**Building Applications with Force.com**Exercise Guide

**Table of Contents**

[2-1: Create Custom Objects 1](#_Toc440875379)

[2-2: Create Custom Fields 2](#_Toc440875380)

[2-3: Create Lookup Relationships 6](#_Toc440875381)

[2-4: Create Master-Detail Relationships 8](#_Toc440875382)

[2-5: Create a Custom Junction Object 10](#_Toc440875383)

[2-6: Create a Lookup Filter 12](#_Toc440875384)

[3-1: Create a Custom Application 13](#_Toc440875385)

[3-2: Create Custom Tabs 14](#_Toc440875386)

[3-3: Customize Page Layouts 16](#_Toc440875387)

[3-4: Enable Chatter on the Positions Object 18](#_Toc440875388)

[3-5: Create an Object-Specific Quick Action 19](#_Toc440875389)

[3-6: Create a Global Quick Action and a Global Layout for HR 21](#_Toc440875390)

[4-1: Create Formula Fields 23](#_Toc440875391)

[4-2: Create Cross-Object Formulas 25](#_Toc440875392)

[4-3: Create Roll-Up Summary Fields 27](#_Toc440875393)

[7-1: Create Custom Profiles 29](#_Toc440875394)

[7-2: Create Permission Sets 31](#_Toc440875395)

[7-3: Change Access Using Field-Level Security 34](#_Toc440875396)

[7-4: Create Record Types 35](#_Toc440875397)

[7-5: Create Page Layouts 37](#_Toc440875398)

[7-6: Create Page Layouts and Record Types (Optional) 39](#_Toc440875399)

[8-1: Create Custom Object Queues 40](#_Toc440875400)

[8-2: Set Organization-Wide Defaults 41](#_Toc440875401)

[8-3: Implement a Role Hierarchy 42](#_Toc440875402)

[8-4: Create a Public Group 43](#_Toc440875403)

[8-5: Implement Manual Sharing 44](#_Toc440875404)

[8-6: Implement Sharing Rules 45](#_Toc440875405)

[8-7: Create Apex Sharing Reasons (Optional) 46](#_Toc440875406)

[9-1: Establish Data Access 47](#_Toc440875407)

[9-2: Restrict Data Access 48](#_Toc440875408)

[10-1: Create Formula Fields to Display Images 51](#_Toc440875409)

[10-2: Create Formula Fields to Display Hyperlinks 53](#_Toc440875410)

[11-1: Create Validation Rules 55](#_Toc440875411)

[11-2: Build Validation Rules to Enforce Conditionally Required Fields 56](#_Toc440875412)

[11-3: Build Validation Rules to Enforce Data Format 58](#_Toc440875413)

[11-4: Build Validation Rules to Enforce Consistency 60](#_Toc440875414)

[11-5: Create Validation Rules to Prevent Data Loss (Optional) 63](#_Toc440875415)

[12-1: Create Workflow Rules 65](#_Toc440875416)

[12-2: Set Up Time-Dependent Workflow 67](#_Toc440875417)

[12-3: Create a Process 69](#_Toc440875418)

[13-1: Create Multi-Step Approval Processes 71](#_Toc440875419)

[13-2: Create Dynamic Approval Processes 77](#_Toc440875420)

[14-1: Create a Flow 83](#_Toc440875421)

[14-2: Create a New Version of a Flow 87](#_Toc440875422)

[14-3: Deploy a Flow 91](#_Toc440875423)

[15-1: Audit Changes Using Setup Audit Trail 93](#_Toc440875424)

[15-2: Audit Changes to Data 94](#_Toc440875425)

[16-1: Mass Transfer Ownership of Records 95](#_Toc440875426)

[16-2: Upload Positions 96](#_Toc440875427)

[16-3: Upsert Candidates 98](#_Toc440875428)

[16-4: Upsert Remaining Object Data (Optional) 100](#_Toc440875429)

[17-1: Which is Best Solved Using Visualforce? 101](#_Toc440875430)

[17-2: Create a Visualforce Page 103](#_Toc440875431)

[17-3: Use a Standard Controller and Override a Standard Page 104](#_Toc440875432)

[17-4: Find Components and Their Attributes 105](#_Toc440875433)

[17-5: Complete the Offer Quick Edit Page 107](#_Toc440875434)

[17-6: Create the Candidate Page 109](#_Toc440875435)

[17-7: Create the Review Page (Optional) 111](#_Toc440875436)

[17-8: Create the Console Page Template and Job Application Console Page 114](#_Toc440875437)

[17-9: Add the Confidential Image to the Job Application Console 116](#_Toc440875438)

[18-1: Add Web Content to a Visualforce Page 117](#_Toc440875439)

[18-2: Create a Mass Edit List Page (Optional) 118](#_Toc440875440)

[18-3: Deploy a Flow using Visualforce 119](#_Toc440875441)

[18-4: Display the Job Site 120](#_Toc440875442)

[18-5: Create a Partial Page Update for Conditional Fields (Optional) 122](#_Toc440875443)

2-1: Create Custom Objects

Scenario:

Universal Containers (UC) is currently using a spreadsheet to track new positions. This very inefficient process is difficult to manage.

In order to improve this process and make it more efficient, UC has decided to create a custom object to track positions. All internal communication and activity relating to Positions should be tracked on this object. In addition, users should be able to run reports on these objects.

Goal:

Create a custom object called Position.

Task:

Create a custom Position object.

Time:

5 minutes

Instructions:

# Create a Position custom object.

## Click Setup | Create | Objects.

## Click New Custom Object.

### Label: Position

### Plural Label: Positions

### Object Name:Position (This field auto-populates.)

### Record Name: Title

### Data Type: Text

### Allow Reports: (selected)

### Allow Activities: (selected)

### Track Field History: (selected)

### Allow Search: (selected)

### Deployment Status: Deployed

### Add Notes & Attachments related list to default page layout: (selected)

### Launch New Custom Tab Wizard after saving this custom object: (cleared)

## Click Save.

2-2: Create Custom Fields

Scenario:

With a new custom object created, Universal Containers has to create the fields it wants to use to track data regarding positions. There are varieties of different data types that will be required and certain fields will be dependent on others. You can use custom fields to set this up.

Goal:

Add custom fields to the Position and Candidate custom objects.

Tasks:

# Add custom fields to the Position and Candidate objects.

# Create dependent picklists.

# Add a field for the Social Security Number on the Candidate object.

Time:

20 minutes

Instructions:

# Add custom fields to the Position object.

## Click Setup | Create | Objects | Position.

## In the Custom Fields & Relationships related list, click New.

## Follow the steps to create the custom fields listed in the table below.

### Set each field to not visible, except for the Custom-Executive, Custom-HR, and System Administrator profiles, and click **Next.**

### Accept the default to add the field to the Position Layout and click Save.

### Click Save & New to create the next field in the list.

| Custom Field Type | Custom Field Label | Picklist Values/Notes | |
| --- | --- | --- | --- |
| Date/Time | Date Closed |  | |
| Date/Time | Date Opened |  | |
| Picklist | Status | New Open Closed | |
| Picklist | Sub-Status | Pending Approved Not Approved Filled Cancelled | |
| Picklist | Department | Engineering IT Finance Support Sales | |
| Picklist | Location | San Francisco, CA New York, NY Atlanta, GA London, United Kingdom | |
| Number | Duration | Length: 3,  Decimal Places: 0 | |
| Text Area | Job Description | Required: selected | |
| Text | Legacy Position Number | Length: 20, Unique: selected (case insensitive),  External ID: selected | |
| Picklist | Priority | Critical High Medium Low | |
| Text Area (Long) | Education |  | |
| Text Area (Long) | Responsibilities |  | |
| Date | Start Date |  | |
| Picklist | Type | Full Time Part Time Temp | |
| Picklist | Pay Grade | C-100 C-200 C-300 C-400 IT-100 IT-200 IT-300 IT-400 ACT-100 ACT-200 ACT-300 ACT-400 | ENG-100 ENG-200 ENG-300 ENG-400 S-100 S-200 S-300 S-400 |

# Create dependent picklists.

## In the Custom Fields & Relationships related list, click Field Dependencies.

## Click New.

### Controlling Field: Department

### Dependent Field: Pay Grade

## Click Continue.

## Edit the Field Dependencies based on the chart below.

Note: To create dependencies, highlight the values in each column that should be available when a user selects that value, and then click Include Values. You can use SHIFT and CTRL to select more than one value at a time.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sales | IT | Finance | Engineering | Support |
| C-100 | IT-100 | ACT-100 | ENG-100 | S-100 |
| C-200 | IT-200 | ACT-200 | ENG-200 | S-200 |
| C-300 | IT-300 | ACT-300 | ENG-300 | S-300 |
| C-400 | IT-400 | ACT-400 | ENG-400 | S-400 |

## Click Save.

## Click New.

### Controlling Field: Status

### Dependent Field: Sub-Status

## Click Continue.

## Edit the Field Dependencies as instructed in Step 2D.

### Open:Pending, Approved

### Closed: Not Approved, Filled, Cancelled

### New:(none selected)

## Click Include Values.

## Click Save.

## When you receive a pop-up message that says, “1 controlling values have no dependent values included. Save anyway?” click OK.

# Add a field for the Social Security Number on the Candidate object.

## Click Setup | Create | Objects | Candidate.

## Under the Custom Fields & Relationships related list, click New.

### Data Type: Text (Encrypted)

### Click Next.

### Field Label: Social Security Number

### Length: 11

### Field Name: Social\_Security\_Number (This field auto-populates.)

### Mask Type: Social Security Number

### Mask Character: X

### Click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Accept the default to add the field to the Candidate Layout, click Save.

2-3: Create Lookup Relationships

Scenario:

Universal Containers needs to be able to see which Job Applications are related to each Position. Additionally, the company needs to see which Hiring Manager is related to   
each Position.

Goal:

Create lookup relationships to connect objects to one another.

Tasks:

# Create a lookup relationship between Job Application and Position.

# Create a lookup relationship between Position and Hiring Manager.

Time:

5 minutes

Instructions:

# Create a lookup relationship between Job Application and Position.

## Click Setup | Create | Objects | Job Application.

## In the Custom Fields & Relationships related list, click New.

### Data Type:Lookup Relationship

### Click Next.

### Related to: Position

### Click Next.

### Field Label: Position

### Field Name: Position

## Click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## To accept the defaults to add the reference field to Page Layouts, click Next.

## To accept the defaults to add Custom Related Lists, click Save.

# Create a lookup relationship between Position and Hiring Manager.

## Click Setup | Create | Objects | Position.

## In the Custom Fields & Relationships related list, click New.

### Data Type:Lookup Relationship

### Click Next.

### Related to: User

### Click Next.

### Field Label: Hiring Manager

### Field Name: Hiring\_Manager (This field auto-populates.)

### Click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## To accept the defaults to add the reference field to Page Layouts, click Save.

2-4: Create Master-Detail Relationships

Scenario:

At Universal Containers (UC), every position should have one or more interviewers associated with it. An Interviewer record should always be associated with a Position record. If a given position is deleted, then the associated interviewer data should also be deleted.

To satisfy these requirements, UC needs to create a master-detail relationship between the Interviewer object and the Position object.

In addition, job application records and review records should have a similar relationship.

Goal:

Create master-detail relationships between two objects.

Tasks:

# Create a master-detail relationship between Interviewer and Position.

# Create a master-detail relationship between Review and Job Application.

Time:

5 minutes

Instructions:

# Create a master-detail relationship between Interviewer and Position.

## Click Setup | Create | Objects | Interviewer.

## In the Custom Fields & Relationships related list, click New.

### Data Type: Master-Detail Relationship

### Click Next.

### Related to: Position

### Click Next.

### Field Label:Position (This field auto-populates.)

### Field Name: Position (Click field to auto-populate.)

### Click Next.

## To accept the defaults for field-level security, click Next.

## To accept the defaults to add the field to the page layout, click Next.

## To accept the defaults to add the related list to the page layout, click Save.

# Create a master-detail relationship between Review and Job Application.

## Click Setup | Create | Objects | Review.

## In the Custom Fields & Relationships related list, click New.

### Data Type: Master-Detail Relationship

### Click Next.

### Related to: Job Application

### Click Next.

### Field Label: Job Application

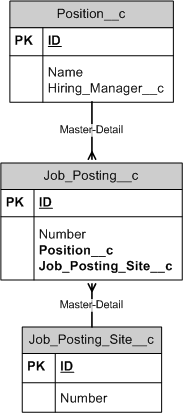
### Field Name: Job\_Application (This field auto-populates.)

### Click Next.

## To accept the defaults for field-level security, click Next.

## To accept the defaults to add the field to the page layout, click Next.

## To accept the defaults to add the related list to the page layout, click Save.

2-5: Create a Custom Junction Object

Scenario:

Universal Containers will have many positions advertised on various job posting sites. The company wants to be able to connect and manage those records within Salesforce.

Goal:

Create a Many-to-Many Relationship between Position and Job Posting Site.

Tasks:

# Create a new custom junction object.

# Create the master-detail relationships of Job Posting with Position and Job Posting Site.

Time:

5 minutes

Instructions:

# Create a new custom junction object.

## Click Setup | Create | Objects.

## Click New Custom Object.

### Label:Job Posting

### Plural Label: Job Postings

### Object Name: Job\_Posting (This field auto-populates.)

### Record Name:Job Posting Number

### Data Type:Auto Number

### Display Format: JOBPOST-{0000}

### Starting Number: 1

### Allow Reports:(selected)

### Allow Activities: (cleared)

### Track Field History: (selected)

### Allow Search: (selected)

### Deployment Status: Deployed

### Add Notes & Attachments related list to default page layout: (selected)

### Launch New Custom Tab Wizard after saving this custom object: (cleared)

## Click Save.

# Create the master-detail relationships of Job Posting with Job Posting Site and Position.

## In the Custom Fields & Relationships related list, click New.

### Data Type:Master-Detail Relationship

### Click Next.

### Related to: Job Posting Site

### Click Next.

### Field Label: Job Posting Site

### Field Name: Job\_Posting\_Site (This field auto-populates.)

### Click Next.

## To accept the defaults for field-level security, click Next.

## To accept the defaults to add reference field to Page Layouts, click Next.

## To accept the defaults to add the related list to the page layout, click Save & New.

### Data Type: Master-Detail Relationship

### Click Next.

### Related to: Position

### Click Next.

### Field Label: Position

### Field Name: Position (This field auto-populates.)

### Click Next.

## To accept the defaults for field-level security, click Next.

## To accept the defaults to add reference field to Page Layouts, click Next.

## To accept the defaults to add the related list to the page layout, click Save.

2-6: Create a Lookup Filter

Scenario:

At Universal Containers (UC), only users who are people managers should be selected as the hiring manager on a new position. UC needs to create a lookup filter that would prevent users from selecting a user who is not a hiring manager when creating a new position.

Goal:

Create a lookup filter.

Task:

Create a lookup filter.

Time:

5 minutes

Instructions:

# Create a lookup filter.

## Click Setup | Create | Objects | Position.

## Scroll down to the Custom Fields & Relationships section and click Hiring Manager.

## Click Edit.

## Under the Lookup Filter section, click the Show Filter Settings link.

### Field: Hiring Manager: People Manager?

### Operator: equals

### Value/Field: Value

### Value: True

### Filter Type: Required

### If it doesn’t, display this error message on save: In order to be a Hiring Manager, the user must be a people manager. Please ensure that the People Manager? Checkbox on the user record is checked.

### Active: (selected)

## Click Save.

3-1: Create a Custom Application

Scenario:

Now that Universal Containers has created some new objects and their associated tabs, the company would like to create a simplified way to access all the tabs with a single click.

Goal:

Create a custom recruiting application.

Task:

Create a custom recruiting application.

Time:

5 minutes

Instructions:

# Create a custom recruiting application.

## Click Setup | Create | Apps.

## Click New.

### App Label: Recruiting

### App Name: Recruiting (This field auto-populates.)

## Click Next.

## Click Insert an Image.

### File Location: Corporate Graphics

### Click the link for the Universal containers.GIF file.

## Click Next.

## Hold CTRL and select Documents, Dashboards, Reports, Offers, Candidates, Job Applications, Reviews, Interviewers, and Job Posting Sites from the Available Tabs list.

### Click Add to move selected items to the Selected Tabs list.

### Set the Default Landing tab to Home.

## Click Next.

## Make the app visible to the Custom-Executive, Custom-HR, and System Administrator profiles by checking the Visible checkbox on the correct profiles.

## Click Save.

3-2: Create Custom Tabs

Scenario:

Universal Containers wants to make sure that users will be able to easily access the new custom objects it has created. The company needs to create new custom tabs that will quickly guide people to this information.

Goal:

Create a custom tabs for the Positions and Job Postings objects.

Tasks:

# Create a custom tab for the Positions object.

# Create a custom tab for the Job Postings object.

# Reorder the tabs for your user account.

Time:

5 minutes

Instructions:

# Create a custom tab for the Positions object.

## Click Setup | Create | Tabs.

## In the Custom Object Tabs section, click New.

## Enter the following details:

### Object: Position

### Tab Style: Desk

### Splash Page Custom Link: (leave as --None--)

## Click Next.

## Add to Profiles.

### Select the Apply one tab visibility to all profiles: Default Off radio button.

### Select the Apply a different tab visibility for each profile radio button.

### Select Default On for the Custom-Executive, Custom-HR, and System Admin profiles.

### Click Next.

## Add to Custom Apps.

### Deselect all applications except the Recruiting application.

### Select the Append tab to users’ existing personal customizations checkbox.

### Click Save.

# Create a custom tab for the Job Postings object.

## In the Custom Object Tabs section, click New.

## Enter the following details:

### Object: Job Posting

### Tab Style: Building Block

### Splash Page Custom Link: (leave as --None--)

## Click Next.

## Add to Profiles.

### Select the Apply one tab visibility to all profiles: Default Off radio button.

### Select the Apply a different tab visibility for each profile radio button.

### Select Default On for the Custom-Executive, Custom-HR, and System Admin profiles.

### Click Next.

## Add to Custom Apps.

### Deselect all applications except the Recruiting application.

### Select the Append tab to users’ existing personal customizations checkbox.

### Click Save.

# Reorder the tabs for your user account.

## Select the Recruiting app from the Force.com App menu in the upper right-hand corner.

## Click All Tabs (+).

## Click Customize My Tabs.

## Make the Positions tab appear just to the right of the Home tab.

### Click Positions under Selected Tabs.

### Use the Up arrow to move it to just under the Home tab.

Note: Moving a tab up in the list moves it farther to the left in the Salesforce user interface. Moving a tab down in the list moves it farther to the right.

