Lesson 1

Force.com Configuration
Relationships

Objective

Introduction & Agenda
Introduction to CRM
Force.com Configuration

- Standard & Custom Objects Review
- Apps review
- User Interface
- Fields & Field Dependencies
- Introducing Page Layouts
- Compact Layouts/Record Types
- Introducing Search Layouts

Relationships

- Master - Details, Many-to-Many, Parent - Child Relationship
- Customizing Related Lists in a Many-to-Many Relationship
- Roll-Up Summary Fields
- Formula Fields

Administration

Set-up the Training Org

All exercises will be performed on a new 30 day training org
To sign-up for your training org, enter the link and follow the instructions:

https://www.salesforce.com/form/signup/freetrial_training.jsp

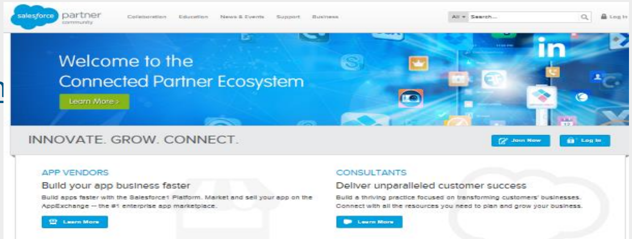
Select: **Building Applications on Force.om**

You will also need to download the various exercise books
When instructed from the attachments tab

Logging into the Partner Training Catalog

All videos can be found in the Partner Training Catalog.
Please log into the Partner Community via:
https://partners.salesforce.com/

and go to:
https://partn



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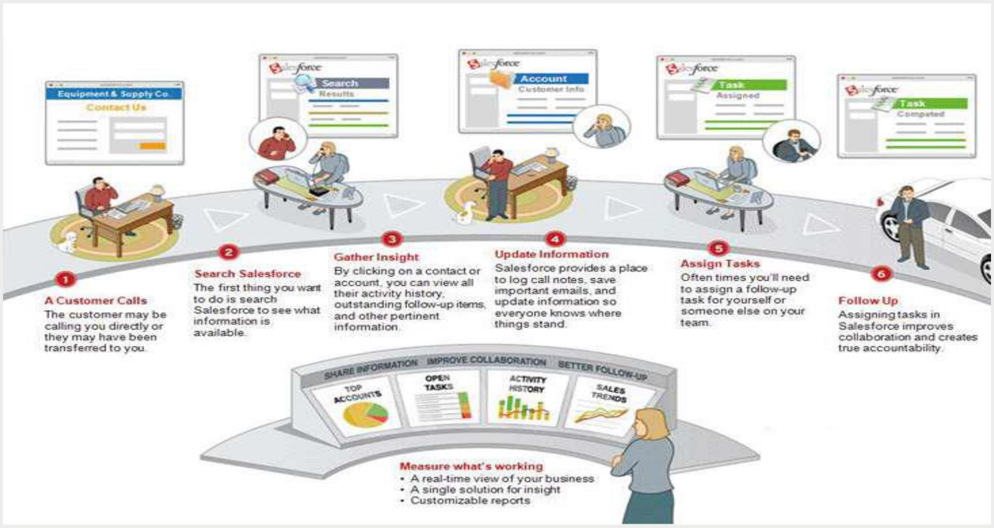
Introduction to CRM

