

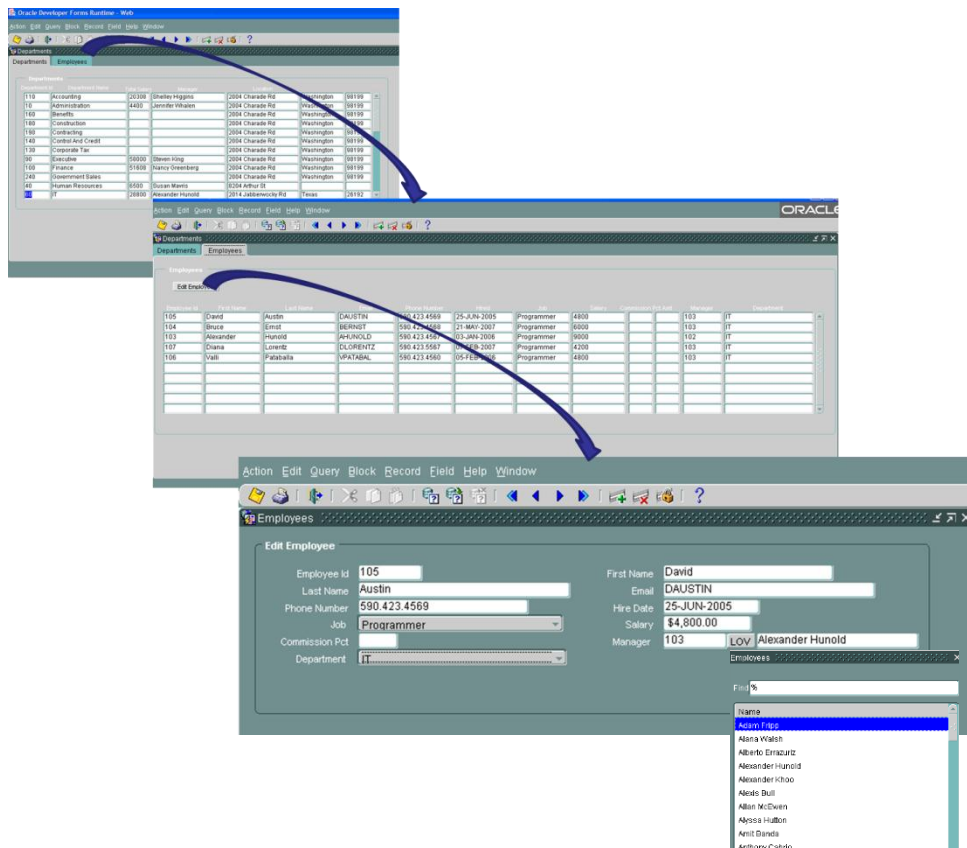
Workshop: Redeveloping a legacy application in JDeveloper ADF

This document contains the requirements that have been determined from our legacy application.

1 Screens

The application has two Forms modules for Department and Employee information.

- The Departments form has two tabs. The first lists Departments. The second tab lists the Employees for the Department selected in the first tab.
- The Employee form has a single canvas allowing Employee information to be edited.



2 Requirements

2.1 Business Rules Summary

- 1) Employee hire date must default to today.
- 2) We need to display the commission amount as well as the percentage
- 3) Employees email must be a valid email format.
- 4) Commission Pct must be between 0 and .5
- 5) Salary cannot be negative
- 6) Jobs min salary cannot be more than max salary.
- 7) Employees can only have a commission pct if they are currently allocated to the sales department.

