

+ Introduction
+ Getting Started
+ Lab 1: Defining New Data Structures
+ Lab 2: Creating the Application
+ Lab 3: Regenerating the Application
+ Lab 4: Improving Tasks
- Lab 5: Improving To Dos
Introduction
Task 1: Adding Columns to the Report.
Task 2: Updating the Tasks LOV.
Summary
Acknowledgments
+ Lab 6: Improving Links
+ Need Help?

Improve To Dos

Introduction

In this lab, you will learn how to add additional columns to a report and improve a list of values.

Estimated Time: 10 minutes

Objectives

- Improve the Projects List of Values
- Update the applications To Dos section

What Do You Need?

- An Oracle Cloud paid account, a LiveLabs account or free trial.
- An APEX Workspace and application

Collapse All Tasks

— Task 1: Adding Columns to the Report.

In the Runtime environment navigate to To Dos and notice that the report includes the Task but not the associated Project and Milestone. To retrieve these values in the report you need to utilize an SQL which ties in the Projects and Milestones tables. This can be done using inner selects or by joining multiple tables together. For simplicity you are going to implement inner select statements.

1. From the runtime application, navigate to the To Dos report page, and then navigate to Page Designer.

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

Task ↑	Todo	Assignee	Due Date	Details
Budget Planning System	Ac sapien suscipit tristique ac volutpat risus. Phasellus vitae ligula commodo, dictum.	FIREWALL REVIEW	29-JUL-2018 17:32	Vestibulum eget rhoncus non, molestie sit amet lectus.
Coding Standards Document	Lorem commodo ullamcorper. Interdum et malesuada fames ac ante ipsum primis in faucibus. Ut id nulla ac sapien suscipit tristique ac volutpat risus. Phasellus vitae ligula commodo, dictum lorem sit amet, imperdiet ex. Etiam cursus porttitor tincidunt. Vesti	FIREWALL REVIEW	29-OCT-2018 17:32	Placerat iaculis aliquam. Vestibulum lacinia arcu.
Compendium Tracking	Commodo, dictum lorem sit.	FIREWALL REVIEW	29-JUL-2018 17:32	Ac volutpat risus. Phasellus vitae ligula commodo, dictum lorem sit amet, imperdiet ex. Etiam cursus porttitor tincidunt. Vestibulum ante ipsum primis in faucibus sed lectus enim varius posuere cubilia Curas;
Competitive Tracking	Massa pharetra, id mattis risus rhoncus. Cras vulputate porttitor ligula. Nam semper diam suscipit ultricies sodales. Proin sit amet massa eu lorem commodo ullamcorper. Interdum et malesuada.	FIREWALL REVIEW	29-JUL-2018 17:32	Ex. Etiam cursus porttitor tincidunt. Vestibulum ante ipsum primis in faucibus sed lectus enim varius posuere cubilia Curas; tincidunt. Nulla facilisi. In posuere blandit leo et ligula. Vivamus efficitur ipsum.
Customer Satisfaction Improvement	Consectetur mi venenatis nec. Donec convallis sollicitudin elementum. Nulla facilisi. In posuere blandit leo et ligula. Vivamus efficitur ipsum tellus, quis posuere mi maximum vitae, pretium et metus. Duis.	FIREWALL REVIEW	28-FEB-2019 17:32	Id nulla ac sapien suscipit tristique ac volutpat risus. Phasellus vitae ligula commodo, dictum lorem sit.
Digital Document Management	Impenitent ex. Etiam cursus porttitor tincidunt. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curas; Proin vulputate platerat pellentesque. Proin viverra congue etiam consetetur mi venenatis nec. Donec convallis s	FIREWALL REVIEW	29-JUL-2019 17:32	Vitae ligula commodo, dictum lorem sit amet, imperdiet ex. Etiam cursus porttitor tincidunt. Vestibulum ante ipsum primis in faucibus orci.

You should now be in Page Designer with **Page 9: To Dos** loaded.

2. You need to update the query defined for To Dos.

Within Page Designer, in the Rendering tree (left pane), click **To Dos**.

In the Property Editor (right pane), for Source > Type, select **SQL Query**.

(Note: The SQL Query will be populated. The SQL statement selects all of the columns from the HOL_TO_DOS table.)

For Source > SQL Query, click the **Code Editor** icon.