### Click Save.

3-3: Customize Page Layouts

Scenario:

Universal Containers wants to make sure that the newly created fields are displayed in a logical order on the page. The fields should be arranged according to the chart below.

Goal:

Create a page layout for the Position object.

|  |  |  |
| --- | --- | --- |
| **Section Name** | **Fields** | |
| Information | Title | Owner |
| Type | Priority |
| Department | Status |
| Location | Sub-Status |
| Pay Grade | Date Opened |
| Hiring Manager | Date Closed |
| Duration | Start Date |
| Legacy Position Number |  |
| Description | Job Description | |
| Education | |
| Responsibilities | |
| System Information | Created By | Last Modified By |

Tasks:

# Arrange existing fields in the Position Page Layout.

# Create a new section and add fields for Description on the Position Page Layout.

# Set the Status field to be required and add Position History to the Related Lists area.

# Test your changes.

Time:

10 minutes

Instructions:

# Arrange the fields within the sections as noted in the table.

## Click Setup | Create | Objects | Position.

## In the Page Layouts related list, click the Edit link next to the Position Layout.

## Arrange the fields in the Information section according to the chart.

|  |  |  |
| --- | --- | --- |
| **Section Name** | **Fields** | |
| Information | Title | Owner |
| Type | Priority |
| Department | Status |
| Location | Sub-Status |
| Pay Grade | Date Opened |
| Hiring Manager | Date Closed |
| Duration | Start Date |
| Legacy Position Number |  |

# Create a new section for Description.

## Drag Section from the palette to below the Information section.

### Section Name: Description

### Layout: 1-Column

### Click OK.

## Drag the Job Description, Education, and Responsibilities fields from the Information section into the Description section according to the chart.

|  |  |
| --- | --- |
| **Section Name** | **Fields** |
| Description | Job Description |
| Education |
| Responsibilities |

# Set the Status field to be required and add Position History to the Related Lists area.

## Double-click the Status field and select the Required checkbox.

## Click OK.

## Add Position History to the Related Lists area.

### On the palette, click Related Lists.

### Click and drag Position History to the bottom of the Related Lists area.

### Click Save.

## Click Yes to override the personal related list customizations.

# Test these changes by clicking the Positions tab in the Recruiting application and adding a new position.

3-4: Enable Chatter on the Positions Object

Scenario:

Universal Containers wants to make sure that users can easily see updates made to position records they follow.

Goal:

Enable Chatter on the Positions object.

Tasks:

# Enable Chatter Feed Tracking on the Positions object.

# Modify a position record to test feed tracking**.**

Time:

5 minutes

Instructions:

# Enable Chatter Feed Tracking on the Positions object.

## Click Setup | Customize | Chatter | Feed Tracking.

## Select the Position object.

## Click Enable Feed Tracking.

## Select Location, Owner, Status, Title, Sub-Status, and Type and click Save.

# Modify a position record to test feed tracking.

## Navigate to the position record you created in the previous exercise.

## Modify the Status field.

## Does the update show in the record's chatter feed?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3-5: Create an Object-Specific Quick Action

Scenario:

Universal Containers would like a simple and quick way to create a job application for a candidate from the candidate record. You need to create an object-specific quick action to accomplish this.

Goal:

Create an object-specific quick action.

Tasks:

# Create an object-specific quick action to create a job application from a candidate record.

# Customize the action’s layout.

# Set the predefined field value.

# Add the action to the Candidate page layout.

# Test the new action.

Time:

10 minutes

Instructions:

# Create an object-specific quick action to create a job application from a candidate record.

## Select Setup | Create | Objects | Candidate.

## Click New Action from the Buttons, Links, and Actions list.

## Select Create a Record as the action type.

## Select Job Application as the target object.

## Enter New Job App as the label for the action. This is the name users see for the action in the publisher menu. The Name field auto-populates.

## Enter Action to create a Job Application from a Candidate record as the Description. This description is not visible to users.

## Click Save.

# Customize the action's page layout.

## Add the Position field to the layout.

## Click Save.

# Set the predefined field value.

## Click New in the Predefined Field Values list on the action detail page.

## Select the Stage field from the Field Name picklist.

## Select New from the A specific value picklist.

## Click Save.

# Add the action to the Candidate page layout.

## Select Setup | Create | Objects | Candidate.

## Click Edit on the Candidate Layout.

## Under Quick Actions in the Publisher, click the override the global publisher layout link.

## Select Quick Actions from the Page Layout editor.

## Drag the New Job App action to the Quick Actions in the Publisher section of the page layout. Place it after Post and File.

## Click Save.

# Test the new action.

## Navigate to the Candidates tab and create a new candidate record.

## Is the New Job App action listed on the newly created candidate record?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Click the New Job App action.

## Select an available position and click **Create**.

## Navigate to the Job Applications tab and click GO!

## Is the job application you created listed?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3-6: Create a Global Quick Action and a Global Layout for HR

Scenario:

Universal Containers would like a simple way for Human Resources and Recruiters to add new candidates. You need to create a global quick action and a separate global layout to accomplish this.

Goal:

Create a global quick action to create a candidate record and make it only available to Human Resources.

Tasks:

# Create a global quick action to create a new candidate record.

# Create a Human Resources specific global layout.

# Add the Candidate action to the HR global layout.

# Assign the HR global layout to the Custom-HR profile.

# Test the new action.

Time:

10 minutes

Instructions:

# Create a global quick action to create a new candidate record.

## Select Setup | Create | Global Actions | Actions.

## Click New Action.

## Select Create a Record as the action type.

## Select Candidate as the target object.

## Enter New Candidate as the label for the action. This is the name users see for the action in the publisher menu. The Name field auto-populates.

## Enter Action to create a new candidate record as the Description. This description is not visible to users.

## Click Save.

## Add these fields to the Action layout:

|  |  |
| --- | --- |
| **Left Column** | **Right Column** |
| * First Name * Phone * Education * Currently Employed? | * Last Name * Email * Years of Experience * Current Employer |

## Click Save.

# Create a Human Resources specific global layout.

## Select Setup | Create | Global Actions | Publisher Layouts.

## Click New.

## Select Global Layout as the Existing Publisher Layout and type HR Layout as the Publisher Layout Name.

## Click Save.

# Add the Candidate action to the HR global layout.

## Drag the New Candidate action from the palette and move it to the right of the File action in the Quick Actions in the Publisher layout.

## Drag unwanted actions back to the palette, so that the remaining actions are listed as:

Post, File, New Candidate, New Task, New Contact, Link, Poll

## Click Save.

# Assign the HR global action page layout to the Custom-HR profile.

## Click Publisher Layout Assignment.

## Click Edit Assignment.

## Select the Custom-HR profile.

## Select HR Layout from the Publisher Layout to Use picklist.

## Click Save.

# Test the new action.

## Select Setup | Manage Users | Users.

## Click Login next to Phil Katz to log in as him.

## Navigate to the Home tab.

## Is the New Candidate action listed?

## Click New Candidate.

## Enter this information:

i. First Name: Test

ii. Last Name: Candidate

iii. Phone: 555-555-1234

iv. Email: test@uctest.com

v. Education: BA/BS

vi. Years of Experience: 3

vii. Currently Employed: Yes (checked)

viii. Current Employer: Test

## Click Create.

## Click the Candidates tab, select All from the View picklist, and click Go!

## Verify that the new candidate exists.

## Select Phil Katz | Logout to log out as Phil Katz.

4-1: Create Formula Fields

Scenario:

The VP of HR at Universal Containers is interested in tracking the overall score of each candidate who has been interviewed, as well as the number of days that a position stays open. You need to create formula fields to accomplish these tasks.

Goals:

Create a Review formula field to calculate overall score. Create a Position Formula that tracks the number of days a position has been open.

Tasks:

# Create a custom formula field that calculates the overall score from the Review object.

# Create new records to test your formula.

# Create a new custom formula field that calculates the Days Opened on the Position object.

Time:

10 minutes

Instructions:

# Create a custom formula field that calculates the overall score from the Review object.

## Click Setup | Create | Objects | Review.

## In the Custom Fields & Relationships related list, click New.

## In the Data Type field, click Formula.

## Click Next.

## Enter the following field details.

### Field Label: Overall Score

### Field Name:Overall\_Score (This field auto-populates.)

### Formula Return Type: Number

### Decimal Places: 2

## Click Next.

## Add the formula.

### Overall Score (Number) =: ( Cultural\_Fit\_\_c + Experience\_\_c + Leadership\_Skills\_\_c + IF( Recommend\_for\_Hire\_\_c , 5, 1) ) / 4

### Click Check Syntax to verify the syntax.

### Click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Click Save to accept the defaults and add the field to the Page Layout.

# Create new records to test your formula.

## Create a new candidate record.

## Create a new interviewer record, associating it with the position you created in an earlier exercise.

## Create a new job application record, specifying the candidate you created in step 2A.

## Create a new review record.

## Specify the interviewer you created in step 2B.

## Specify the job application you created in step 2C.

## Fill out the fields for scores in Cultural Fit, Experience, and Leadership Skills (acceptable values are 1-5). Check the Recommend for Hire field.

## After saving the review record, verify that your formula field was correctly updated on the review.

# Create a new custom formula field that calculates the Days Opened on the Position object.

## Click Setup | Create| Objects | Position.

## In the Custom Fields & Relationships related list, click New.

## In the Data Type field, select Formula.

## Click Next.

## Enter the following information:

### Field Label: Days Opened

### Field Name: Days\_Opened (This field auto-populates.)

### Formula Return Type: Number

### Decimal Places: 0

## Click Next.

## Add the formula.

### . Days Opened (Number) =: IF( ISPICKVAL( Status\_\_c , "Open") , NOW() - Date\_Opened\_\_c , Date\_Closed\_\_c - Date\_Opened\_\_c )

### ii. Click Check Syntax to verify the syntax.

### iii. After verifying that there are no errors, click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Click **Save** to accept the defaults to add the field to the page layout.

## Click on the position record created earlier to verify that the number of days open is being calculated.

4-2: Create Cross-Object Formulas

Scenario:

Universal Containers users would like to see the candidate full name and position title on an offer.

Goal:

Use cross-object formula fields to make fields from related objects visible on an object.

Tasks:

# Create a formula field to pull the candidate full name to display on the offer.

# Create a formula field to pull the position title to display on the offer.

Time:

5 minutes

Instructions:

# Create a formula field to pull the candidate full name to display on the offer.

## Click Setup | Create | Objects | Offer.

## In the Custom Fields & Relationships section, click New.

### In the Data Type field, select Formula.

### Click Next.

## Enter the following field details:

### Field Label: Candidate Name

### Field Name: Candidate\_Name (This field auto-populates.)

### Formula Return Type: Text

## Click Next.

## Add the formula.

### Candidate Name (Text) =: Job\_Application\_\_r.Candidate\_\_r.First\_Name\_\_c &" "& Job\_Application\_\_r.Candidate\_\_r.Last\_Name\_\_c

### Click Check Syntax to verify the syntax.

### After verifying that there are no errors, click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Click Save & New to accept the defaults on the Add to Layout page.

# Create a formula field to pull the position title to display on the offer.

## In the Data Type field, enter Formula.

## Click Next.

## Enter the following field details:

### Field Label: Position Title

### Field Name:Position\_Title (This field auto-populates.)

### Formula Return Type: Text

## Click Next.

## Add the formula.

### Position Title (Text) =: Job\_Application\_\_r.Position\_\_r.Name Note: The label of the Name field is Title.

### Click Check Syntax to verify the syntax.

### After verifying that there are no errors, click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Click Save to accept the defaults on the Add to Layout page.

## Create a new offer record to view the new fields.

4-3: Create Roll-Up Summary Fields

Scenario:

To ensure the company hires stand-out candidates, the HR Director of Universal Containers wants to see a list of the all of the combined review scores on each Job Application.

Goal:

Calculate the average of all review scores on a job application.

Tasks:

# Create a roll-up summary field for Total Reviews on the Job Application object.

# Create a roll-up summary field for Review Scores on the Job Application object.

# Create a formula field that calculates the Average Review Score for a job application.

Time:

10 minutes

Instructions:

# Create a roll-up summary field for Total Reviews on the Job Application object.

## Click Setup | Create | Objects | Job Application.

## In the Custom Fields & Relationships section, click New.

### Data Type: Roll-Up Summary

### Click Next.

### Field Label: Total Reviews

### Field Name: Total\_Reviews (This field auto-populates.)

### Click Next.

### Summarized Object: Reviews

### Select Roll-Up Type: Count

### Filter Criteria: All records should be included in the calculation

## Click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Click Save & New to accept the defaults and add to page layouts.

# Create a roll-up summary field for Review Scores on the Job Application object.

## Continue from previous task.

### Data Type: Roll-Up Summary

### Click Next.

### Field Label: Total Review Score

### Field Name: Total\_Review\_Score (This field auto-populates.)

### Click Next.

### Summarized Object: Reviews

### Roll-Up Type: Sum

### Field to Aggregate: Overall Score

### Filter Criteria: All records should be included in the calculation

## Click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Click Save & New to accept the defaults to add to page layouts.

# Create a formula field that calculates the Average Review Score for a job application.

## Enter the following details of the new formula field:

### Data Type: Formula

### Click **Next**.

### Field Label: Average Review Score

### Field Name: Average\_Review\_Score (This field auto-populates.)

### Formula Return Type: Number

### Decimal Places: 2

## Click Next.

## Add the formula:

### . Average Review Score (Number) =: IF (Total\_Reviews\_\_c<>0, Total\_Review\_Score\_\_c / Total\_Reviews\_\_c, 0)

### Click Check Syntax to verify the syntax.

### After verifying that there are no errors, click Next.

## Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

## Click Save to accept the defaults and add the field to the page layout.

7-1: Create Custom Profiles

Scenario:

At Universal Containers (UC), recruiters need to be able to create, view, and modify any position, candidate, job application, or review that is in the system.

To comply with state and federal public records laws, all recruitment-related information must be saved for several years. Consequently, recruiters should NOT have the ability to delete any records in the Recruiting Application.

Goal:

Create a new profile for recruiters.

Tasks:

1. Create a custom recruiter profile.
2. Define the recruiter profile to accomplish the business requirements.
3. Assign users to this new profile.
4. Modify the existing profiles for the new objects.

Time:

15 minutes

Instructions:

# Create a custom recruiter profile.

## Click Setup | Manage Users | Profiles.

## Click New Profile.

### Existing Profile: Custom-HR

### Profile Name: Custom–Recruiter

## Click Save. (Click "No Thanks" on the popup box if it appears.)

# Define the recruiter profile to accomplish the business requirements.

## Remove the ability to Read (as well as Create, Edit, and Delete) all standard objects except Documents.

### Select Object Settings from the Profile Overview list.

### Click Accounts.

### Click Edit.

### Select Tab Hidden as the Tab Setting.

### Uncheck Read from the Object Permissions table.

### Click Save.

### Repeat these steps for these objects:

Contacts

Ideas

Leads

Opportunities

Price Books

Products

Solutions

## Set the custom object permissions to Read, Create, and Edit access.

### Select Positions from the Object picklist.

### Click Edit.

### Check Read, Create, and Edit from the Object Permissions table.

### Click Save.

### Select Candidates from the Object picklist.

### Click Edit.

### Uncheck Delete from the Object Permissions table.

### Click Save.

### Set the permissions for the other custom objects objects by choosing the objects from the picklist, then clicking Edit, and assigning the following permissions:

| **Object** | **Read** | **Create** | **Edit** | **Delete** |
| --- | --- | --- | --- | --- |
| Interviewers |  |  |  |  |
| Job Applications |  |  |  |  |
| Job Postings |  |  |  |  |
| Job Posting Sites |  |  |  |  |
| Offers |  |  |  |  |
| Reviews |  |  |  |  |

# Assign users to this new profile.

## Click Setup | Manage Users | Users.

## Click the Edit link next to Mario Ruiz. (Make sure All Users is selected as the list view.)

## Select Custom – Recruiter from the Profile picklist.

## Click Save.

# Modify the existing profiles for the Position object.

## Set the Position object for the Custom-Executive, and Custom-HR access:

|  |  |
| --- | --- |
| Profile | Object Access |
| Custom-Executive | Create, Read, Edit, Delete, and View All |
| Custom-HR | Create, Read, Edit, Delete |

7-2: Create Permission Sets

Scenario:

Hiring managers and interviewers have different needs and different levels of access to the information that will be stored in the Recruiting Application.

In addition, the access of hiring managers and interviewers to other portions of the organization needs to be maintained.

Goal:

Create permission sets for the hiring manager and interviewers.