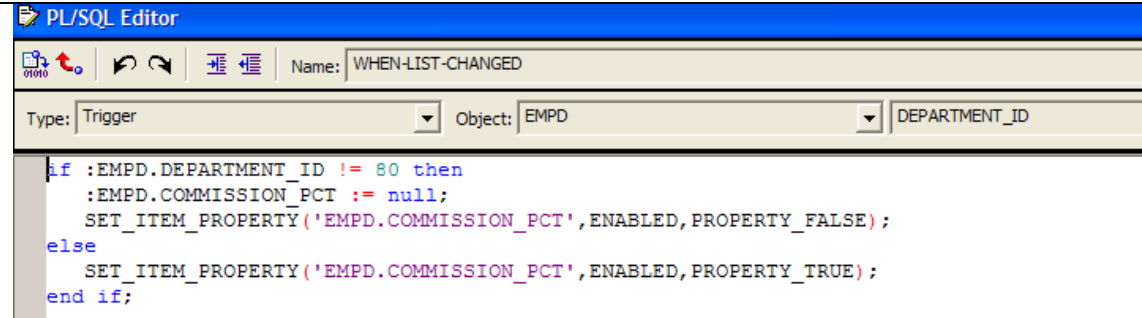
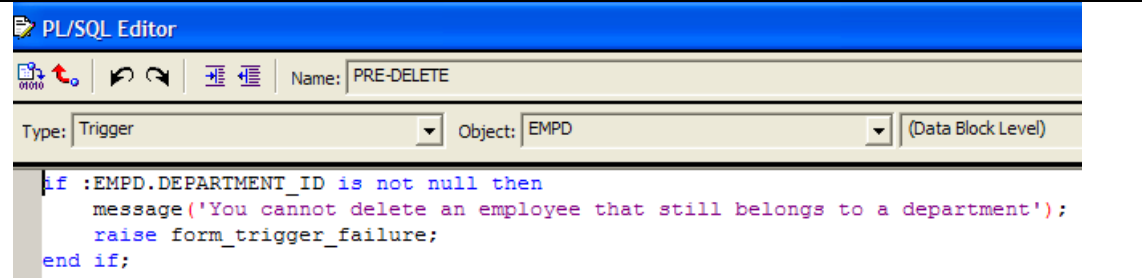
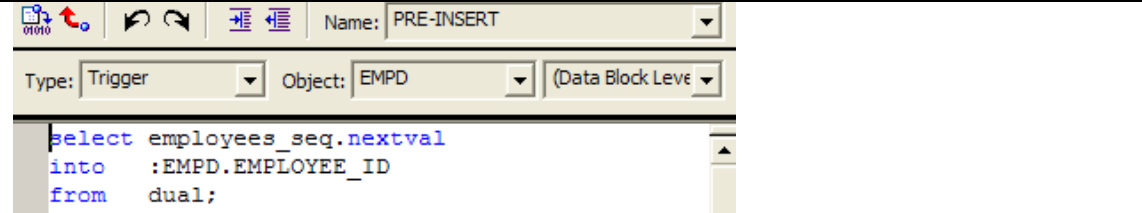
UI: Commission Pct should be set to disabled if they choose a department other than Sales.

UI: Commission pct should be set to null if they choose a department other than Sales.

- 8) You cannot delete an employee that is still assigned to a department.
- 9) Employee_id is generated from the EMPLOYEES_SEQ sequence.
- 10) The Employee's Department must be selected from a drop down list of valid departments.
- 11) The Employee's Job must be selected from a drop down list of valid jobs.
- 12) The Employee's Manager must be selected from a popup LOV of valid employees.
- 13) We need to display the total salary bill for each department.
- 14) Departments should be displayed order by Name. Employees should be displayed order by Last Name followed by First name.
- 15) The Employees list displayed must match the department displayed in the first tab
- 16) The Edit Employee Form is called from the Employee list passing the Employee Id in.
- 17) The Employee list should show Job Title and Department Name rather than IDs.
- 18) The Department list should show Manager Name and Location Address rather than Ids

