

Building Applications with Force.com – Part 1 (Introducing Business Logic)

Exercise Guide

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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:

1. Create a custom formula field that calculates the overall score from the Review object.
2. Create new records to test your formula.
3. Create a new custom formula field that calculates the **Days Opened** on the Position object.

Time:

10 minutes

Instructions:

1. Create a custom formula field that calculates the overall score from the Review object.
 - A. Click **Setup | Create | Objects | Review**.
 - B. In the Custom Fields & Relationships related list, click **New**.
 - C. In the **Data Type** field, click **Formula**.
 - D. Click **Next**.
 - E. Enter the following field details.
 - i. **Field Label:** Overall Score
 - ii. **Field Name:** Overall_Score (This field auto-populates.)
 - iii. **Formula Return Type:** Number
 - iv. **Decimal Places:** 2
 - F. Click **Next**.
 - G. Add the formula.
 - i. **Overall Score (Number) =:** (Cultural_Fit__c + Experience__c + Leadership_Skills__c + IF(Recommend_for_Hire__c , 5, 1)) / 4
 - ii. Click **Check Syntax** to verify the syntax.
 - iii. Click **Next**.
 - H. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.

- I. Click **Save** to accept the defaults and add the field to the Page Layout.
2. Create new records to test your formula.
 - A. Create a new candidate record.
 - B. Create a new interviewer record, associating it with the position you created in an earlier exercise.
 - C. Create a new job application record, specifying the candidate you created in step 2A.
 - D. Create a new review record.
 - E. Specify the interviewer you created in step 2B.
 - F. Specify the job application you created in step 2C.
 - G. Fill out the fields for scores in **Cultural Fit**, **Experience**, and **Leadership Skills** (acceptable values are 1-5). Check the **Recommend for Hire** field.
 - H. After saving the review record, verify that your formula field was correctly updated on the review.
3. Create a new custom formula field that calculates the **Days Opened** on the Position object.
 - A. Click **Setup | Create | Objects | Position**.
 - B. In the Custom Fields & Relationships related list, click **New**.
 - C. In the **Data Type** field, select **Formula**.
 - D. Click **Next**.
 - E. Enter the following information:
 - i. **Field Label:** Days Opened
 - ii. **Field Name:** Days_Opened (This field auto-populates.)
 - iii. **Formula Return Type:** Number
 - iv. **Decimal Places:** 0
 - F. Click **Next**.
 - G. Add the formula.
 - i. **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**.
 - H. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
 - I. Click **Save** to accept the defaults to add the field to the page layout.
 - J. 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:

1. Create a formula field to pull the candidate full name to display on the offer.
2. Create a formula field to pull the position title to display on the offer.

Time:

5 minutes

Instructions:

1. Create a formula field to pull the candidate full name to display on the offer.
 - A. Click **Setup | Create | Objects | Offer**.
 - B. In the Custom Fields & Relationships section, click **New**.
 - i. In the **Data Type** field, select `Formula`.
 - ii. Click **Next**.
 - C. Enter the following field details:
 - i. **Field Label:** `Candidate Name`
 - ii. **Field Name:** `Candidate_Name` (This field auto-populates.)
 - iii. **Formula Return Type:** `Text`
 - D. Click **Next**.
 - E. Add the formula.
 - i. **Candidate Name (Text) =:**
`Job_Application__r.Candidate__r.First_Name__c & " "&
Job_Application__r.Candidate__r.Last_Name__c`
 - ii. Click **Check Syntax** to verify the syntax.
 - iii. After verifying that there are no errors, click **Next**.
 - F. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
 - G. Click **Save & New** to accept the defaults on the Add to Layout page.
2. Create a formula field to pull the position title to display on the offer.

- A. In the **Data Type** field, enter `Formula`.
- B. Click **Next**.
- C. Enter the following field details:
 - i. **Field Label:** `Position Title`
 - ii. **Field Name:** `Position_Title` (This field auto-populates.)
 - iii. **Formula Return Type:** `Text`
- D. Click **Next**.
- E. Add the formula.
 - i. **Position Title (Text) =:** `Job_Application__r.Position__r.Name`
Note: The label of the Name field is Title.
 - ii. Click **Check Syntax** to verify the syntax.
 - iii. After verifying that there are no errors, click **Next**.
- F. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
- G. Click **Save** to accept the defaults on the Add to Layout page.
- H. 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:

1. Create a roll-up summary field for Total Reviews on the Job Application object.
2. Create a roll-up summary field for Review Scores on the Job Application object.
3. Create a formula field that calculates the Average Review Score for a job application.

Time:

10 minutes

Instructions:

1. Create a roll-up summary field for Total Reviews on the Job Application object.
 - A. Click **Setup | Create | Objects | Job Application**.
 - B. In the Custom Fields & Relationships section, click **New**.
 - i. **Data Type:** Roll-Up Summary
 - ii. Click **Next**.
 - iii. **Field Label:** Total Reviews
 - iv. **Field Name:** Total_Reviews (This field auto-populates.)
 - v. Click **Next**.
 - vi. **Summarized Object:** Reviews
 - vii. **Select Roll-Up Type:** Count
 - viii. **Filter Criteria:** All records should be included in the calculation
 - C. Click **Next**.
 - D. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
 - E. Click **Save & New** to accept the defaults and add to page layouts.
2. Create a roll-up summary field for Review Scores on the Job Application object.
 - A. Continue from previous task.
 - i. **Data Type:** Roll-Up Summary
 - ii. Click **Next**.
 - iii. **Field Label:** Total Review Score

- iv. **Field Name:** Total_Review_Score (This field auto-populates.)
 - v. Click **Next**.
 - vi. **Summarized Object:** Reviews
 - vii. **Roll-Up Type:** Sum
 - viii. **Field to Aggregate:** Overall Score
 - ix. **Filter Criteria:** All records should be included in the calculation
- B. Click **Next**.
 - C. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
 - D. Click **Save & New** to accept the defaults to add to page layouts.
3. Create a formula field that calculates the Average Review Score for a job application.
- A. Enter the following details of the new formula field:
 - i. **Data Type:** Formula
 - ii. Click **Next**.
 - iii. **Field Label:** Average Review Score
 - iv. **Field Name:** Average_Review_Score (This field auto-populates.)
 - v. **Formula Return Type:** Number
 - vi. **Decimal Places:** 2
 - B. Click **Next**.
 - C. Add the formula:
 - i. **Average Review Score (Number) =:** IF (Total_Reviews__c<>0, Total_Review_Score__c / Total_Reviews__c, 0)
 - ii. Click **Check Syntax** to verify the syntax.
 - iii. After verifying that there are no errors, click **Next**.
 - D. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
 - E. Click **Save** to accept the defaults and add the field to the page layout.