Tasks:

# Create a new permission set for hiring managers.

# Create a new permission set for interviewers.

# Assign users to the new permission sets.

Time:

10 minutes

Instructions:

# Create a new permission set for hiring managers.

## Click Setup | Manage Users | Permission Sets.

## Click New.

## Type Hiring Managers as the Label, and click Save. (The other settings are correct as is. By leaving the license setting to None, this permission set can be used for any user regardless of their specific user license.)

## Click Assigned Apps.

## Click Edit.

## Select Recruiting from the Available Apps list and click Add.

## Click Save.

## Click Permission Set Overview and select Object Settings from the Overview list

## Click Candidates from the Object Settings list.

## Click Edit.

## Select Visible from the Tab Settings list.

## Select Read from the Object Permissions list and click Save.

## Set the permissions for the Interviewers, Job Applications, Job Postings, Job Posting Sites, Offers, Positions, and Reviews objects by choosing the objects from the picklist, then clicking Edit, and selecting the following:

| **Object** | **Tab Settings** | **Read** | **Create** | **Edit** | **Delete** |
| --- | --- | --- | --- | --- | --- |
| Interviewers | Visible |  |  |  |  |
| Job Applications | Visible |  |  |  |  |
| Job Postings | Visible |  |  |  |  |
| Job Posting Sites | Visible |  |  |  |  |
| Offers | Visible |  |  |  |  |
| Positions | Visible |  |  |  |  |
| Reviews | Visible |  |  |  |  |

# Create a new permission set for interviewers.

## Click Setup | Manage Users | Permission Sets.

## Click New.

## Type Interviewers as the Label and click Save. All other settings are correct as is.

## Click Assigned Apps.

## Click Edit.

## Select Recruiting from the Available Apps list and click Add.

## Click Save.

## Click Object Settings.

## Click Candidates from the Object Settings list.

## Click Edit.

## Select Visible from the Tab Settings list.

## Check Read from the Object Permissions list and click Save.

## Repeat these steps for the Interviewers, Job Applications, Job Postings, Job Posting Sites, Offers, Positions, and Reviews objects, setting the permissions to those listed below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Object** | **Tab Settings** | **Read** | **Create** | **Edit** | **Delete** |
| Interviewers | Visible |  |  |  |  |
| Job Applications | Visible |  |  |  |  |
| Job Postings | Visible |  |  |  |  |
| Job Posting Sites | Visible |  |  |  |  |
| Offers | Visible |  |  |  |  |
| Positions | Visible |  |  |  |  |
| Reviews | Visible |  |  |  |  |

# Assign users to the new permission sets.

## Click Setup | Manage Users | Permission Sets.

## Select the Hiring Managers permission set.

## Click Manage Assignments.

## Click Add Assignments.

## Select Clark Kentman, Frank Linstrom, Amy Lojack, and Andy Macrola and click Assign.

## Click Done.

## Click Setup | Manage Users | Permission Sets.

## Select the Interviewers permission set.

## Click Manage Assignments.

## Click Add Assignments.

## Select Craig Kingman, Melissa Lee, Harry Potterham, Flash Stevenson, and Tom Zales and click Assign.

## Click Done.

7-3: Change Access Using Field-Level Security

Scenario:

In an effort to secure personal information on candidates, Universal Containers wants to ensure that recruiters cannot see or edit the Social Security Number of a candidate.

Goal:

Use field-level security to remove access to Social Security Numbers on candidate records.

Tasks:

Modify the field-level security for candidates to hide the Social Security Number field for recruiters.

Time:

5 minutes

Instructions:

# Make the Social Security Number field hidden for recruiters.

## Click Setup | Manage Users | Profiles | Custom – Recruiter.

## Click Object Settings from the Apps section.

## Click Candidates.

## Click Edit.

## Clear Read on the Social Security Number field in the Field Permissions section.

## Click Save.

## Log in as Mario Ruiz to test that the Social Security Number field is no longer visible.

### Click Setup | Manage Users | Users.

### Click the Login link next to Mario Ruiz.

### Click on a candidate and then verify that the Social Security Number field is not visible.

## Log out.

7-4: Create Record Types

Scenario:

Technical hiring managers can create new positions, but they should only create positions in the IT and Engineering departments. The Position object has a department field that contains a picklist of values. When creating a technical position, hiring managers should have access only to the IT and Engineering values. When creating a non-technical position, hiring managers should have access to the other department values. Recruiters should be able to see and use all department values.

Goal:

Create a custom record type that limits the picklist choices available to hiring managers.

Tasks:

# Create a technical position record type.

# Repeat the process, creating a non-technical position record type.

# Add the Record Type field to the Position Layout.

Time:

10 minutes

Instructions:

# Create a new technical position record type.

## Click Setup | Create | Objects | Position.

## In the Record Types related list, click New.

## Enter the following details:

### Existing Record Type: Master

### Record Type Label: Technical Position

### Record Type Name: Technical\_Position (This field auto-populates.)

### Description: This record type should be used for Technical Positions only.

### Active: (selected)

### Enable for Profile: Custom – Executive, Custom – HR, Custom – Recruiter and System Administrator only.

## Click Next.

## Select the Apply one layout to all profiles radio button.

## Click Save.

## Under Picklists Available for Editing, click the Edit link next to Department.

## Remove all but IT and Engineering from the Selected Values.

## Click Save.

## Click the Back to Custom Object: Position link near the top of the page.

# Repeat the process, creating a Non-Technical Position record type, making it accessible to these profiles:

Custom – Executive

Custom – HR

Custom – Recruiter

System Administrator

# Modify the Department picklist to remove the IT and Engineering values. Make sure to test your work.

# Add the Record Type field to the Position Layout.

## Click Setup | Create | Objects | Position.

## In the Page Layouts related list, click the Edit link next to the Position Layout.

## Drag the Record Type field into the Information section below the Start Date field.

## Click Save.

7-5: Create Page Layouts

Scenario:

When creating new positions, technical hiring managers need to specify technical criteria desired for their candidates, such as programming language or operating system. Recruiters need to be able to create all kinds of positions.

Goal:

Create a new page layout to reflect differences between technical and non-technical positions.

Tasks:

# Create fields for Operating System and Programming Language.

# Create a new page layout for technical positions. On the new page layout, show the Operating System and Programming Language fields in a separate section.

Time:

15 minutes

Instructions:

# Create new fields for Operating System and Programming Language.

## Click Setup | Create | Objects | Position.

## Under the Custom Fields & Relationships section, click New.

### Data Type: Picklist

### Click Next.

### Field Label: Operating Systems

### Picklist values: Windows, Unix, Mac (on 3 separate lines)

### Field Name: Operating\_Systems (This field auto-populates.)

### Click Next.

### Make the field visible to these profiles:

Custom – Executive

Custom – HR

Custom – Recruiter

System Administrator profiles

### Click Next.

### Uncheck all the page layouts and click Save and New to complete the field.

## Enter the data for the second new field.

### Field Type: Picklist

### Click Next.

### Field Label: Programming Languages

### Picklist values: COBOL, FORTRAN, .Net, Java, PHP, Perl, Python

### Field Name: Programming\_Languages (This field auto-populates.)

### Click Next.

### Make the field visible to these profiles:

Custom – Executive

Custom – HR

Custom – Recruiter

System Administrator profiles

### Click Next.

### Uncheck all the page layouts and click Save to complete the field.

# Create a new page layout for technical positions. On the new page layout, show the Operating System and Programming Language fields in a separate section.

## Click Setup | Create | Objects | Position.

## In the Page Layouts related list, click New.

### Existing Page Layout: Position Layout

### Page Layout Name: Technical Position Layout

## Click Save.

## Drag a new section from the palette to below the Description section.

### Name: Technical Skills

### Layout: 1-Column

## Click OK.

## Drag the Operating Systems and Programming Languages fields into the new section from the Information section.

## If you have not already done so, drag the Record Type field into the Information section below the Start Date field.

## Click Save.

## Edit the page layout assignments for the Position object so Custom – Recruiter and System Administrator profiles always use the Technical Position page layout, while all other profiles will use the appropriate layout for the position.

### In the Page Layouts related list, click Page Layout Assignment.

### Click Edit Assignment.

### Click the cell under the Non-Technical Position Record Type column for the Custom – Recruiter and System Administrator profiles and set Page Layout to Use: Technical Position Layout. (Use the CTRL key to select multiple items.)

### Click the Technical Position column heading and again set Page Layout to Use: Technical Position Layout to ensure that all users see the Technical Position Layout when viewing the Technical Record Type.

### Click Save.

## Log in as Mario Ruiz and verify your changes by creating a new position. Mario should see the Operating Systems and Programming Language fields regardless of whether he creates a technical or non-technical position.

7-6: Create Page Layouts and Record Types (Optional)

Scenario:

Universal Containers would like to implement an approval process for each position. This process will route positions to the approvers specified on the position. Once the position has been approved, the approvers no longer need to be listed on the position.

Goal:

Create page layouts and record types for approved positions.

Tasks:

# Create new page layout for approved positions.

# Create new record types for approved positions.

Time:

10 minutes

Instructions:

# Create new page layout for approved positions.

## Click Setup | Create | Objects | Position.

## Under the Page Layout related list, click Edit next to Position Layout.

## In the arrow under Save, click Save As…

## Page Layout Name: Approved Position Layout

## Click Save.

## Navigate back to Setup | Create | Objects | Position.

# Create new record type for approved positions.

## Scroll down to the Record Types related list and click New.

### Existing Record Type: Technical Position

### Record Type Label: Approved Position

### Description: This record type will be used for positions, once they have been approved.

### Active: (selected)

### Do not enable for any profile.

## Click Next.

## Select Apply one layout to all profiles: Approved Position Layout.

## Click Save.

## Click the Back to Custom Object: Position link.

## Under the Record Types related list, click Page Layout Assignment.

## Verify that the Approved Position layout is assigned to the Approved Position record type.

8-1: Create Custom Object Queues

Scenario:

Universal Containers wants to use the queue feature to manage the pool of recruiters working with open positions and candidates.

Goal:

Create a custom queue for recruiters to hold position and candidate records.

Task:

Create a queue for positions and candidates.

Time:

5 minutes

Instructions

# Create a queue for positions and candidates.

## Click Setup | Manage Users | Queues.

## Click New.

## Enter the queue information.

### Label: Recruiter Queue

### Queue Name: Recruiter\_Queue (This field auto-populates.)

### Queue Email: (leave blank)

### Send Email to Members: (selected)

### Add the Position object and Candidate object to the Selected Objects box.

### Assign Mario Ruiz, Megan Smith, and Phil Katz as Selected Members of the queue.

## Click Save.

8-2: Set Organization-Wide Defaults

Scenario:

The accessibility for Position, Candidate, Job Application, and Review records should be as follows:

* All users are allowed to view Position data. There will never be a position that some user cannot see. Only some users are allowed to update Position data.
* Individuals in Human Resources should be able to read, create, and edit the Candidate, Job Application, or Review records. This includes the VP and any subordinates.
* Interviewers should be permitted to see only those Candidate and Job Application records to which they have been assigned as interviewers. Additionally, they should only be permitted to view, create, and modify their own Review records.
* Hiring managers should only be able to see a Candidate, Job Application, or Review record if it is related to a Position for which they are responsible.
* Other users should not have access to Candidate, Job Application, and Review records.

Goal:

Use organization-wide defaults (OWD) to establish appropriate permissions for Positions, Candidates, Job Applications, and Reviews.

Tasks:

# Update organization-wide defaults for Positions, Candidates, Job Applications, and Reviews.

# Test your changes.

Time:

5 minutes

Instructions:

# Change the organization-wide default setting for Positions.

## Click Setup | Security Controls | Sharing Settings.

## Click Edit to edit the organization-wide defaults.

## Set default internal access on the Position object to Public Read Only.

## Set default internal access on the Candidate object to Private.

## Set default internal access on the Job Application object to Private.

## Click Save.

# Log in as Craig Kingman to test.

## Click Setup | Manage Users | Users.

## Click the Login link next to Craig Kingman.

## Verify that you cannot view any job application or candidate records.

## Verify that you can view position records.

## Log out.

8-3: Implement a Role Hierarchy

Scenario:

Universal Containers has added a new role called Product Manager and would like their hierarchy to reflect the addition.

Goal:

Complete the role hierarchy by adding a role for product managers.

Tasks:

# Add a new Product Manager role.

# Assign users to the new role.

# Log in as a Product Manager and as the Director of Product Management to test the changes to the hierarchy.

Time:

5 minutes

Instructions:

# Add a new Product Manager role.

## Click Setup | Manage Users | Roles.

## If you see the splash page, click Set Up Roles.

## Click the Expand All link.

## Under the Director Product Management node, click the Add Role link.

### Label: Product Manager

### Role Name: Product\_Manager (This field auto-populates.)

## Click Save.

# Assign users to the new role.

## Click Assign Users to Role.

## Change the Available Users view to All Users.

## Move Amy Lojack and Andy Macrola to Selected Users for Product Manager.

## Click Save.

# Log in as a Product Manager and as the Director of Product Management to test the changes to the hierarchy.

## Click Setup | Manage Users | Users.

## Click the Login link next to Amy Lojack.

## Create a new Position.

## Click Logout.

## Click the Login link next to Frank Linstrom. Verify that you are able to edit the position that you just created as Amy.

## Log out and log in as Megan Smith. Verify that you cannot edit the position created by Amy.

8-4: Create a Public Group

Scenario:

Universal Containers would like to create a public group that includes all interviewers so that they can easily share records and documents with them.

Goal:

Create a new public group including all interviewers.

Task:

Create a public group called All Interviewers.

Time:

5 minutes

Instructions:

# Create a public group called All Interviewers.

## Click Setup | Manage Users | Public Groups.

## Click New.

### Label: All Interviewers

### Group Name: All\_Interviewers (This field auto-populates.)

### Search: Users

### Selected Members: Craig Kingman, Melissa Lee, Harry Potterham, Flash Stevenson, Tom Zales

## Click Save.

8-5: Implement Manual Sharing

Scenario:

Establish manual sharing at Universal Containers to accomplish the remaining access levels:

* Grant hiring managers read and update access on positions and candidates where they are the hiring manager.
* Grant interviewers read access on job application and candidate records for people they are interviewing.

Goal:

Add manual sharing for various users to grant access on records where they are invested in the information.

Task:

Establish manual sharing for an existing position.

Time:

5 minutes

Instructions:

# Establish manual sharing for an existing position. (**Note**: This must be accomplished on a record-by-record basis by the owner, the manager of the owner, or the system administrator of a record.)

## Click the Positions tab.

## Select a position from the Recent Positions list. (If you do not see any positions listed, select All from the View: picklist and click Go! This will bring up a list of all positions; click on any of them.)

## Note the Hiring Manager listed on the position.

## Click Sharing.

## Click Add.

### Search: Users

### Add the hiring manager to the Share With box.

### Access Level: Read/Write

## Click Save.

## **Note**: This would have to be repeated for each specific object record to be shared, as required.

## Log in as the hiring manager to verify that you can edit the position that you shared.

### Click Setup | Manage Users | Users.

### Click the Login link next to the hiring manager.

### Search for the position that you shared.

8-6: Implement Sharing Rules

Scenario:

Recruiters and their management should be able to read and update every position, candidate, job application, and review record in the application.

Goal:

Allow recruiters, recruiting managers, and the VP of Human Resources to view all elements of the recruiting process.

Task:

Create sharing rules to give recruiters the access they need to positions, candidates, job applications, and reviews.

Time:

10 minutes

Instructions:

# Create sharing rules to give recruiters the access they need to positions, candidates, job applications, and reviews.

## Click Setup | Security Controls | Sharing Settings.

## In the Position Sharing Rules related list, click New.

### Label: VP Human Resources Rule

### Rule Name: VP\_Human\_Resources\_Rule (This field auto-populates.)

### Rule Type: Based on Record Owner

### Position: owned by members of: Public Groups | All Internal Users

### Share with: Roles and Subordinates | VP Human Resources

### Access Level: Read/Write

## Click Save.

## Click OK to the dialog box that appears warning that “This operation could take significant time. Are you sure?”

## Repeat for the Candidate and Job Application objects.

## Log in as Megan Smith, the VP of Human Resources, to verify that you have access to all positions, candidates, and job applications.

## Click Setup | Manage Users | Users.

## Click the Login link next to Megan Smith.

## Click the Positions tab, select All from the View picklist, and click Go!

## Verify that Megan can edit all of the positions that you have created thus far.

8-7: Create Apex Sharing Reasons (Optional)

Scenario:

Universal Containers wants to add new Apex sharing reasons to show the reasons why a record may be shared.

Goal:

Define the reasons that a record may be shared.

Tasks:

# Create new Apex sharing reasons.

# Add sharing on a position record to see the new sharing reasons.

Time:

5 minutes

Instructions:

# Create a new Apex sharing reason.

## Click Setup | Create | Objects | Position.

## On the Apex Sharing Reasons related list, click New.

### Reason Label: Approved Position

### Reason Name: Approved\_Position (This field auto-populates.)

## Click Save & New.

### Reason Label: Approver

### Reason Name: Approver

## Click Save & New.

### Reason Label: Hiring Manager

### Reason Name: Hiring\_Manager

## Click Save.

# Add sharing on a position record to see the new sharing reasons.

## Click the Positions Tab.

## Select any position.

## Click Sharing.

## Click Add.

## Take note of the new reasons in the Reason picklist.

9-1: Establish Data Access

Scenario:

Universal Containers has determined that new and open positions should be visible to all users, but a closed position should only be visible to the recruiter, the related hiring manager, and the managers above both. Only the recruiter and his or her manager should be able to add sharing to a position.

Goal:

Create a process by which position access is determined by the status of a position.