2.2 Business Rules Source

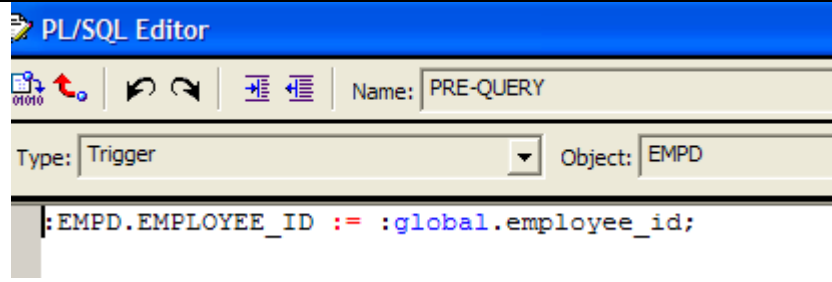
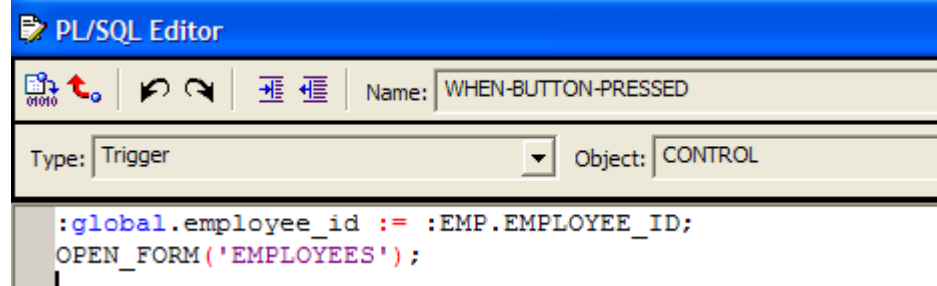
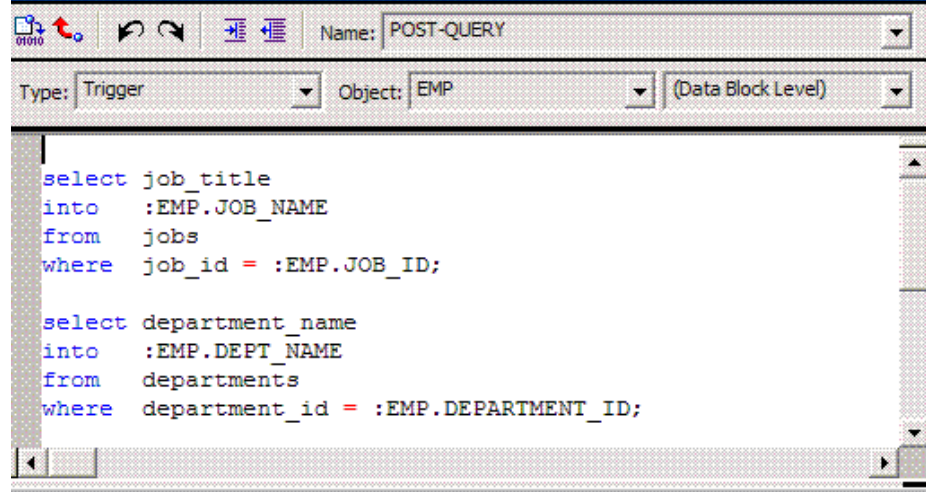
Forms Functionality	Rule No.	Rule
HireDate: <input type="checkbox"/> Initial Value \$\$DATETIME\$\$	1	Employee hire date must default to today
Commission Amt: <input type="checkbox"/> Calculation <input type="checkbox"/> Calculation Mode Formula <input type="checkbox"/> Formula :emp.salary*:emp.commission_pct	2	We need to display the commission as well as the percentage
Not implemented	3	Employees email must be a valid email format.
<input type="checkbox"/> Lowest Allowed Value 0 <input type="checkbox"/> Highest Allowed Value .05	4	Commission Pct must be between 0 and .5
Salary:	5	Salary cannot be negative
Not implemented	6	Jobs min salary cannot be more than max salary.
<pre> if :EMPD.DEPARTMENT_ID != 80 and NVL(:EMPD.COMMISSION_PCT,0) != 0 then message ('You can only assign Commission for employees in Sales'); raise FORM_TRIGGER_FAILURE; end if; </pre>	7	Employees can only have a commission pct if they are currently allocated to the sales department. UI: Commission Pct should be set to disabled if they choose a department other than Sales. UI: Commission pct should be set to null if they choose a department other than Sales.

 <p>PL/SQL Editor</p> <p>Name: WHEN-LIST-CHANGED</p> <p>Type: Trigger Object: EMPD DEPARTMENT_ID</p> <pre> if :EMPD.DEPARTMENT_ID != 80 then :EMPD.COMMISSION_PCT := null; SET_ITEM_PROPERTY('EMPD.COMMISSION_PCT',ENABLED,PROPERTY_FALSE); else SET_ITEM_PROPERTY('EMPD.COMMISSION_PCT',ENABLED,PROPERTY_TRUE); end if; </pre>		
 <p>PL/SQL Editor</p> <p>Name: PRE-DELETE</p> <p>Type: Trigger Object: EMPD (Data Block Level)</p> <pre> if :EMPD.DEPARTMENT_ID is not null then message('You cannot delete an employee that still belongs to a department'); raise form_trigger_failure; end if; </pre>	8	You cannot delete an employee that is still assigned to a department.
 <p>PL/SQL Editor</p> <p>Name: PRE-INSERT</p> <p>Type: Trigger Object: EMPD (Data Block Level)</p> <pre> select employees_seq.nextval into :EMPD.EMPLOYEE_ID from dual; </pre>	9	Employee_id is generated from the EMPLOYEES_SEQ sequence.

	<pre> DECLARE dept_rg recordgroup; job_rg recordgroup; v_status NUMBER; BEGIN -- Define Department poplist elements dept_rg := CREATE_GROUP_FROM_QUERY ('dept_rgrp','SELECT department_name, to_char(department_id) FROM departments ' ' ORDER BY department_name '); -- Populate the record group with data form the query v_status := POPULATE_GROUP(dept_rg); -- Populate the list item form the record group POPULATE_LIST('EMPD.DEPARTMENT_ID', dept_rg); -- Define Job poplist elements job_rg := CREATE_GROUP_FROM_QUERY ('job_rgrp','SELECT job_title, to_char(job_id) FROM jobs ' ' ORDER BY job_title '); -- Populate the record group with data form the query v_status := POPULATE_GROUP(job_rg); -- Populate the list item form the record group POPULATE_LIST('EMPD.JOB ID', job rg); </pre>	10	The Employee's Department must be selected from a drop down list of valid departments.
See above		11	The Employee's Job must be selected from a drop down list of valid jobs.

