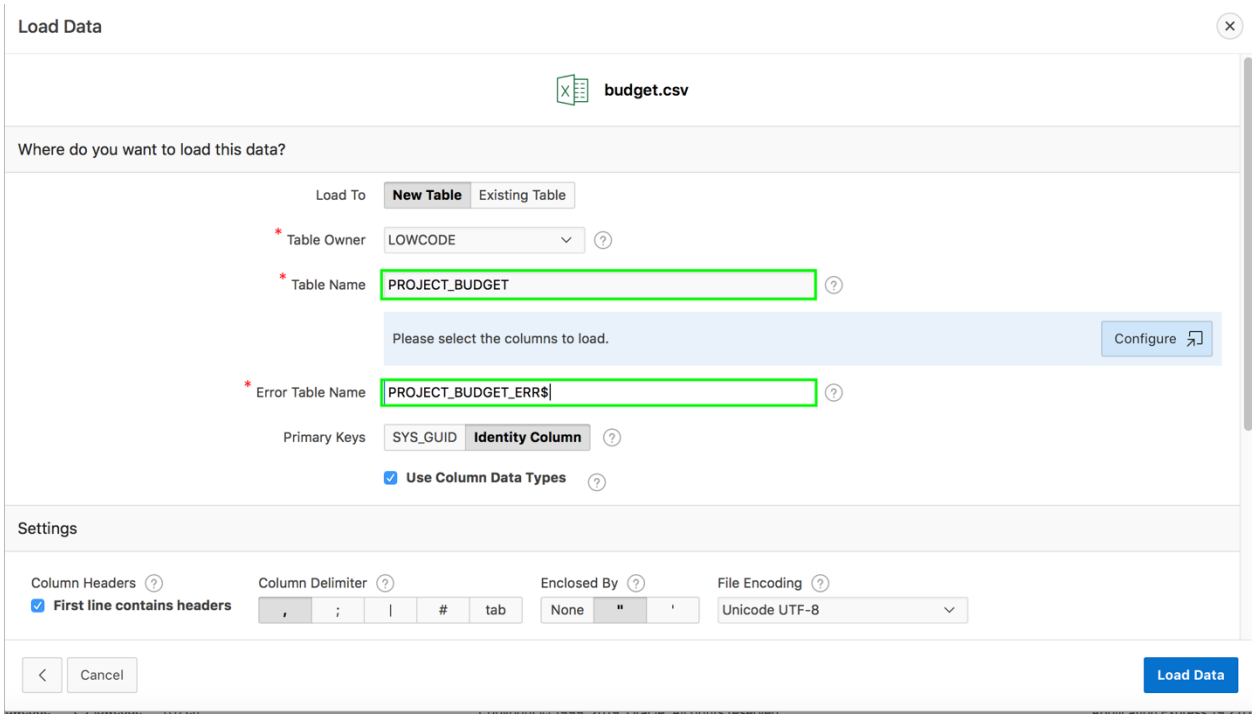
2. Select **From a File**.



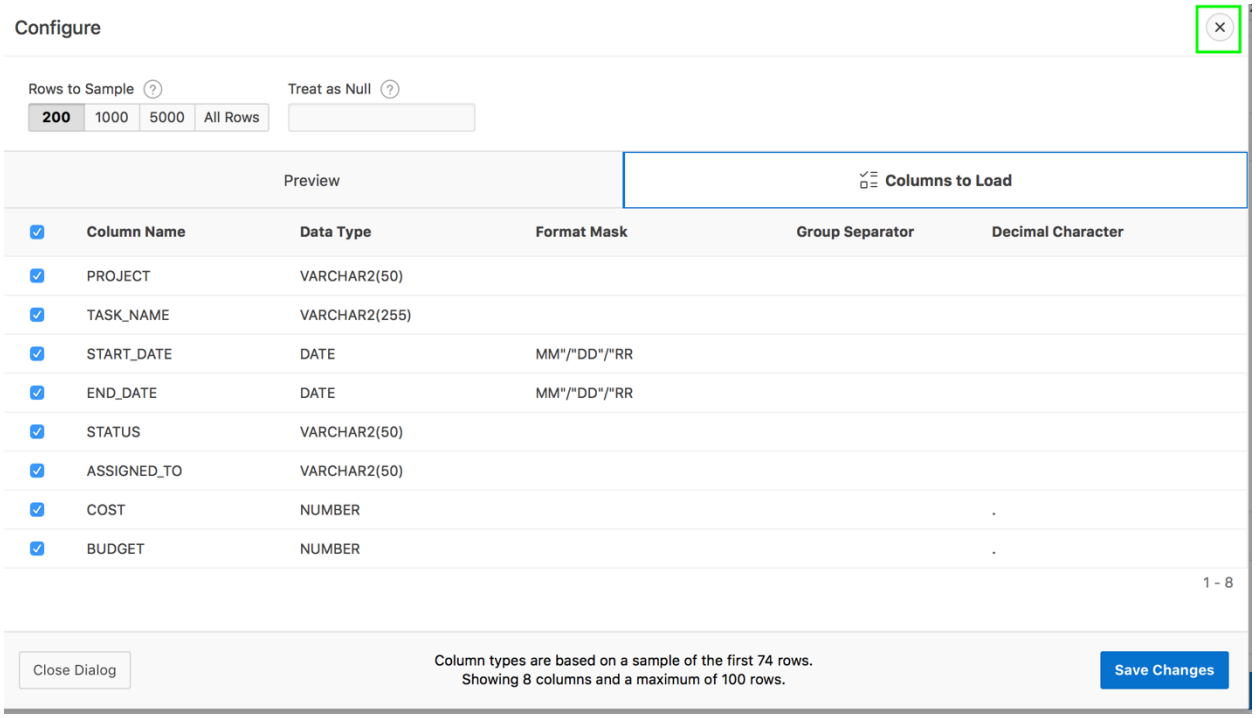
3. Navigate to your working directory. Drag **budget.csv** and drop it in to the Load Data dialog.