Salesforce CRM Overview

Salesforce CRM Overview



Salesforce CRM Overview

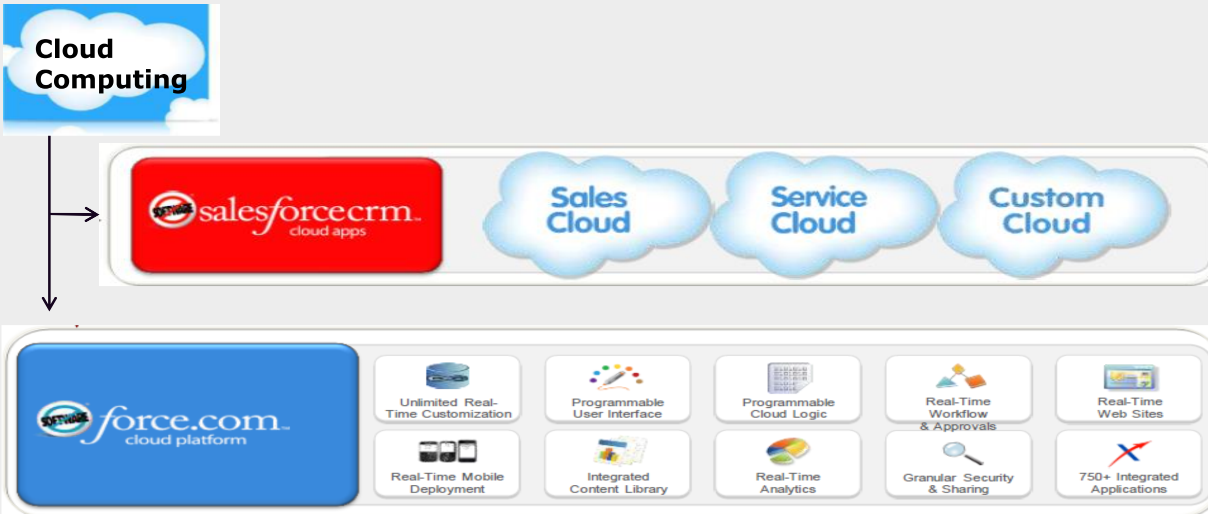
Salesforce CRM Overview

What is SalesForce.Com?

Salesforce CRM is a web-based Customer Relationship Management (CRM) service.

- It hosts the applications offsite & is best known for its Customer Relationship Management (CRM) products.
- It allows you to create a single view of your customers and leads, coordinate your sales, marketing and customer service activities and provides an overview into how your business is operating.
- You can generate, manage, and report on leads, opportunities and track results from first contact to won or lost business.
- You can see the results of your marketing campaigns and understand their impact using real-time analytics.
- It helps to improves efficiency, reduces administration time and lets you focus more on your business by reducing the time taken to search for information by providing a centralised service.

What is Force.com?
Welcome to Cloud2



Sales Cloud
Sales Cloud

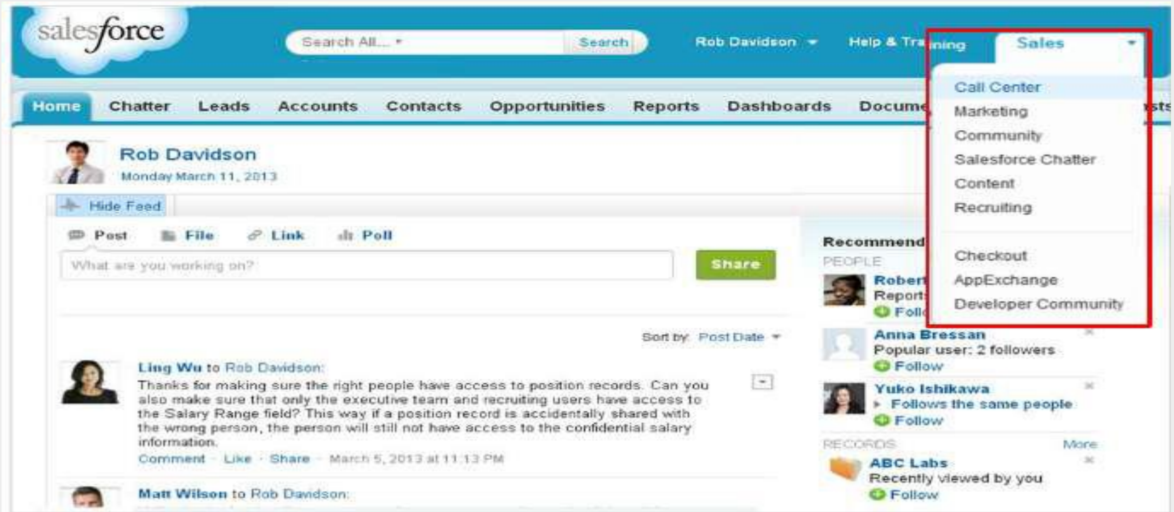
Sales Cloud
Business Drivers, Processes and Sales Cloud Solutions