<div data-bbox="190 191 1176 774"> <p>General</p> <ul style="list-style-type: none"> Name: LOV_MGR Subclass Information Comments <p>Functional</p> <ul style="list-style-type: none"> Title: Employees List Type: Record Group Record Group: LOV21 Column Mapping Properties Filter Before Display: No Automatic Display: No Automatic Refresh: Yes Automatic Select: No Automatic Skip: No Automatic Position: Yes Automatic Column Width: No <p>Physical</p> </div> <div data-bbox="190 837 1254 1125"> <p>PL/SQL Editor</p> <p>Name: WHEN-BUTTON-PRESSED</p> <p>Type: Trigger Object: CONTROL</p> <pre>go_item('EMPD.MANAGER_ID'); LIST_VALUES;</pre> </div>		12	The Employee's Manager must be selected from a popup LOV of valid employees.
<ul style="list-style-type: none"> POST-QUERY ON-POPULATE-DETAILS ON-CHECK-DELETE-MAST <p>Items</p> <ul style="list-style-type: none"> DEPARTMENT_ID DEPARTMENT_NAME MANAGER_ID 	<pre>begin select sum(salary) into :dept.total_salary from employees where department_id = :dept.department_id;</pre>	13	We need to display the total salary bill for each department.

<p>Dept:</p> <table border="1"> <tr> <td>ORDER BY Clause</td> <td>department_name</td> </tr> </table> <p>Emp:</p> <table border="1"> <tr> <td>ORDER BY Clause</td> <td>last_name,first_name</td> </tr> </table>	ORDER BY Clause	department_name	ORDER BY Clause	last_name,first_name	14	Departments should be displayed order by Name. Employees should be displayed order by Last Name followed by First name.																						
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<p>Relation: DEPT_EMP</p> <table border="1"> <tr> <td colspan="2">General</td> </tr> <tr> <td>Name</td> <td>DEPT_EMP</td> </tr> <tr> <td>Relation Type</td> <td>Join</td> </tr> <tr> <td>Subclass Information</td> <td></td> </tr> <tr> <td>Comments</td> <td></td> </tr> <tr> <td colspan="2">Functional</td> </tr> <tr> <td>Detail Data Block</td> <td>EMP</td> </tr> <tr> <td>Join Condition</td> <td>department_id</td> </tr> <tr> <td>Delete Record Behavior</td> <td>Non Isolated</td> </tr> <tr> <td>Prevent Masterless Operations</td> <td>No</td> </tr> <tr> <td colspan="2">Coordination</td> </tr> <tr> <td>Deferred</td> <td>No</td> </tr> <tr> <td>Automatic Query</td> <td>No</td> </tr> </table>	General		Name	DEPT_EMP	Relation Type	Join	Subclass Information		Comments		Functional		Detail Data Block	EMP	Join Condition	department_id	Delete Record Behavior	Non Isolated	Prevent Masterless Operations	No	Coordination		Deferred	No	Automatic Query	No	15	The Employees displayed must match the department displayed in the first tab
General																												
Name	DEPT_EMP																											
Relation Type	Join																											
Subclass Information																												
Comments																												
Functional																												
Detail Data Block	EMP																											
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Delete Record Behavior	Non Isolated																											
Prevent Masterless Operations	No																											
Coordination																												
Deferred	No																											
Automatic Query	No																											
<pre> default_value (null, 'GLOBAL.EMPLOYEE_ID'); if :global.employee_id is not null then go_block('EMPD'); check_package_failure; execute_query; end if; </pre>	16	The Edit Employee Form is called from the Employee list passing the Employee Id in.																										

 		
	17	The Employee list should show Job Title and Department Name rather than IDs.


```
begin
  select first_name||' '||last_name
  into   :dept.manager_name
  from   employees
  where  :dept.manager_id = employee_id;
exception
  when no_data_found then null;
end;
```

```
begin
  select street_address, postal_code, state_province
  into   :dept.location_adr, :dept.location_postcode, :dept.location_state
  from   locations
  where  location_id = :dept.location_id;
exception
  when no_data_found then null;
end;
```

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The Department list should show
Manager Name and Location Address
rather than Ids