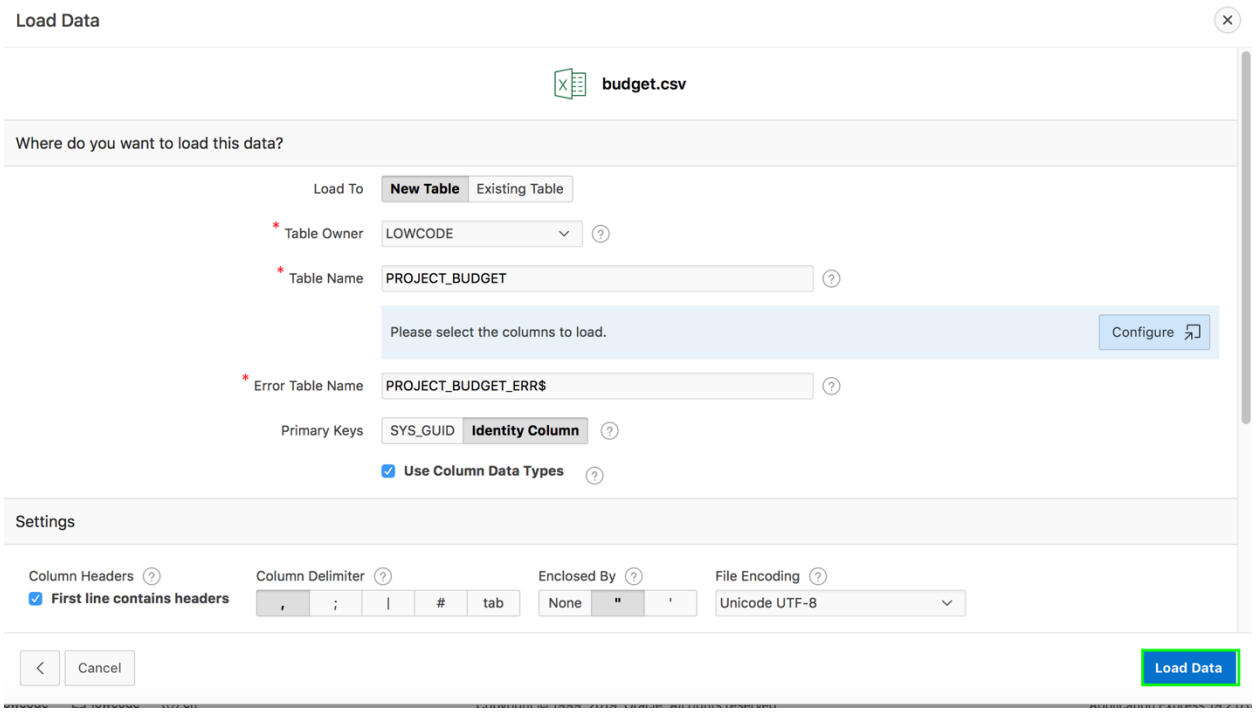
4. Enter **Project_Budget** for Table Name.
Click in the **Error Table Name** field. Notice that the error table name is automatically populated.