Business Drivers	Business Processes	Sales Cloud Solutions	
Build a Strong Pipeline	Lead Generation	Automated Lead Capture and Import	Sales Force Automation (SFA)
	Lead Qualification	▪ Lead Scoring & Routing ▪ Lead Conversion ▪ Alerts & Monitoring	
Manage the Funnel	Sales Methodology	Opportunity Management	
	Visibility of the Sales Forecast	Forecasts	
Improve Sales Rep Productivity	Account and Contact Management	▪ 360 Degree View ▪ Approvals	
	Activity Management	Activity Sharing & Tracking	
Drive More Business	Demand Generation	Campaign Management Segmentation	Marketing
	Search Marketing	▪ Website Integration ▪ Google AdWords	
Align Sales and Marketing	Lead Handoff	Feedback from Sales	
	Brand Management	▪ Email Templates ▪ Communications	
	Marketing Collateral Management	Collateral & Documents	

Service Cloud
Service Cloud

Salesforce Application

Salesforce Application



Salesforce Objects
Salesforce Object

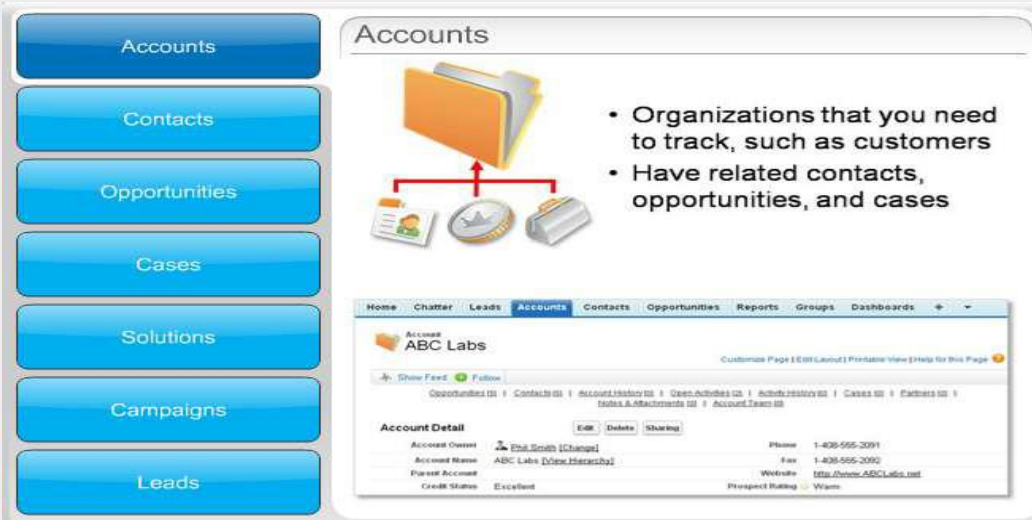
- What are Objects?
- How are they related?
- How can I navigate between them?

An object is a table of data containing records.

	A	B	C	D
1	**Account Owner**	**Account Name**	**Industry**	**Billing City**
2	Phil Smith	ABC Labs	Biotechnology	San Jose
3	Phil Smith	Acme Inc.	Manufacturing	Atlanta
4	Phil Smith	Acme-NY	Manufacturing	New York
5	Phil Smith	American Bank	Banking	Charlotte
6	Phil Smith	American Package	Shipping	Atlanta
7	David Hudson	American Package_UK	Shipping	London
8	Phil Smith	AMP Industries	Manufacturing	San Francisco
9	Phil Smith	AmShip Corporation	Shipping	Memphis
10	Phil Smith	Arbuckle Laboratories	Biotechnology	Arbuckle Park
11	David Hudson	Arbuckle Laboratories - Austria	Biotechnology	Vienna
12	David Hudson	Arbuckle Laboratories - France	Biotechnology	Paris
13	Anjana Shah	Arbuckle Laboratories - Germany	Biotechnology	Weisbaden
14	Phil Smith	Cable Inc.	Entertainment	New York

