

BUILDING APPLICATIONS WITH FORCE.COM - PART 1 (BUILDING YOUR DATA MODEL)

Exercise Guide



Table of Contents

2-1: Create Custom Objects	1
2-2: Create Custom Fields.....	2
2-3: Create Lookup Relationships	6
2-4: Create Master-Detail Relationships	8
2-5: Create a Custom Junction Object.....	10
2-6: Create a Lookup Filter	12

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:

1. Create a Position custom object.
 - A. Click **Setup | Create | Objects**.
 - B. Click **New Custom Object**.
 - i. **Label:** Position
 - ii. **Plural Label:** Positions
 - iii. **Object Name:** Position (This field auto-populates.)
 - iv. **Record Name:** Title
 - v. **Data Type:** Text
 - vi. **Allow Reports:** (selected)
 - vii. **Allow Activities:** (selected)
 - viii. **Track Field History:** (selected)
 - ix. **Allow Search:** (selected)
 - x. **Deployment Status:** Deployed
 - xi. **Add Notes & Attachments related list to default page layout:** (selected)
 - xii. **Launch New Custom Tab Wizard after saving this custom object:** (cleared)
 - C. 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:

1. Add custom fields to the Position and Candidate objects.
2. Create dependent picklists.
3. Add a field for the **Social Security Number** on the Candidate object.

Time:

20 minutes

Instructions:

1. Add custom fields to the Position object.
 - A. Click **Setup | Create | Objects | Position**.
 - B. In the Custom Fields & Relationships related list, click **New**.
 - C. Follow the steps to create the custom fields listed in the table below.
 - i. Set each field to not visible, except for the Custom-Executive, Custom-HR, and System Administrator profiles, and click **Next**.
 - ii. Accept the default to add the field to the Position Layout and click **Save**.
 - iii. 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

Custom Field Type	Custom Field Label	Picklist Values/Notes
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	

Custom Field Type	Custom Field Label	Picklist Values/Notes	
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

2. Create dependent picklists.

- A. In the Custom Fields & Relationships related list, click **Field Dependencies**.
- B. Click **New**.

- i. **Controlling Field:** Department
- ii. **Dependent Field:** Pay Grade

- C. Click **Continue**.
- D. 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

- E. Click **Save**.

- F. Click **New**.
 - i. **Controlling Field:** Status
 - ii. **Dependent Field:** Sub-Status
 - G. Click **Continue**.
 - H. Edit the Field Dependencies as instructed in Step 2D.
 - i. **Open:** Pending, Approved
 - ii. **Closed:** Not Approved, Filled, Cancelled
 - iii. **New:** (none selected)
 - I. Click **Include Values**.
 - J. Click **Save**.
 - K. When you receive a pop-up message that says, “1 controlling values have no dependent values included. Save anyway?” click **OK**.
3. Add a field for the **Social Security Number** on the Candidate object.
- A. Click **Setup | Create | Objects | Candidate**.
 - B. Under the Custom Fields & Relationships related list, click **New**.
 - i. **Data Type:** Text (Encrypted)
 - ii. Click **Next**.
 - iii. **Field Label:** Social Security Number
 - iv. **Length:** 11
 - v. **Field Name:** Social_Security_Number (This field auto-populates.)
 - vi. **Mask Type:** Social Security Number
 - vii. **Mask Character:** X
 - viii. Click **Next**.
 - C. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
 - D. 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:

1. Create a lookup relationship between Job Application and Position.
2. Create a lookup relationship between Position and Hiring Manager.

Time:

5 minutes

Instructions:

1. Create a lookup relationship between Job Application and Position.
 - A. Click **Setup | Create | Objects | Job Application**.
 - B. In the Custom Fields & Relationships related list, click **New**.
 - i. **Data Type:** Lookup Relationship
 - ii. Click **Next**.
 - iii. **Related to:** Position
 - iv. Click **Next**.
 - v. **Field Label:** Position
 - vi. **Field Name:** Position
 - C. Click **Next**.
 - D. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
 - E. To accept the defaults to add the reference field to Page Layouts, click **Next**.
 - F. To accept the defaults to add Custom Related Lists, click **Save**.
2. Create a lookup relationship between Position and Hiring Manager.
 - A. Click **Setup | Create | Objects | Position**.
 - B. In the Custom Fields & Relationships related list, click **New**.
 - i. **Data Type:** Lookup Relationship
 - ii. Click **Next**.

- iii. **Related to:** User
 - iv. Click **Next**.
 - v. **Field Label:** Hiring Manager
 - vi. **Field Name:** Hiring_Manager (This field auto-populates.)
 - vii. Click **Next**.
- C. Set the field visible for the Custom-Executive, Custom-HR, and System Administrator profiles and click **Next**.
- D. 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:

1. Create a master-detail relationship between Interviewer and Position.
2. Create a master-detail relationship between Review and Job Application.