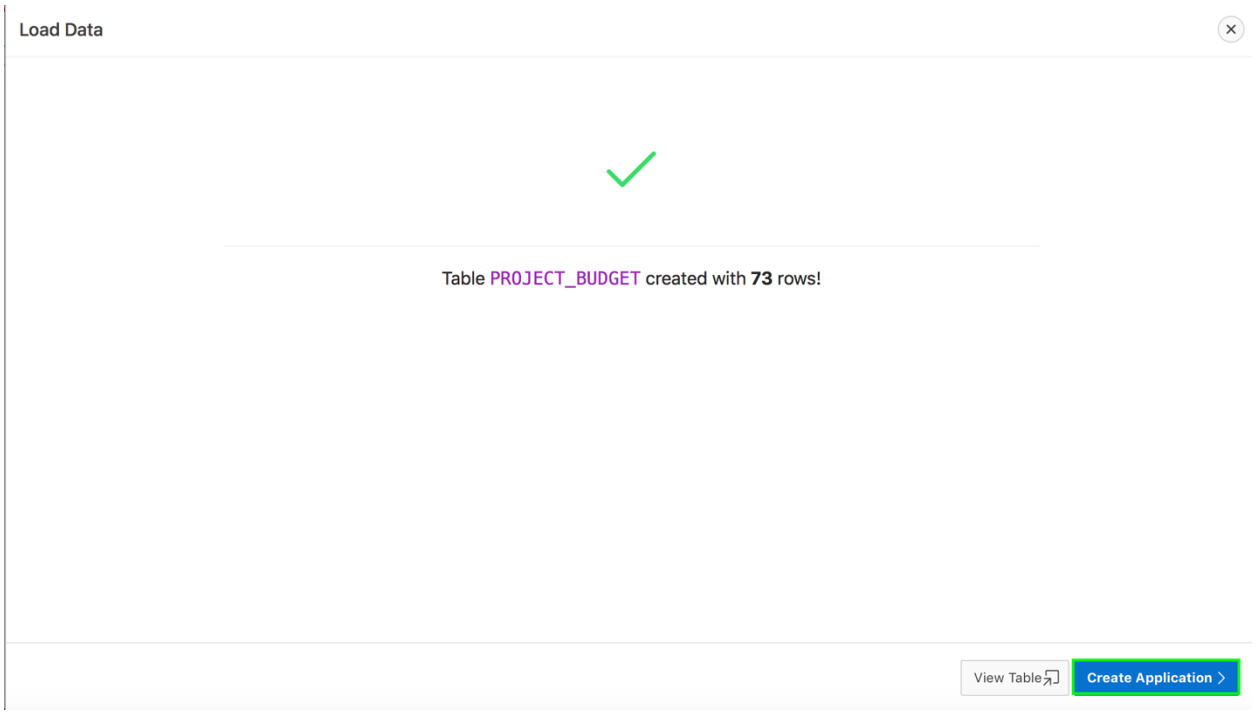
5. Click **Configure**.
You now see **Columns to Load**. Verify the data types for each of the columns. For example, make sure that START_DATE and END_DATE columns have DATE Data Type.
You do not have any changes to save. Click **X** to close the Configure dialog.