1.4: Standard Objects

Standard Objects - Accounts

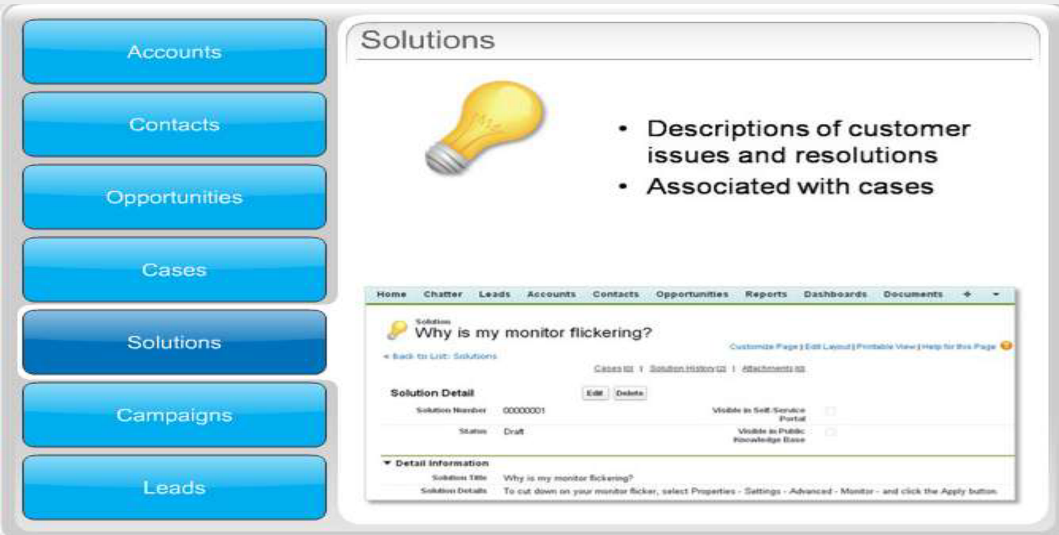


1.4: Standard Objects
Standard Objects - Contacts

1.4: Standard Objects
Standard Objects - Opportunities

Standard Objects
Standard Objects - Cases

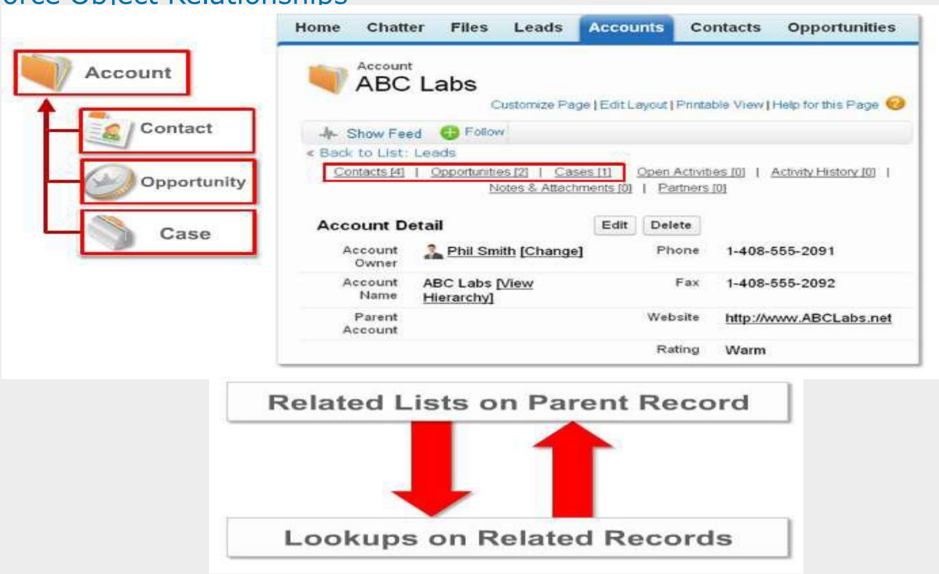
Standard Objects
Standard Objects - Solutions