Tasks:

# Set the organization-wide default for positions to Private.

# Create a criteria-based sharing rule that gives the entire organization access to new and open positions.

Time:

20 minutes

Instructions:

# Set the organization-wide default for positions to Private.

## Click Setup | Security Controls | Sharing Settings.

## Click Edit in the Organization-Wide Defaults.

## Select Private for the Position object.

## Click Save.

# Create a criteria-based sharing rule that gives the entire organization access to open positions.

## Click Setup | Security Controls | Sharing Settings.

## Scroll down to the Position Sharing Rules section and click New.

### Label: All View New and Open Positions

### Rule Name: All\_View\_New\_and\_Open\_Positions (This field auto-populates.)

### Rule Type: Based on criteria

### Criteria: Status | equals | New, Open

### Share with: Public Group | All Internal Users

### Access Level: Read Only

## Click Save.

9-2: Restrict Data Access

Scenario:

Universal Containers has decided to track salary information for any position and that this information should only be visible to the recruiter for that position, the hiring manager for that position, and the hiring manager’s boss. The recruiter should control the salary data.

Goal:

Create an object to track salary for any position. This should only be visible to the recruiter, the hiring manager, and the hiring manager’s boss.

Tasks:

# Create a new Salary object.

# Add custom fields to the Salary object.

# Give hiring managers and recruiters access to the new Salary Object.

# Set organization-wide defaults for Salaries.

Time:

20 minutes

Instructions:

# Create a new Salary object.

## Click Setup | Create | Objects.

## Click New Custom Object.

### Label: Salary

### Plural Label: Salaries

### Object Name: Salary (This field auto-populates.)

### Record Name: Salary Number

### Data Type: Auto Number

### Display Format: PAY-{0000}

### Starting Number: 1

### Allow Reports: (selected)

### Allow Activities: (selected)

### Track Field History: (selected)

### Allow Search: (selected)

### Deployment Status: Deployed

### Add Notes and Attachments related list to default page layout: (cleared)

### Launch New Custom Tab Wizard after saving this custom object: (cleared)

## Click Save.

# Add custom fields to the Salary object.

## Under the Custom Fields & Relationships related list, click New.

## Click the Currency radio button under Data Type.

## Click Next.

### Field Label: Actual Pay

### Length: 8

### Decimal Places: 0

### Field Name: Actual\_Pay (This field auto-populates.)

## Click Next.

## Make the field visible to these profiles:

Custom – Executive

Custom – HR

Custom – Recruiter

System Administrator profiles

## Click Next.

## Click Save & New.

## Click the Currency radio button under Data Type.

## Click Next.

### Field Label: Max Pay

### Length: 8

### Decimal Places: 0

### Field Name: Max\_Pay

## Click Next.

## Make the field visible to these profiles:

Custom – Executive

Custom – HR

Custom – Recruiter

System Administrator profiles

## Click Next.

## Click Save & New.

## Click the Currency radio button under Data Type.

## Click Next.

### Field Label: Min Pay

### Length: 8

### Decimal Places: 0

### Field Name: Min\_Pay

## Click Next.

## Make the field visible to these profiles:

Custom – Executive

Custom – HR

Custom – Recruiter

System Administrator profiles

## Click Next.

## Click Save & New.

## Click the Lookup Relationship radio button under Data Type.

## Click Next.

## Select Position from the Related To picklist.

## Click Next.

### Field Label: Position

### Field Name: Position

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter, and System Administrator profiles and click Next.

## Click Next to add the field to the Salary Layout.

## Click Save to add the Salary Related List to all three Position Layouts.

# Give hiring managers and recruiters access to the new Salary Object.

## Click Manage Users | Profiles, then click the Custom – Recruiter link.

## Click Object Settings.

## Click on the Salaries object.

## Click Edit.

## Select Read, Edit, and Create in the Object Permissions table.

## Click Save.

## Repeat this for the Custom – Executive and Custom – HR profiles to give them Read, Edit, and Create access to the Salaries object.

## Click Manage Users | Permission Sets, then click on the Hiring Managers link.

## Click Object Settings.

## Click on the Salaries object.

## Click Edit.

## Select Read in the Object Permissions table.

## Click Save.

# Set organization-wide defaults for Salaries.

## Click Setup | Security Controls | Sharing Settings.

## Under Organization-Wide Defaults, click Edit.

### Salary: Private

### Grant Access Using Hierarchies: (cleared)

## Click Save.

10-1: Create Formula Fields to Display Images

Scenario:

Universal Containers would like to add a visual indicator of the Rating on a job application. Job Applications with a high rating should display a green light; a medium rating should display a yellow light; and a low rating should display a red light. Universal Containers can take advantage of a number of sample images available on the Salesforce servers.

Goal:

Build a formula field that displays an image.

Tasks:

# Create a new formula field to show a green, yellow, or red light on a job application record, depending on the Average Review Score.

# Test the customization by looking at a job application record to see the new Rating field.

# Add the new Rating field to the Job Application related list on the Position page layout.

Time:

10 minutes

Instructions:

# Create a new formula field to show a green, yellow, or red light on a job application record, depending on the Average Review Score.

## Click Setup | Create | Objects | Job Application.

## Scroll down to the Custom Fields & Relationships related list and click New.

## Select the Formula radio button and click Next.

### . Field Label: Rating

### ii. Field Name: Rating (This field auto-populates.)

### iii. Formula Return Type: Text

## Click Next.

### Enter the following formula in the Rating (Text) = textbox:

### IF( Average\_Review\_Score\_\_c >= 3.5, IMAGE("/img/samples/light\_green.gif", "Green") , IF(Average\_Review\_Score\_\_c >= 2.5, IMAGE("/img/samples/light\_yellow.gif", "Yellow") , IMAGE("/img/samples/light\_red.gif", "Red") ) )

### Click Check Syntax.

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save to add the field to the Job Application Layout.

# Test the customization by looking at a job application record to see the new Rating field.

## Click the Job Applications tab.

## Select All from the View picklist, and click Go!

## Click the job application record, APP-0000.

## Note the new Rating indicator.

# Add the new Rating field to the Job Application related list on the Position page layout.

## Click Setup | Create | Objects | Position.

## Scroll down to the Page Layouts related list, then click the Edit link next to Position Layout.

### Click the wrench icon on the Job Applications related list.

### Select Rating from the Available Fields list, and then click Add to move it to the Selected Fields list.

### In the Apply column information to other page layouts: section, ensure that the Select All checkbox is selected.

## Click OK.

## Click Save.

10-2: Create Formula Fields to Display Hyperlinks

Scenario:

Universal Containers would like to be able to click a link on the candidate object to see a photo of the candidate. The images will be stored in the Documents tab, so the company will need to create a field to capture the ID, a field to create the URL, and a field with a link that users can click to see the picture—in addition to embedding the image into the page.

Goal:

Build a formula field that displays a hyperlink.

Tasks:

# Create a new field for the Picture ID.

# Populate a candidate record’s Picture ID field and view the picture.

Time:

15 minutes

Instructions:

# Create a new field for the Picture ID.

## Click Setup | Create | Objects | Candidate.

## Scroll down to the Custom Fields & Relationships related list, and click New.

## Select the Text radio button and click Next.

## Enter the details for the first new custom field.

### Field Label: Picture ID

### Length: 18

### Field Name: Picture\_ID (This field auto-populates.)

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save & New to add the field to the Candidate Layout.

## Select the Formula radio button and click Next.

## Enter the details for the second new custom field.

### Field Label: Picture URL

### Field Name: Picture\_URL (This field auto-populates.)

### Formula Return Type: Text

## Click Next.

### Enter the following formula in the Picture URL (Text) = textbox:

IF(ISBLANK(Picture\_ID\_\_c ), "", "/servlet/servlet.FileDownload?file=" & Picture\_ID\_\_c )

### Click Check Syntax.

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save & New to add the field to the Candidate Layout.

## Select the Formula radio button and click Next.

## Enter the details for the third new custom field.

### Field Label: Picture Link

### Field Name: Picture\_Link (This field auto-populates.)

### Formula Return Type: Text

## Click Next.

### Enter the following formula in the Picture Link (Text) = textbox:

IF( ISBLANK( Picture\_ID\_\_c ), "", HYPERLINK("/servlet/servlet.FileDownload?file=" & Picture\_ID\_\_c , "Candidate Picture"))

### Click Check Syntax.

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter, and System Administrator profiles, and click Next.

## Click Save & New to add the field to theCandidate Layout.

## Select the Formula radio button and click Next.

## Enter the details for the final new custom field.

### Field Label: Picture

### Field Name: Picture (This field auto-populates.)

### Formula Return Type: Text

## Click Next.

### Enter the following formula in the Picture (Text) = textbox: IMAGE(Picture\_URL\_\_c , "Picture")

### Click Check Syntax.

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save to add the field to the Candidate Layout.

# Populate a candidate record’s Picture ID field and view the picture.

## Click the Documents tab. (If necessary, click + to view more tabs.)

## Select Public Photos from the Folder picklist, and click Go!

## Click on one of the documents listed, then copy the last 15 digits of the URL for that document (everything after .com/) from the browser address bar.

## Click the Candidates tab.

## Click New.

## Fill in the information needed to create a new candidate record.

## Paste the ID of the photo you selected from the document into the Picture ID field.

## Click Save. Note how the Picture URL is populated, then click on the Candidate Picture link.

11-1: Create Validation Rules

Scenario:

Universal Containers (UC) employees should not be able to save a position record unless the Hiring Manager field is filled out.

Goal:

Create validation rules to enforce business requirements.

Task:

Create a new validation rule that requires that all positions must have a Hiring Manager listed.

Time:

10 minutes

Instructions:

# Create a new validation rule that requires that all positions must have a Hiring Manager listed.

## Click Setup | Create | Objects | Position.

## In the Validation Rules related list, click New.

### Rule Name: Every Position Must Have a Hiring Mgr

### Active: (selected)

### Description:Every position record must have a hiring manager.

### Error Condition Formula: ISBLANK( Hiring\_Manager\_\_c )

### Click Check Syntax to verify your formula.

### Error Message: Every Position must have a Hiring Manager.

### Error Location: Field: Hiring Manager

## Click Save.

## Create a new Position record to test these validation rules.

11-2: Build Validation Rules to Enforce Conditionally Required Fields

Scenario:

Universal Containers would like to enforce its policies around Temporary positions. The Duration field on a Temp position should not be blank. It should contain a value between   
1 and 365.

Goal:

Build a validation rule that prevents users from saving Temp positions with a blank Duration.

Tasks:

# Build a new validation rule that ensures that these policies are followed.

# Set the Debug Log to track actions that you take.

# Create a new position to test that the validation rule works.

# Check the Debug Logs.

Time:

10 minutes

Instructions:

# Build a new validation rule that ensures that these policies are followed.

## Click Setup | Create | Objects | Position.

## Scroll down to the Validation Rules related list and click New.

### Rule Name: Temp Position Validation

### Active: (selected)

### Description: Temporary positions require a value for Duration between 1 and 365 days.

### Error Condition Formula: ISPICKVAL( Type\_\_c , "Temp") && (BLANKVALUE(Duration\_\_c,0)<1 || Duration\_\_c >365)

### Click Check Syntax to verify your formula.

### Error Message: Temporary positions require a value for Duration between 1 and 365 days.

### Error Location: Field: Duration

## Click Save.

# Set the Debug Log to track actions that you take.

## Click Setup | Monitor | Logs | Debug Logs.

## Click New in User Trace Flags.

## Click the lookup icon to search for and then select your name.

## Set up a new Debug Level.

### Click the lookup icon to select Debug Level.

### Click New.

### Type Test in the Name field.

### Click Save.

## Click Save.

# Create a new position to test that the validation rule works.

## Click the Positions tab.

## Click New.

## Select Non-Technical Position from the Record Type of new record picklist, and click Continue.

### Title: Assistant to the Director of Support

### Type: Temp

### Department: Support

### Location: San Francisco

### Pay Grade: S-100

### Hiring Manager: Frank Linstrom

### Priority: High

### Status: New

### Date Opened: (today’s date)

### Job Description: The Assistant to the Director of Support is a diverse and fast-paced role supporting the director of our 250 person support organization.

## Click Save.

## After receiving the error Temporary positions require a value for Duration between 1 and 365 days, enter the Duration as 364, then click Save again.

# Check the Debug Logs.

## Click Setup | Monitor | Logs | Debug Logs.

## In the section called Debug Logs, click the View link next to the earliest listing (at the bottom of the list) for your name to view the logs.

**Note the result**: VALIDATION\_FAIL

## Click Back to List: Debug Logs (in the upper left).

## Click the View link next to the latest listing for your name to view the logs.

**Note the result**: VALIDATION\_PASS

11-3: Build Validation Rules to Enforce Data Format

Scenario:

Universal Containers would like to make sure that when candidates are entered, the zip code is entered in the correct format.

Goal:

Build a validation rule that enforces proper data format.

Tasks:

# Create a validation rule on candidates that requires that zip codes be entered in a valid 5-digit or 9-digit format.

# Test the validation rule on an existing candidate.

Time:

10 minutes

Instructions:

# Create a validation rule on candidates that requires that zip codes be entered in a valid 5-digit or 9-digit format.

## Click Setup | Create | Objects | Candidate.

## Scroll down to the Validation Rules related list and click New.

### Rule Name: Zip code must be Valid US Postal Code

### Active: (selected)

### Description: Validates that the candidate Zip/Postal Code is in 99999 or 99999-9999 format if Country is USA or US.

### Error Condition Formula: (UPPER(Country\_\_c) == "USA" || UPPER(Country\_\_c) == "US") && NOT(REGEX(Zip\_Postal\_Code\_\_c,"[\\d{5}(-\\d{4})](#_blank)?"))

### Click Check Syntax to verify your formula.

### Error Message: Zip code must be in 99999 or 99999-9999 format.

### Error Location: Field: Zip/Postal Code

## Click Save.

# Test the validation rule on an existing candidate.

## Click the Candidates tab.

## Select All from the View picklist and click Go!

## Select any Candidate and click Edit.

### Country: USA

### Zip/Postal Code: 9410

## Click Save.

## After receiving the error Zip code must be in 99999 or 99999-9999 format, update the zip code to 94105 and click Save.

11-4: Build Validation Rules to Enforce Consistency

Scenario:

Universal Containers would like to ensure that when a zip code is entered, it matches the state that’s entered. For example, a candidate with a California zip code should not have a state of New York. This rule should be ignored when data is loaded in batch.

Goal:

Build a validation rule that enforces data consistency.

Tasks:

# Create an object on which to store zip code data.

# Create additional fields on the Zip Code object.

# Create new zip code records.

# Create a validation rule that checks the zip code entered against a table to validate that the zip code and state match.

# Create a new Candidate to test your Zip Code object and validation rule.

Time:

15 minutes

Instructions:

# Create an object on which to store zip code data.

## Click Setup | Create | Objects.

## Click New Custom Object.

### Label:Zip Code

### Plural Label: Zip Codes

### Object Name: Zip\_Code (This field auto-populates.)

### Context-Sensitive Help Setting: Open the standard Salesforce.com Help & Training window.

### Record Name: Zip Code

### Data Type: Text

### Allow Reports: (selected)

### Allow Activities: (cleared)

### Track Field History: (cleared)

### Allow Search: (selected)

### Deployment Status: Deployed

### Launch New Custom Tab Wizard after saving this custom object: (selected)

## Click Save.

## Use the lookup icon to select the Map tab style, and click Next.

## Make the tab Default On for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Include the tab in the Recruiting application only, and click Save.

# Create additional fields on the Zip Code object.

## Under Custom Fields & Relationships, click New.

## Select the Text radio button and click Next.

## Enter the details for the first new custom field.

### Field Label: State

### Length: 2

### Field Name: State (This field auto-populates.)

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save & New to add the field to the zip code layout.

## Select the Text radio button and click Next.

## Enter the details for the second new custom field.

### Field Label: City

### Length: 80

### Field Name: City (This field auto-populates.)

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter, and System Administrator profiles, and click Next.

## Click Save to add the field to the zip code layout.

## Modify the Zip Code page layout so that the fields are displayed in a logical order.

### Under the Page Layout related list, click the Edit link next to Zip Code Layout.

### Arrange the fields in the left hand column of the page layout so that City is on top, then State, then Zip Code.

### Click Save.

# Create new zip code records.

## Click the Zip Codes tab.

## Click New.

## Enter the City, State, and Zip Code for any location.

## Click Save.

## Repeat to create 3 to 5 zip code records (to look up Zip Codes for any city, go to http://zip4.usps.com/zip4/citytown.jsp).

# Create a validation rule that checks the zip code entered against a table to validate that the zip code and state match.

## Click Setup | Create | Objects | Candidate.

## Scroll down to the Validation Rules related list and click New.

### Rule Name: Zip Code Consistent with State

### Active: (selected)

### Description: Validates candidate Zip/Postal Code by looking up the first five characters of the value in a custom object called Zip\_Code\_\_c. Error if the zip code is not found or the candidate State does not match the corresponding State in the object.

### Error Condition Formula:

AND(VLOOKUP($ObjectType.Zip\_Code\_\_c.Fields.State\_\_c, $ObjectType.Zip\_Code\_\_c.Fields.Name, LEFT( Zip\_Postal\_Code\_\_c ,5) ) <> State\_Province\_\_c, NOT(Batch\_Load\_Item\_\_c) )

### Click Check Syntax to verify your formula.

### Error Message: Candidate Zip Code does not exist in specified State.

### Error Location: Field: Zip/Postal Code

## Click Save.

## Create a new Candidate to test your Zip Code object and validation rule.

## Click the Candidates tab.

## Click New.

### Populate a new Candidate with a Zip Code that matches a Zip Code record that you have already created.

### Enter a State that does not match the Zip Code.

## Click Save.

## Note the validation error that you receive.

11-5: Create Validation Rules to Prevent Data Loss (Optional)

Scenario:

Universal Containers would like make sure that once a job application is approved, users will not be able to add or remove reviews.