Time:

5 minutes

Instructions:

1. Create a master-detail relationship between Interviewer and Position.
 - A. Click **Setup | Create | Objects | Interviewer**.
 - B. In the Custom Fields & Relationships related list, click **New**.
 - i. **Data Type:** Master-Detail Relationship
 - ii. Click **Next**.
 - iii. **Related to:** Position
 - iv. Click **Next**.
 - v. **Field Label:** Position (This field auto-populates.)
 - vi. **Field Name:** Position (Click field to auto-populate.)
 - vii. Click **Next**.
 - C. To accept the defaults for field-level security, click **Next**.
 - D. To accept the defaults to add the field to the page layout, click **Next**.
 - E. To accept the defaults to add the related list to the page layout, click **Save**.
2. Create a master-detail relationship between Review and Job Application.
 - A. Click **Setup | Create | Objects | Review**.

- B. In the Custom Fields & Relationships related list, click **New**.
 - i. **Data Type:** Master-Detail Relationship
 - ii. Click **Next**.
 - iii. **Related to:** Job Application
 - iv. Click **Next**.
 - v. **Field Label:** Job Application
 - vi. **Field Name:** Job_Application (This field auto-populates.)
 - vii. Click **Next**.
- C. To accept the defaults for field-level security, click **Next**.
- D. To accept the defaults to add the field to the page layout, click **Next**.
- E. 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:

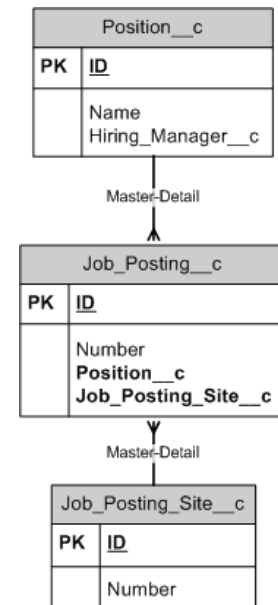
Create a Many-to-Many Relationship between Position and Job Posting Site.

Tasks:

1. Create a new custom junction object.
2. Create the master-detail relationships of Job Posting with Position and Job Posting Site.

Time:

5 minutes



Instructions:

1. Create a new custom junction object.
 - A. Click **Setup | Create | Objects**.
 - B. Click **New Custom Object**.
 - i. **Label:** Job Posting
 - ii. **Plural Label:** Job Postings
 - iii. **Object Name:** Job_Posting (This field auto-populates.)
 - iv. **Record Name:** Job Posting Number
 - v. **Data Type:** Auto Number
 - vi. **Display Format:** JOBPOST-{0000}
 - vii. **Starting Number:** 1
 - viii. **Allow Reports:** (selected)
 - ix. **Allow Activities:** (cleared)
 - x. **Track Field History:** (selected)
 - xi. **Allow Search:** (selected)
 - xii. **Deployment Status:** Deployed
 - xiii. **Add Notes & Attachments related list to default page layout:** (selected)
 - xiv. **Launch New Custom Tab Wizard after saving this custom object:** (cleared)
 - C. Click **Save**.

2. Create the master-detail relationships of Job Posting with Job Posting Site and Position.
 - A. In the Custom Fields & Relationships related list, click **New**.
 - i. **Data Type:** Master-Detail Relationship
 - ii. Click **Next**.
 - iii. **Related to:** Job Posting Site
 - iv. Click **Next**.
 - v. **Field Label:** Job Posting Site
 - vi. **Field Name:** Job_Posting_Site (This field auto-populates.)
 - vii. Click **Next**.
 - B. To accept the defaults for field-level security, click **Next**.
 - C. To accept the defaults to add reference field to Page Layouts, click **Next**.
 - D. To accept the defaults to add the related list to the page layout, click **Save & New**.
 - i. **Data Type:** Master-Detail Relationship
 - ii. Click **Next**.
 - iii. **Related to:** Position
 - iv. Click **Next**.
 - v. **Field Label:** Position
 - vi. **Field Name:** Position (This field auto-populates.)
 - vii. Click **Next**.
 - E. To accept the defaults for field-level security, click **Next**.
 - F. To accept the defaults to add reference field to Page Layouts, click **Next**.
 - G. 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 people manager when creating a new position.

Goal:

Create a lookup filter.

Task:

Create a lookup filter.

Time:

5 minutes

Instructions:

1. Create a lookup filter.
 - A. Click **Setup | Create | Objects | Position**.
 - B. Scroll down to the Custom Fields & Relationships section and click **Hiring Manager**.
 - C. Click **Edit**.
 - D. Under the Lookup Filter section, click the **Show Filter Settings** link.
 - i. **Field:** Hiring Manager: People Manager?
 - ii. **Operator:** equals
 - iii. **Value/Field:** Value
 - iv. **Value:** True
 - v. **Filter Type:** Required
 - vi. 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.
 - vii. **Active:** (selected)
 - E. Click **Save**.