Standard Objects
Standard Objects - Campaigns

Standard Objects
Standard Objects - Leads

Salesforce Objects
Salesforce Object Relationships



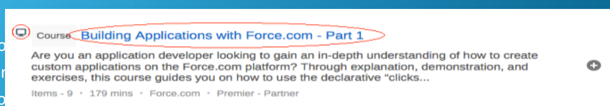
Introduction to Force.com

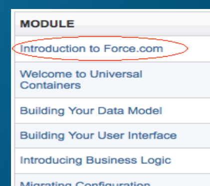
Video: Introduction to Force.com

This training introduces you to the Force.com platform features and functionality (17 min.)

How to Get to this training video ?

- You need an **@partnertraining.com account**.
- If you don't have this account and you work for a Salesforce partner, you need to request an invite from the partner admin in your company to the partner community. Once you have the partner community access you can create a partner training login = xxxx@partnertraining.com
- To avoid a mixup with saved credentials open a private window in a new browsr.
- Browse to http://help.salesforce.com and log in with your @partnertraining.com account.
- Search for "Building Application with Force.com part 1"
- Make sure to select this training (pay attention to the video logo   ):





- Select the mo
- Enjoy the 17 r
- Direct Link: (o wser) https://help.salesforce.com/HTTrainingModulesDetail?courseId=a1S30000000gvGyEAI

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Hands-on Exercise

Prepare your training org

View the hands on exercise steps in the “Introduction to Force.com” Exercise Guide

https://lms.cfs-api.com/v1/content/1ddba721-6e5a-49ab-816c-610776ccbd8a/presentation_content/external_files/introductiontoforce.comexerciseguide.pdf

Exercise 0-1: Sign up for a training org
Exercise 0-2: Prepare your training org

Make sure that all system messages from the org come to you
Make sure you can access the org outside of your corporate network.

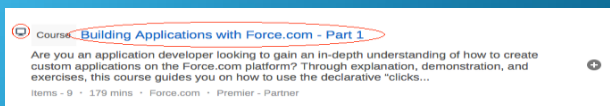
Task: Create a custom Position object.

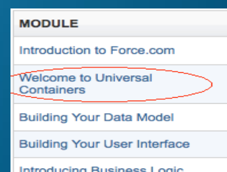
Video: Welcome to Universal Containers

Learn about our case study organization, Universal Containers, and the recruiting application they need to build in Salesforce to solve their business issues. (8 min)

How to Get to this training video ?

- You need an **@partnertraining.com account**.
- To avoid a mixup with saved credentials open a private window in a new browsr.
- Browse to http://help.salesforce.com and log in with your @partnertraining.com account.
- Search for “Building Application with Force.com part 1”
- Make sure to select this training (pay attention to the video logo):





- Select the module “Welcome to Universal Containers”:
- Enjoy the 8 min video.
- Direct Link: (only works after you’ve logged in with your @partnertraining.com account, paste in browser) https://help.salesforce.com/HTTrainingModulesDetail?courseId=a1S30000000gvGyEAI

Who is UC?

Universal Containers
RECRUITING

Mario Ruiz
Recruiter

Recruiters
How many positions are open by a department?