Goal:

Build a validation rule that prevents users from adding or deleting reviews once a job application has been approved.

Tasks:

# Create a validation rule that references the Total Reviews roll-up summary field to ensure that reviews are not added or deleted.

# Test the validation rule.

Time:

10 minutes

Instructions:

# Create a validation rule that references the Total Reviews roll-up summary field to ensure that reviews are not added or deleted.

## Click Setup | Create | Objects | Job Application.

## Scroll down to the Validation Rules related list and click New.

### Rule Name: No New Deleted Reviews for Approved Apps

### Active: (selected)

### Description: Once a Job Application is approved, there can be no new Reviews. Likewise, no Reviews can be deleted.

### Error Condition Formula:

AND( ISPICKVAL( Status\_\_c , "Approved") , ISCHANGED( Total\_Reviews\_\_c ))

### Click Check Syntax to verify your formula.

### Error Message: Once a Job Application is approved, there can be no change to the number of Reviews.

### Error Location: Top of Page

## Click Save.

# Test the validation rule.

## Click the Job Applications tab.

## Click APP-0000.

## Click Edit.

### Change the Status to Approved.

### Click Save.

## Scroll down and click the Del link next to the review listed in the Reviews related list.

## When you receive the popup that says, “Are you sure?” click OK.

12-1: Create Workflow Rules

Scenario:

At Universal Containers, recruiters are responsible for approving or rejecting proposed positions created by hiring managers.

When a new candidate has been created, the candidate should be assigned to the Recruiter Queue and a New Candidate Notification should automatically be sent out to all queue members.

Goal:

Create custom workflow rules and associated field updates for routing new Positions and Candidates to the recruiters.

Tasks:

# Create a workflow rule with a field update to route new Positions to the Recruiter Queue.

# Create a workflow rule with a field update to assign new candidates to the Recruiter Queue.

Time:

15 minutes

Instructions:

# Create a workflow rule with a field update to route new Positions to the Recruiter Queue.

## Click Setup | Create | Workflow & Approvals | Workflow Rules.

## If the splash page appears, click Continue.

## Click New Rule.

## Select Position from the Select object picklist, and click Next.

## Configure rule.

### Rule Name: New Position Rule

### Evaluate the rule when a record is: Created

### Run this rule if the following: criteria are met: Position: Status | equals | New

## Click Save & Next.

## In the Immediate Workflow Actions section, click Add Workflow Action: New Field Update.

### Name:Assign New Position to Recruiter Queue

### Unique Name: Assign\_New\_Position\_to\_Recruiter\_Queue (This field auto-populates.)

### Field to Update: Owner

### Owner: Queue | Recruiter Queue

### Notify Assignee: (selected)

## Click Save.

## Click Done.

## Click Activate.

## Click the Positions tab and add a new position, setting the Status to New. Once you have saved it, check the Owner field on the new record.

# Create a workflow rule with a field update to assign new candidates to the Recruiter Queue.

## Click Setup | Create | Workflow & Approvals | Workflow Rules.

## If you see the splash page, click Continue.

## Click New Rule.

## Select Candidate from the Select object picklist, and click Next.

## Configure rule.

### Rule Name: New Candidate Notification

### Evaluate the rule when a record is: Created

### Field: Operator: Value: Candidate: Created Date | equals | TODAY

## Click Save & Next.

## In the Immediate Workflow Actions section, click Add Workflow Action: New Field Update.

### Name: Assign New Candidate to Recruiter Queue

### Unique Name: Assign\_New\_Candidate\_to\_Recruiter\_Queue (This field auto-populates.)

### Field to Update: Owner

### Owner: Queue: Recruiter Queue

### Notify Assignee: (selected)

## Click Save.

## Click Done.

## Click Activate.

## Click the Candidates tab and create a new candidate. Make sure to enter information for email, name, and phone. Once you have saved it, check the Owner field on the new record.

12-2: Set Up Time-Dependent Workflow

Scenario:

When an offer is made to a candidate, it is valid for only two days. Universal Containers would like to set up a time-dependent workflow rule that evaluates offers in a sent status, and sends a task to the offer owner to remind them to follow up with the candidate.

Goal:

Create a workflow rule that will escalate offers that have been open for two days.

Tasks:

# . Create a workflow rule with time-dependent actions.

# . Create a new offer to test the process and monitor the time-based workflow queue.

Time:

15 minutes

Instructions:

# Create a workflow rule with time-dependent actions.

## Click Setup | Create | Workflow & Approvals | Workflow Rules.

## When you see a splash page, click Continue.

## Click New Rule.

## Select Offer from the Select object picklist, and click Next.

## Configure rule:

### Rule Name: Submitted Offer Requires Attention

### Description: If an offer has been sent, but no word from candidate in 2 days, have recruiter follow up.

### Evaluate the rule when a record is: created, and anytime it’s edited to subsequently meet criteria.

### Run this rule if the following: criteria are met: Offer: Status | equals | Sent

## Click Save & Next.

## Click Add Time Trigger.

## Select 2 | Days | After | Rule Trigger Date from the Workflow Rule picklists.

## Click Save.

## Under this Time Trigger, click Add Workflow Action | New Task.

### Assigned To: Offer Owner (Click the lookup icon, select Owner from the Type picklist, and click Offer Owner to select.)

### Subject: Follow up on submitted offer

### Unique Name: Follow\_up\_on\_submitted\_offer (This field auto-populates.)

### Due Date:Rule Trigger Date | plus | 0 days

### Status: Not Started

### Priority: High

### Comments: Recruiting has not received a response to an offer submitted to a candidate. Please follow up with candidate.

## Click Save.

## Click Done.

## Click Activate.

# Create a new offer to test the process and monitor the time-based workflow queue.

## Click the Job Applications tab.

## Click APP-0000.

## Scroll down to the Offers related list and click New Offer.

### Offer Date: (today’s date)

### Offer Expiration Date: (today’s date + 2)

### Status: Sent

### Actual Salary: 45,000

### Stock Options: 500

### Bonus Percentage: 10

## Click Save.

## Monitor the time-based workflow queue.

### Click Setup | Monitor | Time-Based Workflow.

### Click Search.

Note the offer listed among the pending actions in the queue.

12-3: Create a Process

Scenario:

At Universal Containers (UC), company policy states that hiring managers must always take part in the interview process. UC wants a new interviewer record to be created automatically for the hiring manager whenever a new position is created.

Goal:

Build a process to create a new interviewer record for the hiring manager of a position.

Tasks:

# Create a process with an immediate action.

# Test the process.

Time:

10 minutes

Instructions:

# Create a process with an immediate action.

## Click Setup | Create | Workflow & Approvals | Process Builder.

## Click New.

## Define the process properties.

### Name: Create Interviewer Record

### Description: Create an interviewer record for a new position

## Click Save.

## Click Add object.

### Object: Position

### Start the process: only when a record is created

## Click Save.

## Click Add criteria.

### Criteria Name: Always Execute

### Criteria for Executing Actions: No criteria—just execute the actions!

## Click Save.

## Under IMMEDIATE ACTIONS, click Add Action.

### Action Type: Create a Record

### Action Name: Create Interviewer Record

### Record Type: Interviewer

## Relate the interviewer record to the position record.

### Field: Position

### Type: Reference

### Click the Value field, select Record ID, and click Choose.

## Set the Employee field to the Hiring Manager.

### Click Add Row.

### Field: Employee

### Type: Reference.

### Click the Value field, select Hiring\_Manager\_\_c, and click Choose.

## Click Save.

## Click Activate.

## Click OK.

# Test the process.

## Click Back To Setup.

## From the Positions tab, click New.

### Title: Full-Stack Web Developer

### Type: Full Time

### Department: Engineering

### Location: San Francisco

### Pay Grade: ENG-200

### Hiring Manager: Andy Macrola

### Priority: High

### Status: New

### Job Description:Work with a team to design, code, implement and maintain a fully functional, modern interactive website.

## Click Save.

## From the Interviewers related list, click the interviewer record.

## Verify that the Employee and Position fields have the correct values.

13-1: Create Multi-Step Approval Processes

Scenario:

Universal Containers needs to make sure that all new positions receive the proper approval before they are posted.

* Step 1: New positions should go to the manager of the record owner.
* Step 2: All positions approved by the record owner's manager should go to the recruiter (Mario Ruiz).
* Step 3: Senior level positions should also be approved by the department VP.

Goal:

Create an approval process for approving new positions.

Tasks:

# Create a multi-step approval process.

# Create initial submission actions.

# Create approval steps.

# Create final approval actions.

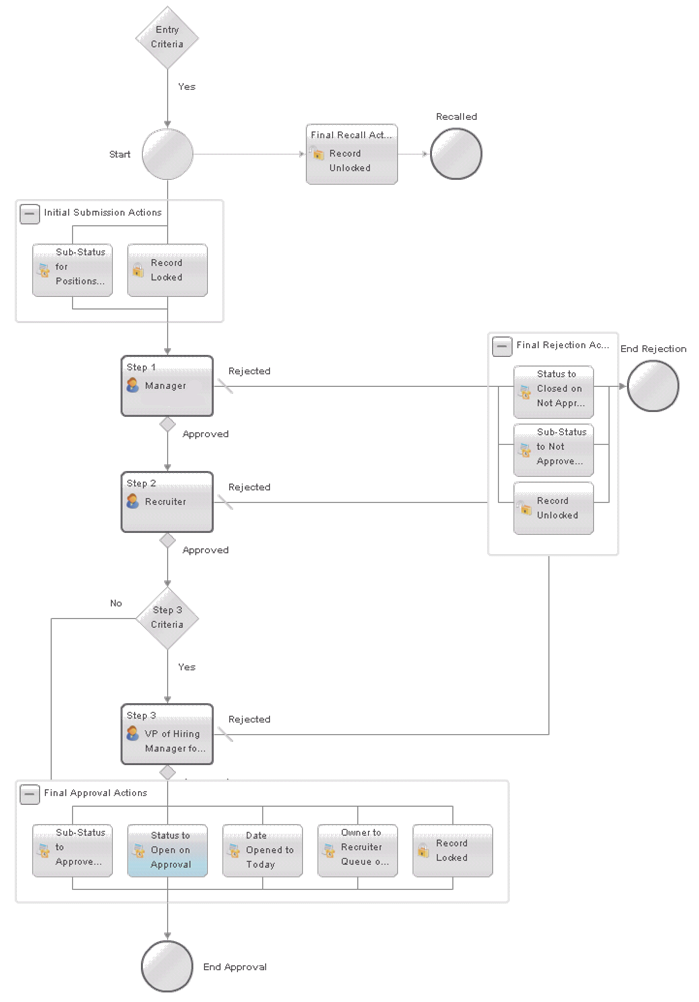
# Create final rejection actions.

# Activate the process.

# Create a new position to test the approval process.

Time:

30 minutes



Instructions:

# Create a multi-step approval process.

## Click Setup | Create | Workflow & Approvals | Approval Processes.

## Select Position from the Manage Approval Processes For: picklist.

## Click Create New Approval Process | Use Standard Setup Wizard.

### Process Name: 3-Step Position Approval #1

### Unique Name: X3\_Step\_Position\_Approval\_1 (This field auto-populates.)

### Description:

ALL New Positions:   
- Step 1: approval by Mgr of Record Owner   
- Step 2: approval by Recruiter (Mario)   
- Step 3: senior-level ONLY approved by VP of Hiring Mgr (manually selected)

## Click Next.

## Specify the entry criteria as Use this approval process if the following: criteria are met: Position: Status | equals | New, and click Next.

### Next Automated Approver Determined By: Manager

### Use Approver Field of Position Owner: (selected)

### Record Editability Properties: Administrators ONLY can edit records during the approval process.

## Click Next.

## Leave the Approval Assignment Email Template field blank, and click Next.

### Selected Fields: Title, Owner, Department, Hiring Manager, Job Description, Pay Grade, Priority, Type (Hold CTRL to select multiple fields.)

### Display approval history information in addition to the fields selected above: (selected)

### Allow approvers to access the approval page only from within the salesforce.com application. (Recommended): (selected)

## Click Next.

### Allowed Submitters: Position Owner

### Add the Approval History related list to Position page layouts: (selected)

### Allow submitters to recall approval requests: (cleared)

## Click Save.

## Select No, I'll do this later, take me to the approval process detail page to review what I've just created.

## Click Go!

# Create initial submission actions.

## Under the Initial Submission Actions related list, click Add New | Field Update.

## Enter the field update details.

### Name: Sub-Status for Positions in Progress

### Unique Name: Sub\_Status\_for\_Positions\_in\_Progress (This field auto-populates.)

### Field to Update: Sub-Status

### Picklist Options: A specific value: Pending

## Click Save.

# Create approval steps.

## Under the Approval Steps related list, click New Approval Step.

### Name: Manager of Record Owner

### Unique Name: Manager\_of\_Record\_Owner (This field auto-populates.)

### Step Number: 1

## Click Next.

## Select All records should enter this step., and click Next.

### Automatically assign using the user field selected earlier. (Manager): (selected)

### The approver’s delegate may also approve this request: (cleared)

## Click Save.

## Select No, I'll do this later. Take me to the approval process detail page to review what I've just created, and click Go!

## Under the Approval Steps related list, click New Approval Step.

### Name: Recruiter

### Unique Name: Recruiter (This field auto-populates.)

### Step Number: 2

## Click Next.

## Select All records should enter this step., and click Next.

## Select Automatically assign to approver(s)., then select User from the picklist that appears, and use the lookup icon to select Mario Ruiz.

### When multiple approvers are selected: Approve or reject based on the FIRST response.

### The approver’s delegate may also approve this request.: (cleared)

### What should happen if the approver rejects this request?: Perform all rejection actions for this step AND all final rejection actions. (Final Rejection)

## Click Save.

## Select No, I'll do this later. Take me to the approval process detail page to review what I've just created., and click Go!

## Under the Approval Steps related list, click New Approval Step.

### Name:VP of Hiring Manager for Sr-Level Positions

### Unique Name: VP\_of\_Hiring\_Manager\_for\_Sr\_Level\_Positions (This field auto-populates.)

### Step Number: 3

## Click Next.

## Select Enter this step if the following: criteria are met: Pay Grade | contains | 300, 400

## Click Next.

### Let the submitter choose the approver manually.: (selected)

### The approver’s delegate may also approve this request.: (cleared)

### Perform all rejection actions for this step AND all final rejection actions. (Final Rejection): (selected)

## Click Save.

## Select No, I'll do this later. Take me to the approval process detail page to review what I've just created., and click Go!

# Create final approval actions.

## Under the Final Approval Actions related list, click Add New | Field Update.

### Name: Status to Open on Approval

### Unique Name:Status\_to\_Open\_on\_Approval (This field auto-populates.)

### Field to Update: Status

### Picklist Options: A specific value: Open

## Click Save & New.

### Name: Sub-Status to Approved on Approval

### Unique Name: Sub\_Status\_to\_Approved\_on\_Approval

### Field to Update: Sub-Status

### Picklist Options:A specific value: Approved

## Click Save & New.

### Name: Owner to Recruiter Queue on Approval

### Unique Name: Owner\_to\_Recruiter\_Queue\_on\_Approval

### Field to Update: Owner

### Owner: Queue: Recruiter Queue

### Notify Assignee: (cleared)

## Click Save & New.

### Name:Date Opened to Today

### Unique Name: Date\_Opened\_to\_Today

### Field to Update: Date Opened

### Date Options: Use a formula to set the new value

### Formula: NOW()

## Click Save.

# Create final rejection actions.

## Under the Final Rejection Actions related list, click Add New | Field Update.

### Name: Status to Closed on Not Approved

### Unique Name: Status\_to\_Closed\_on\_Not\_Approved

### Field to Update: Status

### Picklist Options: A specific value: Closed

## Click Save & New.

### Name: Sub-Status to Not Approved on Reject

### Unique Name: Sub\_Status\_to\_Not\_Approved\_on\_Reject

### Field to Update: Sub-Status

### Picklist Options: A specific value: Not Approved

## Click Save.

# Activate the process.

## Click Activate.

## When you receive the popup that says, “After activating this approval process, you cannot add or remove approval steps. Also, some approval step attributes may not be editable. Continue?” click OK.

# Create a new position to test the approval process.

## Click the Positions tab, then click New.

## Select Non-Technical Position from the Record Type of new record picklist, and click Continue.

## Edit the new position.

### Title:Associate Support Representative

### Type: Full Time

### Department: Support

### Location: San Francisco

### Pay Grade: S-100

### Hiring Manager: Ben Stuart

### Priority: Medium

### Status: New

### Job Description: Associate Support Representatives are the front lines of customer support. They provide courteous and professional support to all kinds of issues that our customers present.

## Click Save.

## Change the owner by clicking [Change] next to the Owner field, keeping the Owner as User, and using the lookup icon to select Ben Stuart.

## Click Save.

## On the Approval History related list, click Submit for Approval.

### When you receive the popup that says, “Once you submit this record for approval, you might not be able to edit it or recall it from the approval process depending on your settings. Continue?” click OK.

### Note that the record is routed to Andrew Goldberg.

### Log in as Andrew Goldberg to approve the position.

### Log out as Andrew Goldberg.

### Note that the record is then routed to Mario Ruiz.

13-2: Create Dynamic Approval Processes

Scenario:

At Universal Containers, not all approval processes route records to a particular user or manager. Universal Containers would like to have more flexibility with its approval processes (to refer to an approval matrix and route approvals based on users specified on the matrix).

Goal:

Create a dynamic approval process.