In the Code Editor, enter the following:

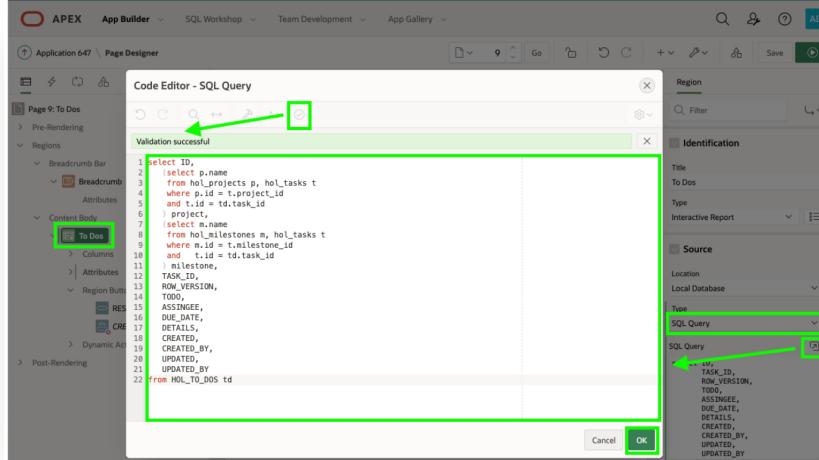
```

select TD.ID,
       (select P.name
        from hol_projects P, hol_tasks T
        where P.id = T.project_id
        and T.id = TD.task_id
       ) project,
       (select M.name
        from hol_milestones M, hol_tasks T
        where M.id = T.milestone_id
        and T.id = TD.task_id
       ) milestone,
       TD.TASK_ID,
       TD.ROW_VERSION,
       TD.TODO,
       TD.ASSINGEE,
       TD.DUE_DATE,
       TD.DETAILS,
       TD.CREATED,
       TD.CREATED_BY
  
```

Copy

```
UPDATED,
UPDATED_BY
from HOL_TO_DOS td
```

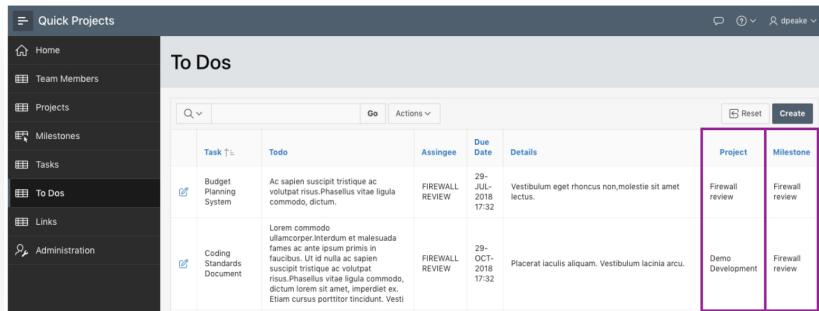
In the Code Editor toolbar, click **Validate**. Click **OK**.



(Note: The two inner select statements connect the projects / milestones tables to the tasks table, and the tasks table to the todos table.)

3. Run the application to ensure the new Project and Milestone columns display correctly.

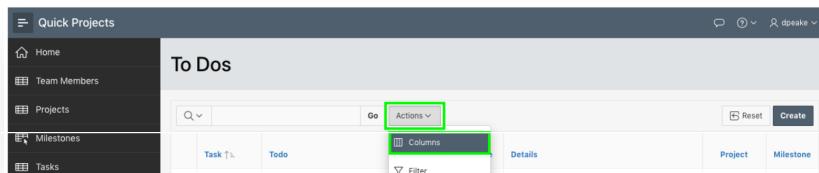
In the Page Designer toolbar, click **Save and Run**.



4. The new project and milestone columns are placed as the last columns in the report, however, they should be moved to be the first columns.

In the runtime environment, in the To Dos report menu, click **Actions**.

In the dropdown, select **Columns**.

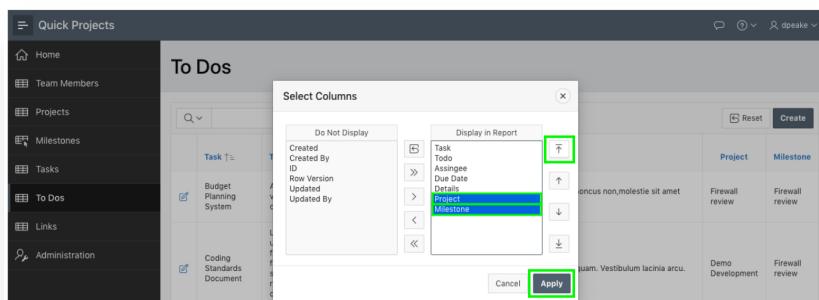


5. In the Select Columns dialog, click **Project**.

Hold down the [Shift] key, and click **Milestone**.

In the options on the right of the dialog, click **Top**.

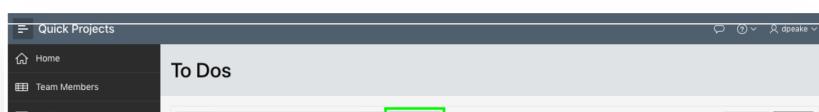
Click **Apply**.