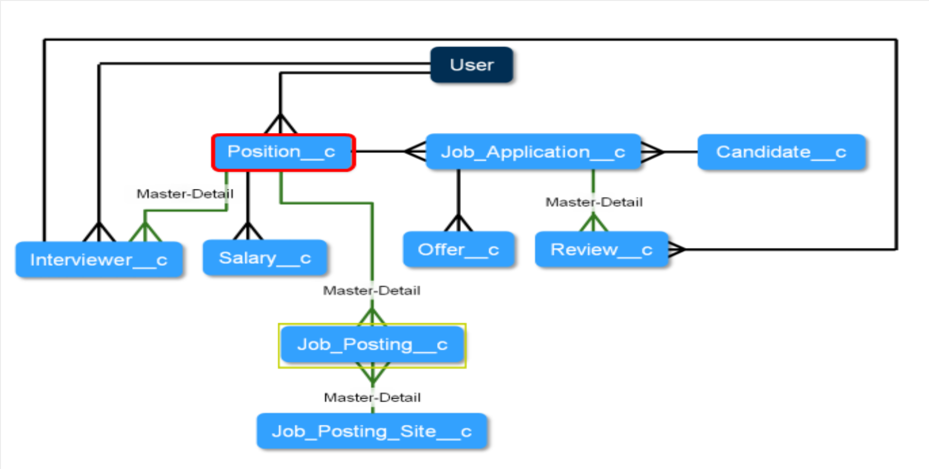
Ben Stuart
SW Dev Manager

Hiring Managers
What are the qualifications of all candidates that have applied for a given position?

Megan Smith
VP Human Resources

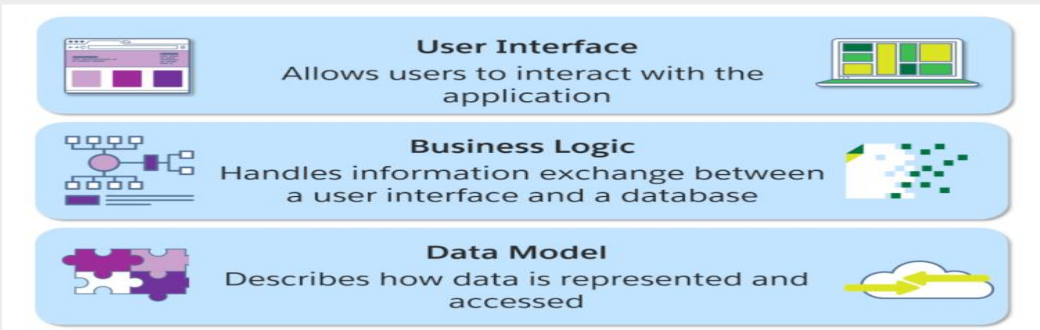
Human Resources Managers
What are the recruiting patterns of new hires?

What is the Structure we Need?



What is a Tiered Model?

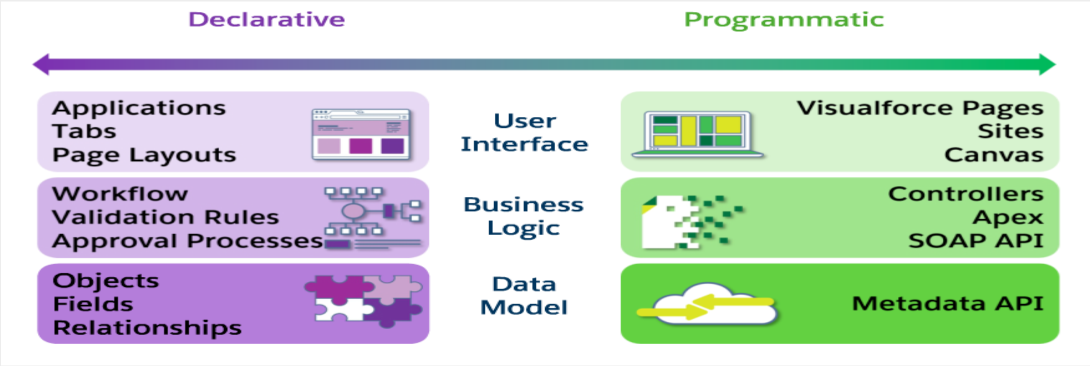
- In a tiered model the application development is divided into different layers
- This makes it possible for different developers work on different layers independently and specialize in specific areas



- Application requirements are defined from the top down and built from the ground up

Application Building Blocks

- The declarative framework is a set of easy-to-use tools to build or customize applications using clicks not code
- Using the programmatic framework provides additional control and flexibility to your customizations

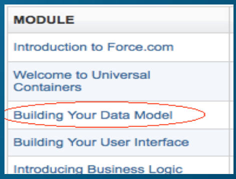


Video: Building Your Data Model

Learn how to create custom objects, custom fields and custom relationships, filters and how to use schema builder (44 min)

How to Get to this training video ?