Tasks:

# Download the needed apex class and trigger.

# Add new approver fields on the Position object.

# Modify the Position Layout and Technical Position Layout to include a section for approver information.

# Create an approval matrix in Salesforce.

# Add fields to the Position Approval Matrix object.

# Create a new position approval matrix.

# Create an Apex trigger to automatically populate the Approver fields on new positions.

# Populate approvers on a Position.

# Modify the existing approval process to use this dynamic routing.

# Test the new approval process.

Time:

30 minutes

Instructions:

# Download the needed apex class and trigger.

## Click the Documents tab.

## Select Shared Documents from the Folder picklist.

## Click the DEV401.zip file.

## Click View File.

## In the File Download dialog box, click Save.

## In the Save As dialog box, select to save the file to the desktop, and click Save.

## Right-click the downloaded .zip file and select Extract All.

# Add new approver fields on the Position object.

## Click Setup | Create | Objects | Position.

## Under the Custom Fields & Relationships section, click New.

## Select the Lookup Relationship radio button under Data Type, and click Next.

## Select User from the Related To picklist, and click Next.

### Field Label: Approver #1

### Field Name:Approver\_1

## Click Next.

## Click Next to make the field visible to Custom – Executive, Custom – HR, Custom – Recruiter, and System Administrator profiles.

## Select only the Position and Technical Position layouts and click Save & New.

## Select the Lookup Relationship radio button under Data Type, and click Next.

## Select User from the Related To picklist, and click Next.

### Field Label:Approver #2

### Field Name:Approver\_2

## Click Next.

## Click Next to make the field visible to Custom – Executive, Custom – HR, Custom – Recruiter, and System Administrator profiles.

## Select only the Position and Technical Position layouts and click Save & New.

## Select the Lookup Relationship radio button under Data Type, and click Next.

## Select User from the Related To picklist, and click Next.

### Field Label: Approver #3

### Field Name:Approver\_3

## Click Next.

## Click Next to make the field visible to Custom – Executive, Custom – HR, Custom – Recruiter, and System Administrator profiles.

## Select only the Position and Technical Position layouts and click Save.

# Modify the Position Layout and Technical Position Layout to include a section for approver information.

## Click Setup | Create | Objects | Position.

## Under the Page Layouts related list, click the Edit link next to Position Layout.

## Drag a new section from the palette at the top onto the page layout, placing it above the System Information section. Make the following changes to the **Section Properties**:

### Section Name: Position Approvers

### Display Section Header On: Detail Page and Edit Page (both selected)

### Layout: 2-Column

### Tab-key Order: Left-Right

### Click OK.

### Drag the Approver #1, Approver #2, and Approver #3 fields from the Information section into the new Position Approvers section.

## Click Save.

## Under the Page Layouts related list, click the Edit link next to Technical Position Layout.

## Drag a new section from the palette at the top onto the page layout, placing it above the System Information section. Make the following changes to the **Section Properties**:

### Section Name: Position Approvers

### Display Section Header On: Detail Page and Edit Page (both selected)

### Layout: 2-Column

### Tab-key Order: Left-Right

### Click OK.

### Drag the Approver #1, Approver #2, and Approver #3 fields from the Information section into the new Position Approvers section.

## Click Save.

# Create an approval matrix in Salesforce.

## Click Setup | Create | Objects.

## Click New Custom Object.

### Label: Position Approval Matrix

### Plural Label: Position Approval Matrices

### Object Name: Position\_Approval\_Matrix (This field auto-populates.)

### Context-Sensitive Help Setting: Open the standard Salesforce.com Help & Training window (selected)

### Record Name: Routing ID

### Data Type: Auto Number

### Display Format: RoutingID – {0000}

### Starting Number: 1

### Allow Reports: (selected)

### Allow Activities: (selected)

### Track Field History: (selected)

### Allow Search: (selected)

### Deployed: (selected)

### Add Notes and Attachments related list to default page layout: (cleared)

### Launch New Custom Tab Wizard after saving this custom object: (selected)

## Click Save.

## Use the lookup icon to select any tab style.

## Click Next.

## Select the Apply one tab visibility to all profiles: Default Off radio button.

## Select the Apply a different tab visibility for each profile radio button.

## Select Default On for the Custom-Executive, Custom-HR, Custom – Recruiter, and System Admin profiles.

## Click Next.

## Add the tab only to the Recruiting app.

## Click Save.

# Add fields to the Position Approval Matrix object.

## Under the Custom Fields & Relationships related list, click New.

## Select the Lookup Relationship radio button under Data Type, and click Next.

## Select User from the Related To picklist, and click Next.

### Field Label: Approver #1

### Field Name:Approver\_1

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save & New to add the field to the page layout.

## Select the Lookup Relationship radio button under Data Type, and click Next.

## Select User from the Related To picklist, and click Next.

### Field Label: Approver #2

### Field Name: Approver\_2

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter, and System Administrator profiles, and click Next.

## Click Save & New to add the field to the page layout.

## Select the Lookup Relationship radio button under Data Type, and click Next.

## Select User from the Related To picklist, and click Next.

### Field Label: Approver #3

### Field Name: Approver\_3

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save & New to add the field to the page layout.

## Select the Picklist radio button under Data Type, and click Next.

### Field Label: Department

### Values:Engineering, Finance,IT, Sales, Support

### Field Name: Department (This field auto-populates.)

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter, and System Administrator profiles, and click Next.

## Click Save & New to add the field to the page layout.

## Select the Picklist radio button under Data Type, and click Next.

### Field Label: Priority

### Values: Critical, High, Medium, Low

### Field Name:Priority (This field auto-populates.)

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter and System Administrator profiles and click Next.

## Click Save & New to add the field to the page layout.

## Select the Text radio button under Data Type, and click Next.

### Field Label: Routing Key

### Length: 200

### Field Name: Routing\_Key (This field auto-populates.)

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter, and System Administrator profiles, and click Next.

## Click Save to add the field to the page layout.

# Create a new position approval matrix.

## Click on the Position Approval Matrices tab. (Click + to see more tabs, if necessary.)

## Click New, then use the lookup icon to select the approvers.

### Approver #1: Ben Stuart

### Approver #2: Andrew Goldberg

### Approver #3:Cynthia Capobianco

### Department: Engineering

### Priority: Medium

### Routing Key: (cleared)

## Click Save.

# Create an Apex trigger to automatically populate the Approver fields on new positions.

## Navigate to the folders you downloaded and extracted to your desktop in as part of step 1.

## Open the \M13\_Approval ProcessesExerciseFiles\ ApexClass.txt file.

## Copy all of the contents in the file, then navigate to Setup | Develop | Apex Classes | New.

## Paste the contents from the file into the entry screen, then click Save.

## Open the \M13\_Approval ProcessesExerciseFiles\ ApexTrigger.txt

## Open the file ApexTrigger.txt, copy the entire contents of the file, then navigate to Setup | Create | Objects | Position.

## Scroll down to the Triggers related list, and click New.

## Remove all existing text, then paste the trigger and click Save.

# Populate approvers on a Position.

## Click the Positions tab.

## Click New.

## Select Technical Position from the Record Type of new record picklist, and click Continue.

### Title: Usability Tester

### Type: Full Time

### Department: Engineering

### Location: San Francisco

### Pay Grade: ENG-200

### Hiring Manager: Andy Macrola

### Priority: Medium

### Status: New

### Job Description:Test our product to make sure users can use it.

## Click Save. Note that the Approver fields are automatically populated based on the Position Approval Matrix.

# Modify the existing approval process to use this dynamic routing.

## Click Setup | Create | Workflow & Approvals | Approval Processes.

## Select Position from the Manage Approval Processes For: picklist.

## Click on 3-Step Position Approval #1.

## Open the **Edit** picklist and select **Entry Criteria**.

## Specify the second through fourth lines of entry criteria as

## Position:Approver#1 | not equal to |

## Position:Approver#2 | not equal to |

## Position:Approver#3 | not equal to |

## [leave Value field blank on each line] and click **Save**.

## Scroll down to the Approval Steps section.

## Next to Step 1, click Edit.

## Click Next, then Next again.

### Select the Automatically assign to approver(s) radio button from the list.

### Select Related User from the picklist that appears, then select Approver #1.

## Click **Save**.

## Repeat to make Approver #2 the designated approver of Step 2, and Approver #3 the designated approver of Step 3.

# Test the new approval process.

## Click the Positions tab, then click on the position Usability Tester.

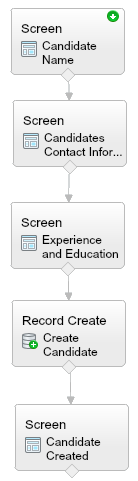
## Click Submit for Approval under the Approval History related list.

## Click OK.

## Who is the position routed to?

14-1: Create a Flow

Scenario:

Universal Containers is seeing a number of candidate records missing information. They want a candidate wizard created that includes all the needed information to complete the record.

Goal:

Create a flow using Visual Workflow.

Tasks:

# Create a flow.

# Add a screen element to prompt for the candidate’s name.

# Set the start element for the flow.

# Add a screen element to prompt for the candidate’s contact information.

# Add a screen element to prompt for the candidate’s experience and education.

# Add a record create element to create a new candidate record.

# Add a screen element to finish the wizard.

# Save and run the flow.

Time:

40 minutes

Instructions:

# Create a flow.

## Click Setup | Create | Workflow & Approvals | Flows.

## Click New Flow. The Welcome to Cloud Flow Designer screen opens displaying an overview video. Click Close to close the screen.

# Add a screen element to prompt for the candidate's name.

## Drag and drop Screen from the palette onto the flow window.

## In the Name field, enter Candidate Name. (The Unique Name field auto-populates.)

## Click the Add a Field tab.

## Double-click the Textbox input type twice to add two textbox fields to the screen.

## Click the top textbox field and enter First Name as the label. (The Unique Name field auto-populates.)

## Click the other textbox field and enter Last Name as the label. (The Unique Name field auto-populates.)

## Click OK to complete the screen element.

# Set the start element for the flow.

## Hover over the Candidate Name element.

## Click the Set as Start Element icon.

## Click Save and save the flow with the name Candidate Wizard. Click OK on the General Warning screen.

# Add a screen element to prompt for the candidate’s contact information.

## Drag and drop Screen from the palette.

## Name the element: Candidate's Contact Information

## Add three textbox input fields.

## Configure the fields:

|  |  |  |
| --- | --- | --- |
| Field Type | Label | Unique Name |
| Textbox | Phone | Phone |
| Textbox | Mobile Phone | Mobile\_Phone |
| Textbox | Email Address | Email\_Address |

## Click OK to complete the screen element.

## Connect the Candidate Name element to the Candidate Contact Information element.

## Click Save.

# Add a screen element to prompt for the candidate’s experience and education.

## Drag and drop Screen from the palette.

## Name the element: Experience and Education

## Add the following fields.

|  |  |  |
| --- | --- | --- |
| Field Type | Label | Unique Name |
| Number | Years of Experience | Years\_of\_Experience |
| Checkbox | Currently Employed | Currently\_Employed |
| Textbox | Current Employer | Current\_Employer |

## Add a multi-select picklist field.

### Add a multi-select picklist field.

### In the Label field, enter Education. (The Unique Name field auto-populates.)

### Select Create New | Choice from Choice Settings.

### Enter GED/HS Diploma as the Label. (The Unique Name field auto-populates.)

### Make sure Text is selected as the Value Data Type.

### Enter GED/HS Diploma as the Stored Value and click OK.

### Click Add Choice 6 times to add 6 other choices.

### Repeat steps iii–v for each of the choices with the following name and stored values:

| Choice Name | Stored Value |
| --- | --- |
| BA/BS | BA/BS |
| MA/MS/MBA | MA/MS/MBA |
| MD | MD |
| JD | JD |
| PhD | PhD |
| Post Doc | Post Doc |

## Click and drag the Education field so that it is below the Years of Experience field and above the Currently Employed field.

## Click OK to complete the screen element.

## Connect the Candidate's Contact Information element to the Experience and Education element.

## Click Save.

# Add a record create element to create a new candidate record.

## Drag and drop Record Create from the palette onto the flow window.

## Name the element Create Candidate. (The Unique Name field auto-populates.)

## Select the Candidate object from the Custom section of the Create picklist.

## Configure the fields and associated values:

| Field | Values |
| --- | --- |
| First\_Name\_\_c | Screen Input Fields | First\_Name |
| Last\_Name\_\_c | Screen Input Fields | Last\_Name |
| Phone\_\_c | Screen Input Fields | Phone |
| Mobile\_\_c | Screen Input Fields | Mobile\_Phone |
| Email\_\_c | Screen Input Fields | Email\_Address |
| Education\_\_c | Screen Multi-Select Fields | Education |
| Currently\_Employed\_\_c | Screen Input Fields | Currently\_Employed |
| Current\_Employer\_\_c | Screen Input Fields | Current\_Employer |
| Years\_of\_Experience\_\_c | Screen Input Fields | Years\_of\_Experience |

## Click OK.

## Click and drag an arrow connector from the Experience and Education element to the Record Create element to connect the elements together.

## Click Save.

# Add a screen element to finish the wizard.

## Drag and drop Screen from the palette onto the flow window.

## In the Name field, enter Candidate Created. (The Unique Name field auto-populates.)

## Add a display text field.

## Name the display text field: CandidateCreated

## Enter this message in the field:

The candidate you entered, {!First\_Name} {!Last\_Name}, has been created.

Use the Select Resource picklist to enter the {!First\_Name} {!Last\_Name} screen input fields.

## Click OK.

## Connect the Create Candidate element to the Candidate Created element.

## Click Save.

# Run the flow.

## Click Run.

## Enter the candidate information into the corresponding fields:

### First Name: John

### Last Name: Smith

### Phone: 4155551234

### Mobile Phone: (leave blank)

### Email: (leave blank)

### Years of Experience: 3

### Education: BA/BS

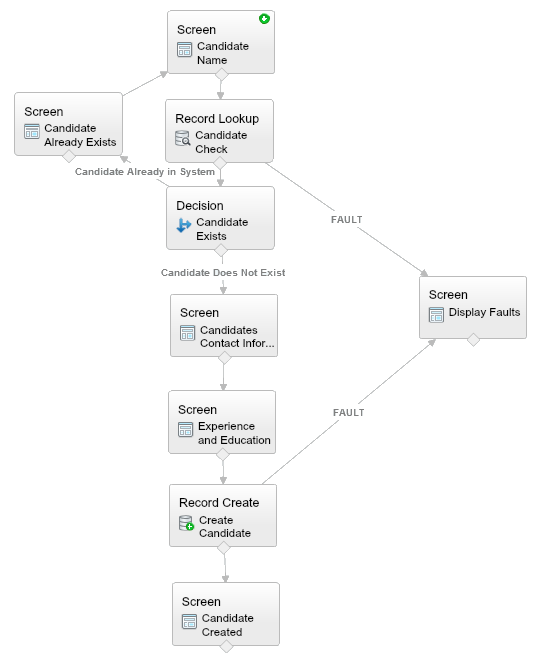
### Currently Employed: (selected)

### Current Employer: XYZ labs

## Click Finish and close the flow browser tab.

## Click Close to exit the Flow Designer.

## Navigate to the existing candidates and verify that John Smith is listed as a candidate.

14-2: Create a New Version of a Flow

Scenario:

Universal Containers is also seeing a number of duplicate candidate records being created. They want to add a record lookup to the candidate wizard to check if the candidate is already in the system based on their name.

Goal:

Create a flow using Visual Workflow.

Tasks:

# Open an existing flow.

# Add a record lookup element to check if the candidate exists.

# Save a new version of the flow.

# Add a decision element based on the lookup element.

# Add a screen element to display faults for data elements.

# Save and run the flow.

Time:

40 minutes

Instructions:

# Open an existing flow.

## Click Setup | Create | Workflow & Approvals | Flows.

## Select All Flows from the View picklist.

## Click the Candidate Wizard link.

## Click Open next to version 1 of the flow.

# Add a record lookup element to check if the candidate exists.

## Drag and drop Record Lookup from the palette onto the flow window.

## In the Name field, enter Candidate Check. (The Unique Name field auto-populates.)

## Select the Candidate object from the Custom section of the Lookup picklist.

## Enter two lookup filters:

|  |  |  |
| --- | --- | --- |
| Field | Operator | Value |
| First\_Name\_\_c | Equals | Screen Input Fields | First\_Name |
| Last\_Name\_\_c | Equals | Screen Input Fields | Last\_Name |

## Create a new variable:

### Select Standard | Id as the field in the Field picklist.

### Select Create New | Variable from the Variable picklist.

### Enter ExistCandidateID as the UniqueName.

### Click OK to complete the variable.

## Click OK to complete the lookup element.

## Delete the connector between the Candidate Name element and the Candidate's Contact Information element by selecting the connector and pressing the Delete key.

## Click and drag an arrow connector from the Candidate Name element to the Candidate Check element to connect the elements together.

# Save a new version of the flow.

## Click Save As.

## Select New Version from the Save As picklist.

## Click OK.

# Add a decision element based on the lookup element.

## Drag and drop Decision from the palette onto the flow window.

## Enter Candidate Exists as the name. (The Unique Name field auto-populates.)

## Configure the Editable Outcome:

### Enter Candidate Already in System as the Editable Outcome name. (The Unique Name field auto-populates.)

### Configure the resource row:

|  |  |  |
| --- | --- | --- |
| Resource | Operator | Value |
| Record Lookup | Candidate Check | Equals | Global Constant| $GlobalConstant.True |

## Configure the Default Outcome:

### Click Default Outcome.

### Enter Candidate Does Not Exist as the name.

## Click OK.

## Connect the Record Lookup element to the Candidate Exists element.

## Add a screen to tell the user the candidate already exists:

### Drag and drop Screen from the palette onto the flow window.

### In the Name field, enter Candidate Already Exists. (The Unique Name field auto-populates.)

### Click the Add a Field tab.

### Double-click Display Text.

### Double-click on the Display Text field and enter ExistsMessage at the name.

### Add the message A Candidate with that name already exists. Please enter a different name. in the text field and click OK.