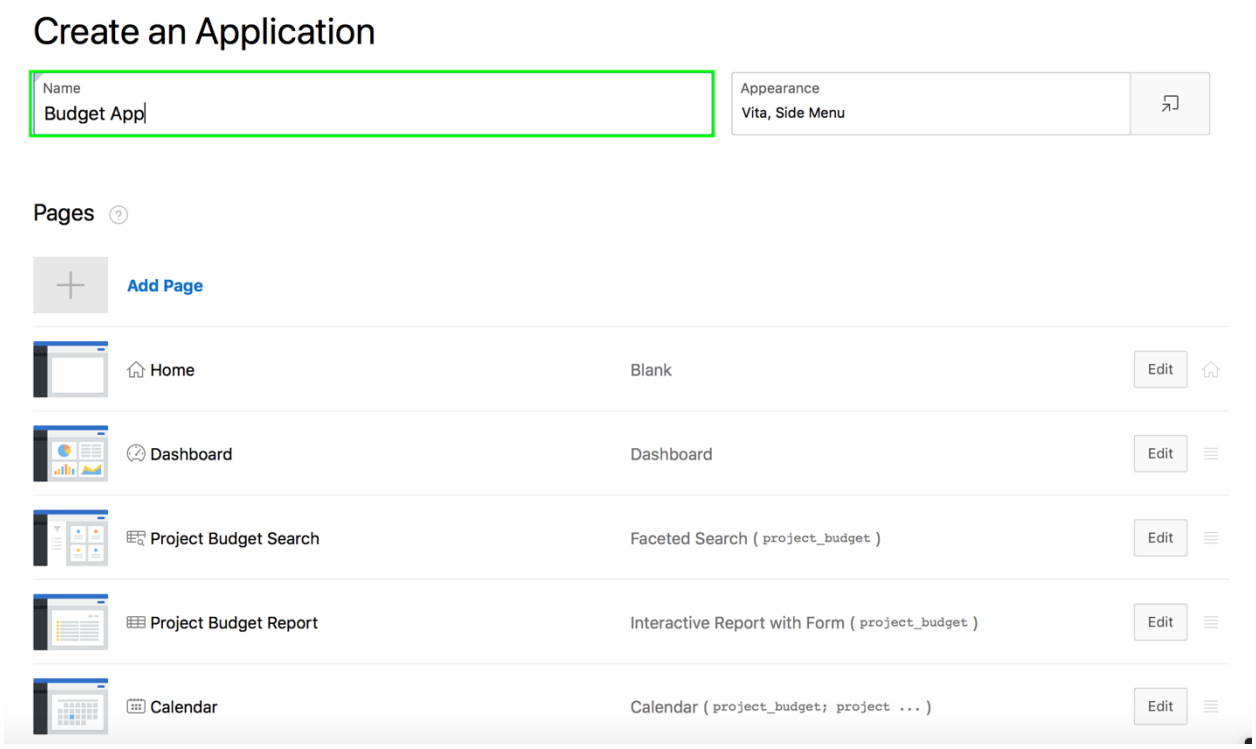
6. Now, click **Load Data**.



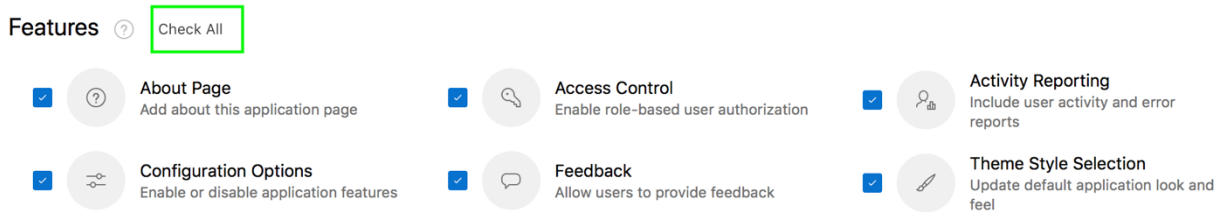
7. The PROJECT_BUDGET table is created with 73 rows. Now, click **Create Application**.



8. For Name, enter **Budget App**.
Notice that the Home, Dashboard, Faceted Search, Interactive Report with Form, and Calendar pages are created by default.