- You need an **@partnertraining.com account**.
- To avoid a mixup with saved credentials open a private window in a new browsr.
- Browse to http://help.salesforce.com and log in with your @partnertraining.com account.
- Search for “Building Application with Force.com part 1”
- Make sure to select this training (pay attention to the video logo):



- Select the module “Building Your Data Model”:
- Enjoy the 44 min video.
- Direct Link: (only works after you’ve logged in with your @partnertraining.com account, paste in browser) https://help.salesforce.com/HTTrainingModulesDetail?courseId=a1S30000000gvGyEAI

What are Custom Objects?

Objects you create in your own org.

Custom Fields
Relationships to other Objects
Page Layouts

Hands-on Exercise

View the hands on exercise steps in the **Building Applications with Force.com - Part 1** "Building Your Data Model" Exercise Guide

https://lms.cfs-api.com/v1/content/866451e8-66c8-496d-b5e1-6cf54063d7bd/presentation_content/external_files/buildingyourdatamodelexerciseguide.pdf

Exercise 2-1: Creating Custom Objects
Exercise 2-2: Creating Custom Fields
Exercise 2-3: Creating Lookup Relationships
Exercise 2-4: Create Master-Detail Relationships
Exercise 2-5: Creating a Custom Junction Object
Exercise 2-6: Creating a Lookup Filter

Task: Create a custom Position object.