## Connect the Decision element to the Candidate Already Exists element.

## Select the Candidate Already in System outcome.

## Connect the Candidate Already Exists element to the Candidate Name element to request that the user enter a different name.

## Connect the Decision element to the Candidate's Contact Information element.

## Click Save.

# Add a screen element to display faults for data elements.

## Drag and drop Screen from the palette onto the flow window.

## Name the element: Display Faults

## Add a display text field.

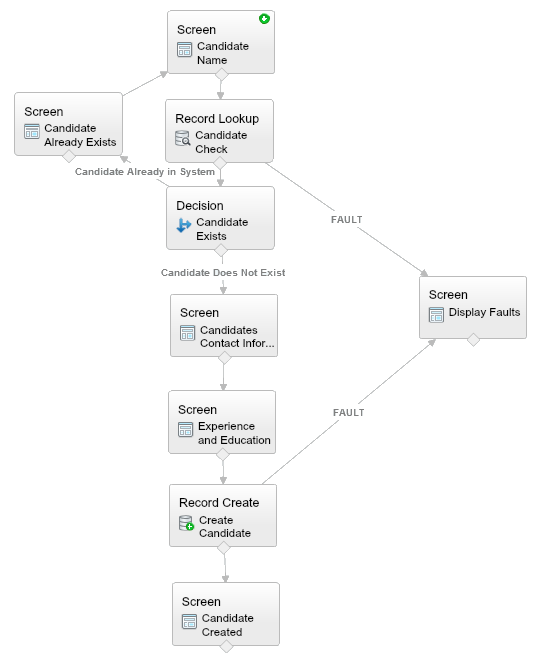
## Name the display text field: Display\_Fault\_Message

## From the Select Resource picklist, select SYSTEM | $Flow.FaultMessage.

## Click OK.

## Connect the Candidate Check and Create Candidate element to the Display Faults element.

## Click Save. Your flow should match the flow below.



# Run the flow.

## Click Run.

## Enter an existing candidate first and last name. (For example, John Smith was added in a previous exercise.)

## Does a message that the candidate already exists display?

## Close the flow browser tab.

## Click Close to exit the Flow Designer.

14-3: Deploy a Flow

Scenario:

Universal Containers would like to be able to launch the candidate wizard from the candidate list view.

Goal:

Create a custom button on the candidate list view to run the candidate flow.

Tasks:

# Activate the flow version.

# Deploy the flow using a custom button.

# Modify the Recruiting and HR profile to give them the Run Flows permission.

# Run the flow.

Time:

10 minutes

Instructions:

# Activate the flow version.

## Click Setup | Create | Workflow & Approvals | Flows.

## Select All Flows from the View picklist.

## Click on the Candidate Wizard flow.

## Click Activate next to version 2 of the Candidate Wizard flow.

# Deploy the flow using a custom button.

## Click Create | Objects | Candidate.

## Scroll down to the Buttons, Links, and Actions section, and click New Button or Link.

## In the Label field, enter Candidate Wizard. (The Name field auto-populates.)

## Select the List Button radio button.

## From the Behavior picklist, select Display in existing window without sidebar or header.

## From the Content Source picklist, select URL.

## Scroll down to the text area below the field selection controls box and enter the following URL without any spaces: /flow/Candidate\_Wizard?retURL=/home/home.jsp

## Click Check Syntax.

## Click Save.

## Click OK.

## Click Create | Objects | Candidate.

## Click Edit next to Candidate List View Search Layout.

## Move the Candidate Wizard button from the Available buttons column to the Selected Buttons column.

## Click Save.

# Modify the Recruiting and HR profile to grant the Run Flows permission.

## Navigate to Setup | Manage Users | Profiles | Custom – Recruiter.

## Select System Permissions and click Edit.

## Select Run Flows and click Save.

## Repeat these steps for the Custom – HR profile.

# Run the flow.

## Click the Candidates tab.

## Click GO!

## Click Candidate Wizard.

## Enter sample data in the wizard.

## Verify that the new candidate record was created.

15-1: Audit Changes Using Setup Audit Trail

Scenario:

Universal Containers needs to be able to track all changes to Salesforce.

Goal:

View the Setup Audit Trail.

Tasks:

# View the Setup Audit Trail.

# Create a new field to see how it appears in the Setup Audit Trail.

# View the addition of the Drivers License Number field in Setup Audit Trail.

Time:

10 minutes

Instructions:

# View the Setup Audit Trail.

## Click Setup | Security Controls | View Setup Audit Trail.

## View the entries for the changes that you have made to the application so far.

# Create a new field to see how it appears in the Setup Audit Trail.

## Click Setup | Create | Objects | Candidate.

## Scroll down to the Custom Fields & Relationships related list, and click New.

## Select the Text radio button from the Data Type picklist, and click Next.

### Field Label: Drivers License Number

### Length: 30

### Field Name: Drivers\_License\_Number (This field auto-populates.)

## Click Next.

## Set the field visible for the Custom-HR, Custom-Executive, Custom-Recruiter, and System Administrator profiles, and click Next.

## Click Save to add the field to the Candidate Layout.

# View the addition of the Drivers License Number field in Setup Audit Trail.

## Click Setup | Security Controls | View Setup Audit Trail.

## View the new entries for the creation of the new field.

15-2: Audit Changes to Data

Scenario:

Universal Containers needs to be able to track changes to any field on reviews.

Goal:

Set up field history tracking to track changes to specified fields.

Tasks:

# Select the fields on which to track history.

# Add the Review History related list to the page layout.

# View the field history tracking at work.

Time:

10 minutes

Instructions:

# Select the fields on which to track history.

## Click Setup | Create | Objects | Review.

## In the Custom Fields & Relationships related list, click Set History Tracking.

## Select all fields.

## Click Save.

# Add the Review History related list to the page layout.

## Scroll down to the Page Layouts section, and click the Edit link next to Review Layout.

## On the palette, click the Related Lists category.

## Drag Review History and drop it at the bottom of the page.

## Click Save.

## Click Yes when you see the Overwrite Users’ Related List Customizations? pop-up.

# View the field history tracking at work.

## Click the Reviews tab.

## Click on any review.

## Click Edit.

## In the Alternate Position field, enter: May also be a good fit for the Associate Developer position.

## Click Save.

## Note the change in the Review History related list.

16-1: Mass Transfer Ownership of Records

Scenario:

Universal Containers (UC) realizes that the recruiting data loaded into its Recruiting App has been assigned to the wrong owner. The company needs to clean up the ownership without executing an additional data load.

Goal:

Utilize the mass transfer records feature of the Force.com platform to assign proper ownership of records.

Tasks:

Use the mass transfer records feature to assign all positions, job applications, candidates, and offers to Phil Katz.

Time:

10 minutes

Instructions:

# Use the mass transfer records feature to assign all positions, job applications, candidates, and offers to Phil Katz.

## Assign all positions to Phil Katz.

### Click Setup | Data Management | Mass Transfer Records | Transfer Positions.

### Transfer from: User

### Transfer to: Phil Katz

### Click Find.

### Select all positions.

### Click Transfer.

## Repeat Step A for all candidates, job applications, and offers.

16-2: Upload Positions

Scenario:

Universal Containers would like to load legacy recruiting data into the Recruiting App.

Goal:

Upload the records from the positions.csv file into Salesforce.

Tasks:

# Download the legacy position data.

# Upload the legacy position records.

# Go into the app and view some of the positions you have uploaded.

Time:

15 minutes

Instructions:

# Download the legacy position data.

If you completed "Exercise 13-2: Creating Dynamic Approval Processes (Optional)" you already downloaded the needed exercise files and do not need to complete this step.

## Click the Documents tab.

## Select Shared Documents from the Folder picklist.

## Click the DEV401.zip file.

## Click View File.

## In the File Download dialog box, click Save.

## In the Save As dialog box, select to save the file to the desktop, and click Save.

## Right-click the downloaded .zip file and select Extract All.

# Upload the legacy position records.

## Double-click the Apex Data Loader icon on the desktop.

If the Data Loader is not already installed, download it from Setup | Data Management | Data Loader.

## Click Upsert.

## Log in by entering your Username and Password.

### Click Login.

### Click Next when you see the "Login completed successfully" message.

## Select Position from the list of objects.

## Select the Positions.csv file.

### Click Browse.

### Browse to Positions.csv (in the M16\_DataManagementExerciseFiles folder of the DEV401.zip file) and click Open.

### Click Next. A message saying “Initialization Succeeded. Your operation will contain 10 records” will appear.

### iv. Click OK.

## Select Legacy\_Position\_Number\_\_c as the key field to use with the Position\_\_c field and click Next.

## Select Legacy\_Employee\_Num\_\_c as the key field to use with the Hiring\_Manager\_\_r field.

## Leave all others blank and click Next.

## Create and save the mapping file for the position object.

### Click Create or Edit a Map.

### Click Auto-Match Fields to Columns.

### Verify that the correct columns from the Positions.csv file are matched to the correct fields. Notice that the Legacy\_Employee\_Num\_\_c column is not matched.

### Drag and drop the Hiring\_Manager\_\_r:Legacy\_Employee\_Num\_\_c to the Legacy\_Employee\_Num\_\_c column.

### Click Save Mapping.

### Browse to the Mapping Files directory.

### Type PositionMapping as the file name and click Save.

## Click OK.

## Click Next.

## Select the directory where your success and error files will be saved.

### Click Browse.

### Select Desktop.

### Click OK.

## Click Finish. You should see the following message: "You have chosen to add new records and/or update existing records. The action you are about to take cannot be undone. Are you sure you want to proceed?"

## Click Yes.

## Click View Successes.

## Click Close.

## In the Operation Finished dialog box of the data loader, click OK.

# Go into the app and view some of the positions you have uploaded.

## From the Force.com App Menu,select Recruiting.

## Click the Positions tab.

## From the View picklist, select All, and click Go!

## Find some of the positions you just inserted.

16-3: Upsert Candidates

Scenario:

Universal Containers would like to load legacy recruiting data into the Recruiting App while limiting the possibility of creating duplicate records.

Goal:

Insert the Candidate records via the Data Loader GUI tool.

Tasks:

# Upsert the candidate data from the Candidates.csv file into Salesforce.

# Go into the app and view some of the candidates you have inserted.

Time:

10 minutes

Instructions:

# Upsert the candidate data from the Candidates.csv file into Salesforce.

## Double-click the Apex Data Loader icon on the desktop.

## Click Upsert.

## If needed, log in by entering your Username and Password.

### Click Log in.

### Click Next when you see the "Login completed successfully" message.

## Select Candidate from the list of objects.

## Select the Candidates.csv file.

### Click Browse.

### Browse to Candidates.csv (in the M16\_DataManagementExerciseFiles folder of the DEV401.zip file) and click Open.

### Click Next.

### A message saying “Initialization Succeeded. Your operation will contain 10 records” appears.

### Click OK.

## Select Legacy\_Candidate\_Number\_\_c as the matching field so the data is matched using the legacy system ID.

## Click Next.

## Select the related objects to create the relationships in the data.

### Select Legacy\_Employee\_Num\_\_c as the CreatedBy field.

### Select Legacy\_Employee\_Num\_\_c as the LastModifiedBy field.

## Click Choose an Existing Map.

## Select the CandidateMapping.sdl file from the Mapping File folder and click Open.

## Click Next.

## Select the directory where your success and error files will be saved.

### Click Browse.

### Select Desktop.

### Click OK.

## Click Finish. You should see the following message: "You have chosen to add new records and/or update existing records. The action you are about to take cannot be undone. Are you sure you want to proceed?"

## Click Yes.

## Click View Successes.

## Click Close.

## In the Operation Finished dialog box of the data loader, click OK.

# Go into the app and view some of the candidates you have inserted.

## From the Force.com App Menu, select Recruiting.

## Click the Candidates tab.

## From the View picklist, select All, and click Go!

## Find some of the candidates you just inserted.

16-4: Upsert Remaining Object Data (Optional)

Scenario:

Universal Containers would like to load the rest of the legacy recruiting data into the Recruiting App.

Goal:

Upsert the remaining legacy records via the Data Loader GUI tool.

Task:

Execute an upsert of the legacy records via the Data Loader using existing mapping files.

Time:

10 minutes

Instructions:

Execute an upsert for the remaining objects in the recruiting app (Job Applications, Interviewers, Reviews, and Offers) using the mapping files in the Mapping Files folder in the M16\_DataManagementExerciseFiles folder of the DEV401.zip file.

17-1: Which is Best Solved Using Visualforce?

Goal:

Determine if these scenarios are best solved using Visualforce.

Task:

Review each scenario and determine if Visualforce would be the best solution.

Time:

15 minutes

Instructions:

# The recruiting team would like to display a map showing the candidate’s location on each candidate record.

# The sales team would like to include a Chatter feed about the record on the Contact page.

# The recruiting team would like the Programming Languages field to display only when the department is specified as Engineering on a job application.

# The recruiting team would like the Job Applications related list to be the only related list displayed on the Candidate record.

# The Candidate object has a lot of fields and requires scrolling to see all the information. The recruiting team would like every section and related list to display as an individual tab that can be viewed when clicked on.

# The recruiting team would like the candidate list view to match the look and feel of the employee referral web page.

17-2: Create a Visualforce Page

**Scenario:**

The Universal Containers recruiting team needs a fast way to update the expiration date and status for offers.

Goal:

Create and save the Offer Quick Edit Visualforce page.

Tasks:

# Perform the one-time setup steps to create Visualforce pages.

# Create the Offer Quick Edit Visualforce page.

Time:

10 minutes

Instructions:

# Perform the one-time setup steps to create Visualforce pages.

## Navigate to *Your Name* | My Settings | Personal | Advanced User Details in Salesforce.

## Click Edit.

## Select the Development Mode checkbox to enable the Inline Editor.

## Click Save.

# Create the Offer Quick Edit Visualforce page.

## Change the URL in the address bar of the browser to:

[https://*salesforceserver*.salesforce.com/apex/OfferQuickEdit](https://salesforceserver.salesforce.com/apex/OfferQuickEdit)

**Note**: Be sure to replace *salesforceserver*.salesforce.com with the exact site name from your URL, which is typically something like na9.salesforce.com.

A warning is displayed that the page does not exist.

## Click the Create Page OfferQuickEdit link.

## Once the page has been created and loaded, click OfferQuickEdit in the lower left corner of the screen.

## Delete all of the text between the <apex:page> components (lines 2-5) and enter:

<b>Hello World!</b>

## Click Save.

17-3: Use a Standard Controller and Override a Standard Page

**Scenario:**

The Universal Containers recruiting team needs a fast way to update the expiration date and status for offers.

Goal:

Modify the Offer Quick Edit page to include the Offer standard controller.

Tasks:

# Add the Offer standard controller to the page.

# Override the standard Offer view page.

Time:

10 minutes

Instructions:

# Add the Offer standard controller to the page.

## Open the Offer Quick Edit page by navigating to:

[https://*salesforceserver*.salesforce.com/apex/OfferQuickEdit](https://salesforceserver.salesforce.com/apex/OfferQuickEdit)

## Add the Offer standard controller to the <apex:page> component:

<apex:page standardController="Offer\_\_c">

## Save the page.

# Override the standard Offer view page.

## Navigate to Setup | Create | Objects | Offer.

## In the Buttons, Links, and Actions related list, click the Edit link next to View.

## Select the Visualforce Page radio button and select OfferQuickEdit [OfferQuickEdit] from the picklist, then click Save.

## Click the Offers tab.

## Open an available offer.

## Does the new Offer Quick Edit page appear?

17-4: Find Components and Their Attributes

Goal:

Use the component reference to answer the questions.

Task:

Answer the questions below.

Time:

15 minutes

Instructions:

# Find the component that can be used to create a new button.

# What attributes are required for the <chatter:feed> component?

# What is the <analytics:reportChart> component used for?

# What attribute of the <apex:detail> component can be used to hide the related lists?

# What attribute of the <apex:page> component can be used to hide the sidebar?

# Find two components that should be placed within an <apex:pageBlock> component.

# What is the <apex:inputField> component used for?

# What components should be used to create the Offer Quick Edit page?

17-5: Complete the Offer Quick Edit Page

**Scenario:**

The Universal Containers recruiting team needs a fast way to update the expiration date and status for offers.

Goal:

Modify the existing Offer Quick Edit page to include all the components needed to complete it.

Tasks:

# Add the needed components to complete the Quick Edit section.

# Hide the related lists on the page.

# Test the new page.

Time:

15 minutes

Instructions:

# Add the needed components to complete the Quick Edit section.

## Open an Offer record.

## Change the Hello message to include the User’s first name and click save:

<b>Hello {!$User.FirstName}!</b> <br/> <br/>

## Add the Chatter feed to the page using the <chatter:feed> component and click save.

<chatter:feed entityId="{!Offer\_\_c.id}" rendered="true"/>

## Add the <apex:pageMessages> component to display any system messages on the page.

<apex:pageMessages />

## Add the <apex:form> component to begin creating the Quick Edit section.

## Add the page block section using the <apex:pageBlock> component and click save.

<apex:pageBlock title="Quick Edit">

## Using the component reference, copy the usage of the <apex:pageBlockSection> component and paste it within the <apex:pageBlock> component.