9. For Features, click **Check All**.

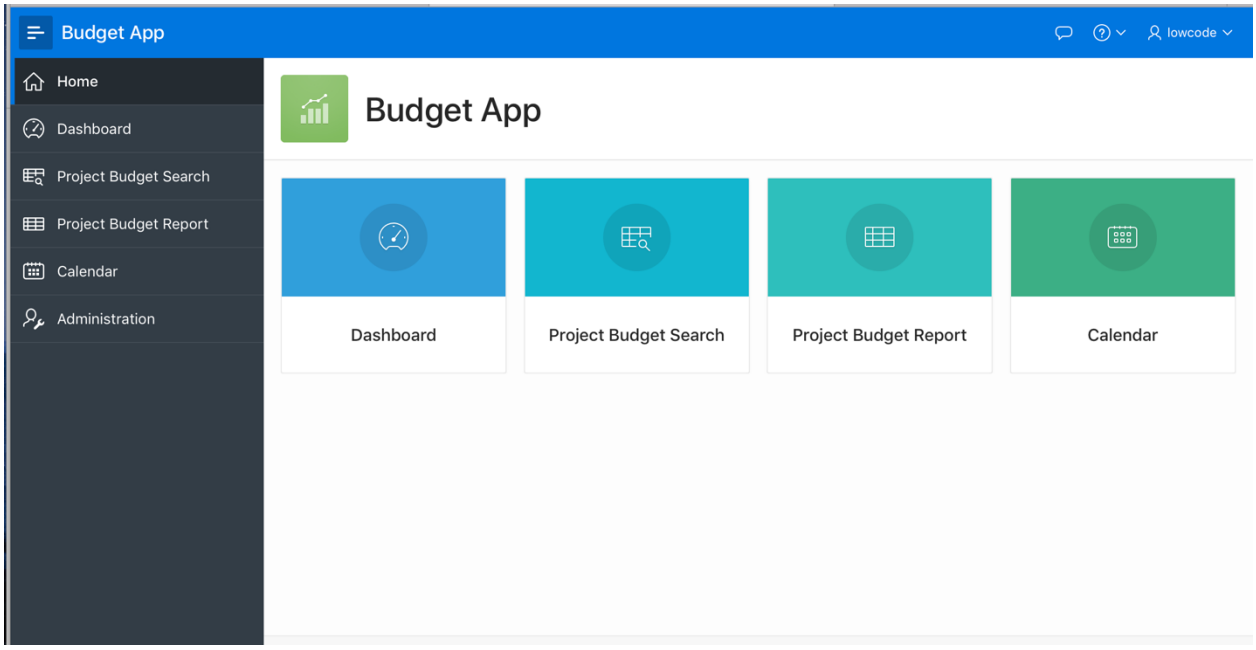


10. Now, click **Create Application**.

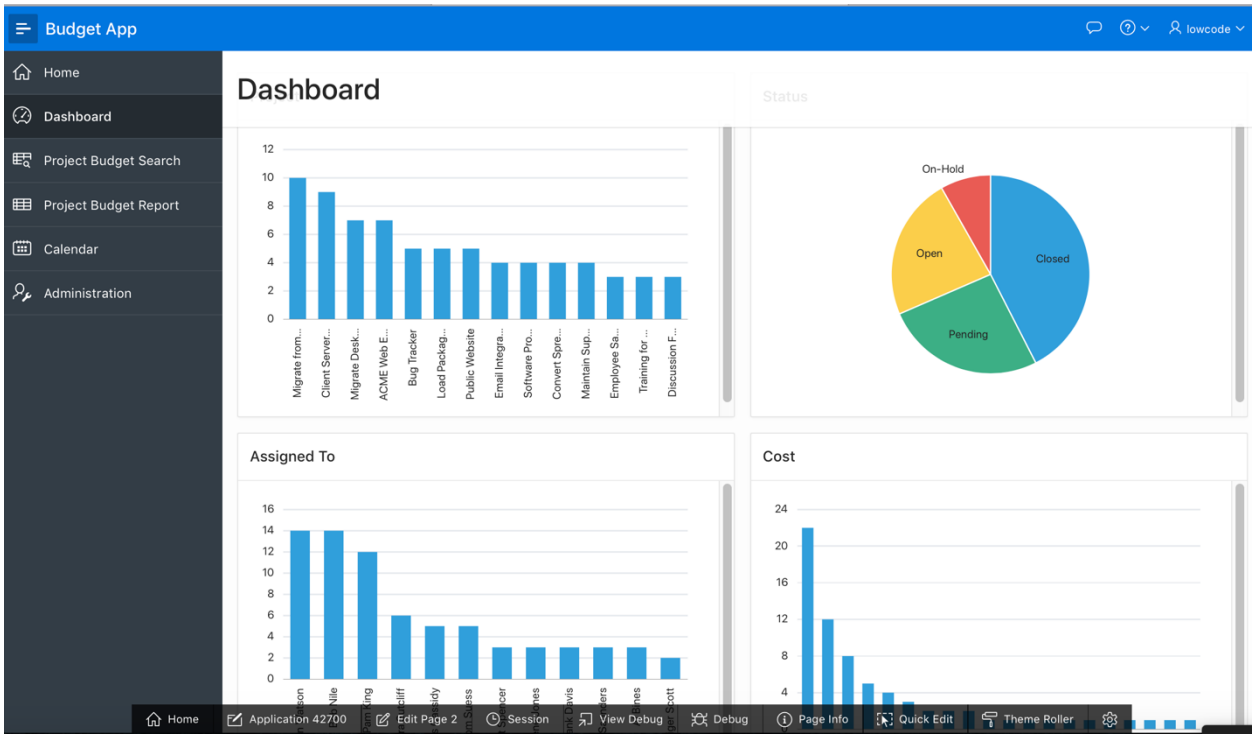
11. Click **Run Application**.

12. Enter your Workspace **Username** and **Password**. Click **Sign In**.

13. Your application should look like the screenshot below:



14. Review the Budget App application that you just created. Check out all the pages that were created by default. For example, the Dashboard page looks like the screenshot below:



ORACLE

Oracle is committed to developing practices and products that help protect the environment

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

Copyright © 2020, Oracle and/or its affiliates. All rights reserved. Licensed under the Creative Commons Attribution 4.0 International License as shown at https://creativecommons.org/licenses/by/4.0/legalcode.

This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.