6. You need to save the revised report layout so others will see the new and improved column placement.

In the runtime environment, in the To Dos report menu, click **Actions**.

In the dropdown, select **Report**, and then click **Save Report**.



7. In the Save Report dialog, for Save (Only displayed for developers), select **As Default Report Settings**.

8. In the Save Default Report dialog, click **Apply**.

(Note: You want to save the report as Primary so that it displayed as you see it now to end users when they navigate to the page.)

— Task 2: Updating the Tasks LOV.

If you review the To Dos form page, by clicking an edit icon on the report, you will see that Project and Milestone are not on the form page either. To simplify data entry, you will change the Tasks select list to a Popup LOV and include the Project and Milestone.

This same LOV is used on the Links form page so we can reuse it there as well.

1. From the runtime environment, in the Developer Toolbar, click **Application xxxx**.

2. From the application home page, click **Shared Components**

3. From Shared Components, under Other Components, click **List of Values**.

4. From the List of Values page, click **HOL_TASKS.NAME**.

5. In the List of Values page, enter the following:

- Source > Source Type - click **SQL Query**
- Source > SQL Query - enter the following -

```
select id
,      (select p.name from hol_projects p where p.id = t.project_id) project
,      (select m.name from hol_milestones m where m.id = t.milestone_id) milestone
,      name
from hol_tasks t
```

Copy

- Column Mapping > Return - select **ID**
- Column Mapping > Display - select **NAME**
- Column Mapping > Default Sort - select **NAME**

Source

Data Source Local Database

Source Type Table SQL Query

SQL Query

```

1 select id
2   , (select p.name from hol_projects p where p.id = t.project_id) project
3   , (select m.name from hol_milestones m where m.id = t.milestone_id) milestone
4   , name
5  from hol_tasks t
  
```

Optimizer Hint

Example: Dynamic Lists of Values on SQL Queries

Column Mapping

- * Return ID
- Display NAME
- Default Sort NAME
- Sort Direction Ascending (Nulls Last)

To display the extra columns, click **Select Columns**

On the Select Additional Display Columns, performing the following actions:

- Move **PROJECT (Varchar2)** to the right pane
- Move **MILESTONE (Varchar2)** to the right pane
- Move **NAME (Varchar2)** to below Milestone in the right pane

(Note: The ID column must be included in the list, however, it will be marked as Visible = No so will not be displayed.)

Click **Update**.

Move from Optimizer Hint

Example: Dynamic Lists of Values on SQL Queries

Select Columns

Column Mapping

- * Return ID
- Display NAME
- Default Sort NAME
- Sort Direction Ascending (Nulls Last)
- Group - Not Defined
- Group Sort Direction Ascending (Nulls Last)
- Icon Not Defined

Additional Display Columns [Select Columns >](#)

Cancel Update

In the List of Values toolbar, click **Apply Changes**.

6. On the To Do form page you will need to update the item type for Task.

From Shared Components, within the breadcrumbs, click **Application xxxx**.

From the application home page, in the list of pages, click **10 - To Dos**.

APEX App Builder SQL Workshop Team Development App Gallery

Application 647 - Quick Projects

Run Application Supporting Objects Shared Components Utilities Export / Import

Actions Create Page >

0 - Global Page - Desktop 1 - Home 2 - Team Members 3 - Team Member 4 - Projects 5 - Project

6 - Milestones 7 - Tasks 8 - Task 9 - To Dos 10 - To Dos 11 - Links

7. Within Page Designer, in the Rendering tree (left pane), click **P10_TASK_ID**.

In the Property Editor (right pane), for Identification > Type, select **Popup LOV**.

Application 647 \ Page Designer

Page 10 - To Dos Pre-Rendering Regions Content Body To Dos Attributes Items P10_TASK_ID

Layout Page Search Help

To Dos DIALOG HEADER CONTENT BODY To Dos PREVIOUS P10_TASK_ID P10_TODO

Page Item Filter

Identification

- Name P10_TASK_ID
- Type Popup LOV
- Label Task
- Settings

8. In the Page Designer toolbar, click **Save**.

9. Time to review the completed form page.

Navigate to the runtime environment tab or browser.

Navigate to **To Dos** and refresh the page.

Click the edit icon for a To Do.

For Task, click the down arrow to display the Task Popup LOV.

Enter in a search term and hit [Enter].

Project	Milestone	Name
Demo Development	Firewall review	Artifact Management System
Demo Development	Firewall review	Best Practices
Demo Development	Firewall review	Coding Standards Document
Web Site UI Standards Upgrade	Firewall review	FR3 Review
Demo Development	Firewall review	New Hire Training Program

— Summary

You now know how to enhance report and list of value queries to display related details. [

— Acknowledgments

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