## Remove the title and change the column number to 3 on the <apex:pageBlockSection> component.

## Change the input field components to reference the Offer Expiration Date and Offer Status fields and click Save.

<apex:inputField value="{!Offer\_\_c.Status\_\_c}"/>  
<apex:inputField value="{!Offer\_\_c.Offer\_Expiration\_Date\_\_c}"/>

## Add the Save button using the <apex:commandButton> component.

<apex:commandButton action="{!save}" value="Update"/>

## Make sure all components have both open and closing components and click Save.

# Hide the related lists on the page.

## Add the <apex:detail> component after the <apex:form> component to display the rest of the Detail page.

## Add the relatedList attribute to the component and set it to false.

<apex:detail relatedList="false"/>

## Save the page.

# Test the new page.

## Click the Offers tab.

## Open an available offer. Does the new Quick Edit section appear?

## Change the status of an offer and click Update. Does the Offer record update?

17-6: Create the Candidate Page

**Scenario:**

Universal Containers would like the name and picture of the candidate to display at the top of the candidate page.

Goal:

Create the candidate Visualforce page.

Tasks:

# Create the candidate page.

# Add the needed components to display the candidate's name and picture.

# Complete the page.

# Override the standard candidate page.

# Test the new page.

Time:

20 minutes

Instructions:

# Create the candidate page.

## Add /apex/candidate to the URL.

## Click the Create Page Candidate link.

## Add the Candidate standard controller to the <apex:page> component.

<apex:page standardController="Candidate\_\_c">

## Save the page.

# Add the needed components to display the candidate's name and picture.

## Add the <apex:pageMessages> component to display any error message on the page.

<apex:pageMessages />

## Add the needed components to create the page section to display the candidate’s name and picture.

<apex:pageBlock >

<apex:pageBlockSection >

</apex:pageBlockSection>

</apex:pageBlock>

## Insert the candidate's name in the page using HTML tags.

<b>{!Candidate\_\_c.First\_Name\_\_c} {!Candidate\_\_c.Last\_Name\_\_c}</b>

## Display the candidate's picture using the <apex:outputField> component.

<apex:outputField value="{!Candidate\_\_c.Picture\_\_c}" label=" "/>

## Save the page.

# Complete the page.

## Add the needed components to display the Chatter feed.

<chatter:feed entityId="{!Candidate\_\_c.id}" rendered="true"/>

## Add the components to display the rest of the fields.

<apex:detail />

## Make sure all components have the needed closing components.

## Save the page.

# Override the standard candidate page.

## Navigate to Setup | Create | Objects | Candidate.

## In the Buttons, Links, and Actions related list, click the Edit link next to View.

## Select the Visualforce Page radio button and select Candidate [Candidate] from the picklist, then click Save.

# Test the new page.

## Click the Candidates tab.

## Open an existing candidate. Does the candidate's name and picture appear at the top?

17-7: Create the Review Page (Optional)

**Scenario:**

Universal Containers would like the Review object's Edit page to provide more guidance about what score should be entered. They would like the score fields to be replaced with radio buttons that match this:

* Excellent = 5.0
* Good = 4.0
* Average = 3.0
* Fair = 2.0
* Poor = 1.0

Goal:

Create a Visualforce page for the Review object that displays the score fields as radio buttons.

Tasks:

# Create the review page.

# Add the components to display the Save and Cancel buttons.

# Add the components to display the fields in the information section.

# Add the needed components to display radio buttons for the score fields.

# Override the review edit page.

# Test the new page.

Time:

15 minutes

Instructions:

# Create the review page.

## Create a new Visualforce page with the name reviewscore.

## Add the Review standard controller to the <apex:page> component. <apex:page standardController="Review\_\_c">

## Below the line you just updated, add the pageMessages tag to display errors.

<apex:pageMessages/>

## Save the page.

# Add the components to display the Save and Cancel buttons.

## Create the structure of the page by adding the needed <apex:form>, <apex:sectionHeader>, and <apex:pageBlock> components.

<apex:form >  
 <apex:sectionHeader title="Review Edit" subtitle="New Review"/>  
 <apex:pageBlock title="Main Detail" mode="edit">

## Add the Save and Cancel buttons using the <apex:pageBlockButton> and <apex:commandButton> components.

<apex:pageblockButtons >  
 <apex:commandButton action="{!save}" value="Save"/>  
 <apex:commandButton action="{!cancel}" value="Cancel"/>  
</apex:pageblockButtons>

## Save the page.

# Add the components to display the fields in the information section.

## Create a section named Information using the <apex:pageBlockSection> component.

<apex:pageBlockSection columns="2" Title="Information">

## Display the Interviewer, Recommend for Hire, Job Application, Reason Recommended, and Legacy Review Number fields in the information section using the <apex:inputField> component.

<apex:pageBlockSection columns="2" Title="Information">  
 <apex:inputField value="{!Review\_\_c.Interviewer\_\_c}"/>   
 <apex:inputField value="{!Review\_\_c.Recommend\_for\_Hire\_\_c}"/>   
 <apex:inputField value="{!Review\_\_c.Job\_Application\_\_c}"/>  
 <apex:inputField value="{!Review\_\_c.Reason\_Recommended\_\_c}"/>   
 <apex:inputField value="{!Review\_\_c.Legacy\_Review\_Number\_\_c}"/>  
</apex:pageBlockSection>

## Save the page.

# Add the needed components to display radio buttons for the score fields.

## Create a section named Score using the <apex:pageBlockSection> component.

<apex:pageBlockSection columns="1" Title="Scores">

## Copy the contents of the file 17-7--CreatetheReviewPage.txt found in the M17\_IntroVisualforcePagesExerciseFiles\Exercises folder into the editor within the <apex:pageBlockSection> component.

## Save the page.

## Display the Cultural Comments field using the <apex:inputField> component.

<apex:inputField value="{!Review\_\_c.Cultural\_Comments\_\_c}"/>

## Change the Experience field to display as radio buttons using the <apex:selectRadio> and <apex:selectOption> components. The contents copied in Step B can be used as a starting point.

<apex:selectRadio label="Experience" value="{!Review\_\_c.Experience\_\_c}">  
 <apex:selectOption itemLabel="Excellent" itemValue="5.0"/>  
 <apex:selectOption itemLabel="Good" itemValue="4.0"/>  
 <apex:selectOption itemLabel="Average" itemValue="3.0"/>  
 <apex:selectOption itemLabel="Fair" itemValue="2.0"/>  
 <apex:selectOption itemLabel="Poor" itemValue="1.0"/>  
</apex:selectRadio>

## Display the Experience Comments field using the <apex:inputField> component.

<apex:inputField value="{!Review\_\_c.Experience\_Comments\_\_c}"/>

## Change the Leadership Skills field to display as radio buttons using the <apex:selectRadio> and <apex:selectOption> components. The contents copied in Step B can be used as a starting point.

<apex:selectRadio label="Leadership Skills" value="{!Review\_\_c.Leadership\_Skills\_\_c}">  
 <apex:selectOption itemLabel="Excellent" itemValue="5.0"/>  
 <apex:selectOption itemLabel="Good" itemValue="4.0"/>  
 <apex:selectOption itemLabel="Average" itemValue="3.0"/>  
 <apex:selectOption itemLabel="Fair" itemValue="2.0"/>  
 <apex:selectOption itemLabel="Poor" itemValue="1.0"/>  
</apex:selectRadio>

## Display the Leadership Comments field using the <apex:inputField> component.

<apex:inputField value="{!Review\_\_c.Leadership\_Comments\_\_c}"/>

## Save the page.

## Make sure all components have the needed closing components.

## Save the page.

# Override the review new page.

## Navigate to Setup | Create | Objects | Review.

## In the Buttons, Links, and Actions related list, click the Edit link next to New.

## Select the Visualforce Page radio button and select reviewscore [reviewscore] from the picklist, then click Save.

# Test the new page.

## Click the Reviews tab.

## Click New. Do the Cultural Fit, Experience, and Leadership Skills fields appear as radio buttons?

17-8: Create the Console Page Template and Job Application Console Page

Scenario:

The Universal Containers recruiting team would like a console page that pulls in information from Job Application, Position, and Candidate. Instead of building a one-off Job Application console page, a template should be built so it can be used for several different console pages.

Goal:

Create a console page made up of a Visualforce template and a Visualforce page to replace the Job Application page.

Tasks:

# Download the needed exercise files.

# Create the custom console template page.

# Create the Job Application console page.

# Override the Job Application view to use the new console page.

# Give the recruiting team access to the new console page.

# Test the new functionality.

Time:

25 minutes

Instructions:

# Download the needed exercise files.

If you completed "Exercise 13-2: Creating Dynamic Approval Processes (Optional)" you already downloaded the needed exercise files and do not need to complete this step.

## Click the Documents tab.

## Select Shared Documents from the Folder picklist.

## Click the DEV4.zip file.

## Click View File.

## In the File Download dialog box, click Save.

## In the Save As dialog box, select to save the file to the desktop, and click Save.

## Right-click the downloaded .zip file and select Extract All.

# Create the custom console template page.

## Create the console template using ConsoleTemplate as the name.

## Copy the entire contents of the file 17-8--CreatetheConsolePageTemplate.txt found in the M17\_IntroVisualforcePagesExerciseFiles folder of the DEV401.zip file into the editor.

## Complete the three sections of the code marked TODO using the <apex:insert> component and the needed attributes. Be sure to save as you work.

# Create the Job Application console page.

## Create the Job Application console page with the name JobApplicationConsole.

## Open a Job Application record in a new tab.

## Copy the Salesforce record ID from the end of the URL:

https://*salesforceserver*.salesforce.com/*RecordID*

## Return to the tab where you created the JobApplicationConsole Visualforce page and add ?id=*RecordID* to the end of the URL and press ENTER. Use the record ID copied in Step C as RecordID.

## Copy the entire contents of the file 17-8--JobApplicationConsole.txt found in the M17\_IntroVisualforcePagesExerciseFiles folder of the DEV401.zip file into the editor.

## Complete the four sections of the code marked TODO using the <apex:composition> and <apex:define> components. Be sure to save as you work.

# Override the Job Application view to use the new console page.

## Navigate to Setup | Create | Objects | Job Application.

## In the Buttons, Links, and Actions related list, click the Edit link next to View.

## Select the Visualforce Page radio button and select JobApplicationConsole [JobApplicationConsole] from the picklist, then click Save.

# Give the recruiting team access to the new console page.

## Navigate to Setup | Manage Users | Profiles | Custom – Recruiter.

## Select Visualforce Page Access and click Edit.

## Select JobApplicationConsole and move it to Enabled Visualforce Pages and click Save.

# Test the new functionality.

## Click the Job Applications tab.

## Open a Job Application record. Is the new Job Application console displayed?

## Can you edit all three of the objects using the respective Edit buttons?

17-9: Add the Confidential Image to the Job Application Console

Scenario:

The Universal Containers recruiting team wants to highlight that the job application information is confidential. They would like the Confidential graphic to display on the console page.

Goal:

Add the Confidential graphic to the Job Application console page.

Tasks:

# Upload the Confidential graphic as a static resource.

# Add the image to the console page.

Time:

10 minutes

Instructions:

# Upload the Confidential graphic as a static resource.

## Navigate to Setup | Develop | Static Resources.

## Click New.

## Enter the following information about the Confidential graphic:

### Name: confidential

### Description: The Confidential graphic for the Job Application console page.

### File: Locate the confidential.png file found in the M17\_IntroVisualforcePagesExerciseFiles folder of the DEV401.zip file.

### Cache Control: Public

## Click Save.

# Add the image to the console page.

## Open a Job Application record.

## Using the inline editor, add the image after the <apex:sectionHeader> component.

<apex:image id="Confidential" value="{!$Resource.confidential}" width="200px"/>

## Save the page.

## Test the page by opening a different Job Application record.

18-1: Add Web Content to a Visualforce Page

Scenario:

Universal Containers wants to display the Employee Referral page at the bottom of the Candidate list view page, so employees can easily refer people to the company.

The employee referral page is still under development, so just use the Salesforce page as a placeholder and do not override the standard Candidate page.

Goal:

Create a Visualforce page that displays a list of candidates and a website.

Tasks:

# Create a Visualforce page that displays the recent candidates.

# Add a website to the page.

Time:

15 minutes

Instructions:

# Create a Visualforce page that displays the recent candidates.

## Create a page with the name CandidateListViewWebpage.

## Add the Candidate standard controller to the page.

## Use the <apex:enhancedList> component and its attributes to display a list of ten candidates 400 px high and click save.

<apex:enhancedList height="400" type="Candidate\_\_c" rowsPerPage="10"/>

# Add the Employee Referral website to the page.

## Add the website to the page using the <apex:iframe> component.

<apex:iframe frameborder="true" height="400px" src="https://www.salesforce.com" scrolling="true" id="EmployeeRefer"/>

## Save the page.

18-2: Create a Mass Edit List Page (Optional)

Scenario:

The Recruiting team would like a page that displays all the available positions where they can edit the status of multiple positions.

Goal:

Create a page that lists a set of records that can be edited.

Tasks:

# Create a Visualforce page that displays a list of positions.

# Add the Save and Cancel buttons.

# Add the needed columns.

# Test the page.

Time:

15 minutes

Instructions:

# Create a Visualforce page that displays a list of positions.

## Create a Visualforce page with PositionMassEdit as the name.

## Copy the entire contents of the file 18-2--CreatingaMassEditListPage.txt found in the M18\_AdditionalVisualforcePagesExerciseFiles folder of the DEV401.zip file into the editor.

## Complete the first TODO task by adding the needed recordSetVar attribute to the <apex:page> component.

## Save the file.

# Add the Save and Cancel buttons.

## Complete the second TODO task using the <apex:pageBlockButtons> and <apex:commandButton> components.

## Save the file.

# Add the needed columns.

## Complete the third TODO task using the <apex:column> component.

## Save the file.

# Test the page.

## Change the status of two different positions and click Save.

## Do the updates display?

18-3: Deploy a Flow using Visualforce

Scenario:

The Recruiting team wants to use the Candidate flow when inputting information for all new candidates.

Goal:

Create a Visualforce page that displays the Candidate flow.

Tasks:

# Create a Visualforce page that displays the Candidate flow.

# Override the standard New view on the Candidate object.

# Modify the recruiting profile to give them access to the page.

Time:

10 minutes

Instructions:

# Create a Visualforce page that displays the Candidate flow.

## Create a page with the name CandidateFlow.

## Add the Candidate standard controller to the page.

## Hide the side bar on the page using the sidebar attribute of the <apex:page> component.

## Use the <flow:interview> component to display the Candidate flow.

<flow:interview name="Candidate\_Wizard" finishLocation="{!URLFOR('/home/home.jsp')}"/>

## Save the file.

# Override the standard New view on the Candidate object.

## Navigate to Setup | Create | Objects | Candidate.

## In the Buttons, Links, and Actions related list, click the Edit link next to New.

## Select the Visualforce Page radio button and select CandidateFlow [CandidateFlow] from the picklist, then click Save.

# Modify the Recruiter profile to give them access to the page.

## Navigate to Setup | Manage Users | Profiles | Custom – Recruiter.

## Select Visualforce Page Access and click Edit.

## Select CandidateFlow and move it to Enabled Visualforce Pages, and click Save.

18-4: Display the Job Site

Scenario:

Universal Containers wants to display the website listed in the Job Posting site record below the record details.

Goal:

Create a Visualforce page that displays the Job Posting site and add it to a page layout.

Tasks:

# Create a Visualforce page that displays the website based on the information in the record.

# Insert the page into the Job Posting site page layout.

Time:

15 minutes

Instructions:

# Create a Visualforce page that displays the website based on the information in the record.

## Create a page with the name JobSite.

## Add the Job Posting Site standard controller to the page.

## Add an iFrame to the page with the following attributes:

### Src: {!Job\_Posting\_Site\_\_c.Job\_Site\_Name\_\_c}

### Frameborder: true

### Height: 200px

### Scrolling: true

### ID: JobSite

## Save the page.

# Insert the page into the Job Posting Site page layout.

## Click Setup | Create | Objects | Job Posting Site.

## In the Page Layouts related list, click Edit on the Job Posting Site layout.

## Drag a new section from the palette to below the System Information section.

### Name: Job Site

### Layout: 1-Column

## Click OK.

## Click Visualforce Pages from the palette.

## Drag the JobSite page to the Job Site section.

## Click Save.

## Create a new Job Post Site record.

### Click Job Posting Sites | New.

#### Description: Testing the new Visualforce page.

#### Job Site Name: https://www.careerbuilder.com

#### Status: Active

### Click Save.

## Does the website display below the record details?

18-5: Create a Partial Page Update for Conditional Fields (Optional)

Scenario:

Universal Containers wants the fields specific to a technical position to appear only when the department is set to either Engineering or IT.

Goal:

Override the Position New page to only display certain fields based on the values of others, and refresh only the part of the page that is required.

Tasks:

# Create a Visualforce page based on the Position page.

# Add the partial page update to the page.

# Override the Position New button.

# Test the page.

Time:

20 minutes

Instructions:

# Create a Visualforce page based on the Position page.

## Create a page with the name PositionPartialPageUpdate.

## In the Page Editor, delete all of the default text and paste in the contents of the 18-5--PositionPartialPageUpdate.txt file found in the M18\_AdditionalVisualforcePagesExerciseFiles folder of the DEV401.zip file.

# Add the partial page update to the page by completing the sections of the code marked TODO.

# Override the Position New button.

## Navigate to Setup | Create | Objects | Position.

## In the Buttons, Links, and Actions related list, click the Edit link next to New.

## Select the Visualforce Page radio button and select PositionPartialPageUpdate [PositionPartialPageUpdate] from the picklist.

## Select the Skip Record Type Selection Page and click Save.

# Test the page.

## Add a new position.

## What happens when you change the Department field value to and from Engineering?