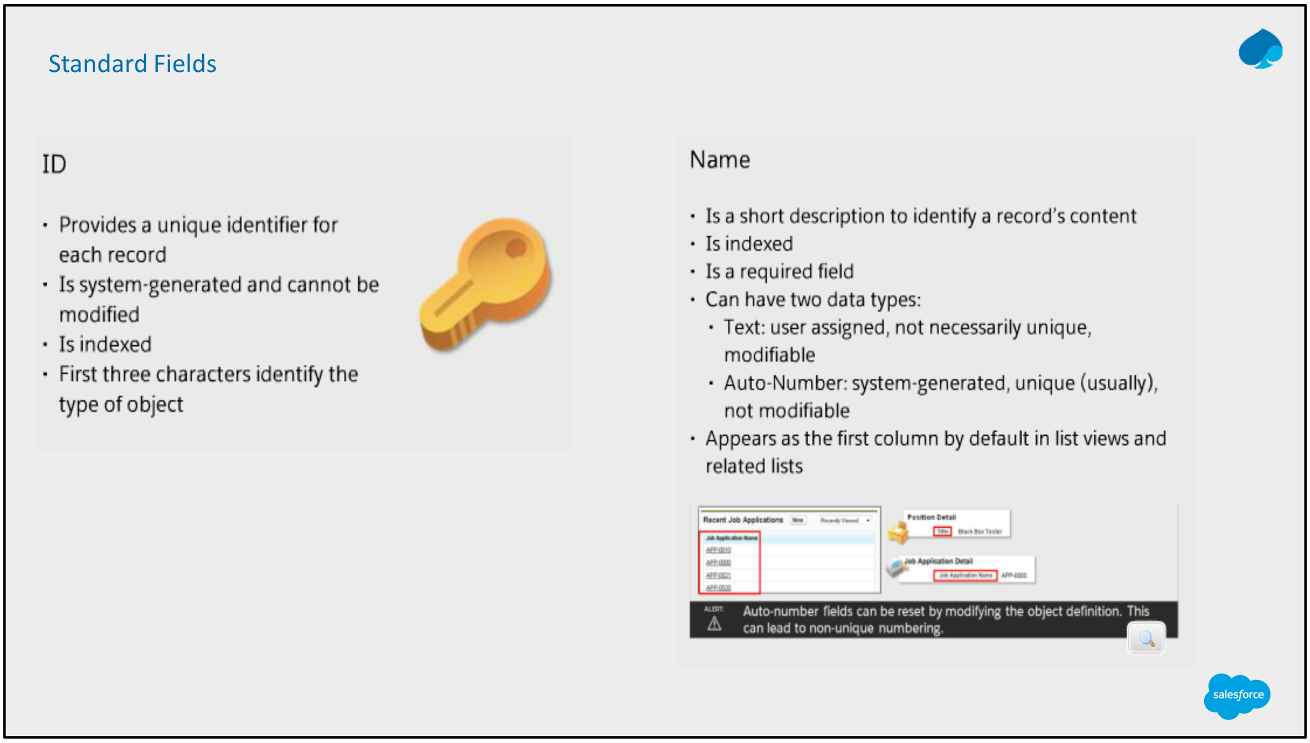
Standard and Custom Fields

Standard fields:
- Change the field label
- Add help text
- Add, edit and reorder values in picklists

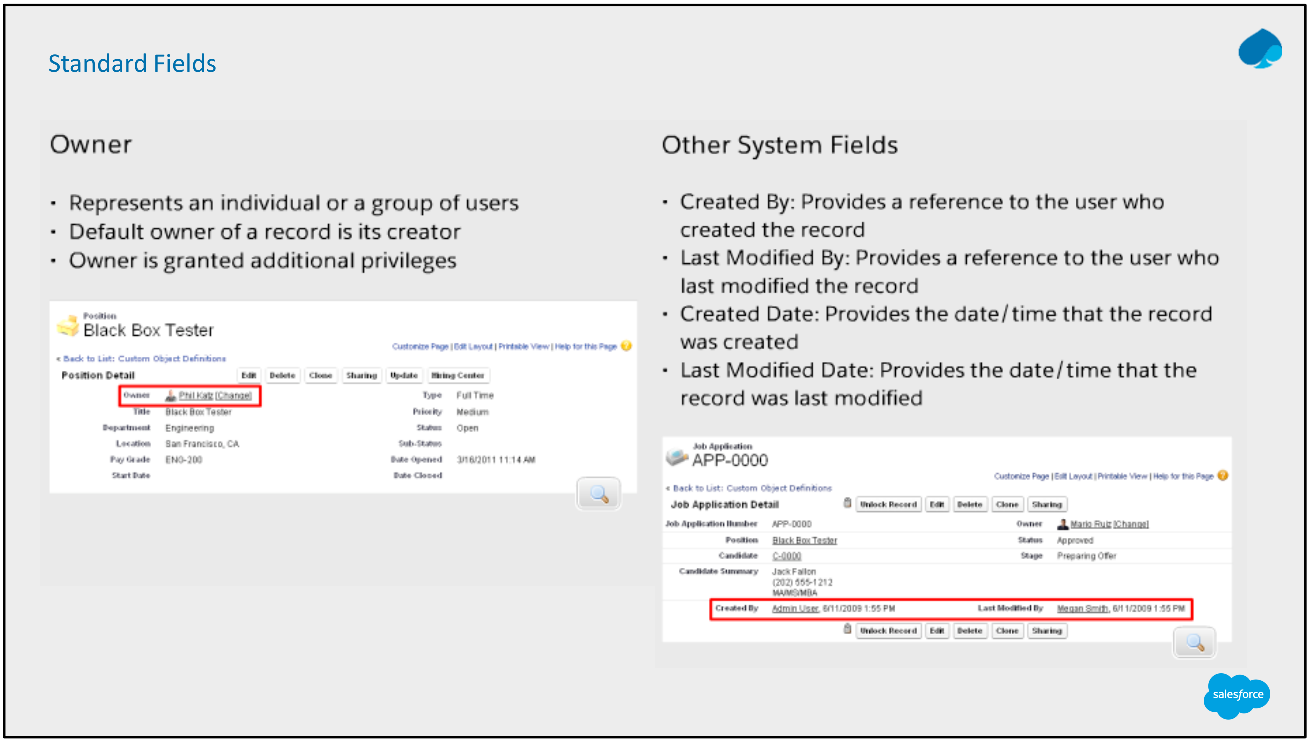
Custom fields:
- Can be deleted
- Changing the data type of a custom field will result in data lost.
- List views based on the field will be deleted, and assignment and escalation rules may be affected. Only modify fields with no data, or consider using new fields.
- Deleting a field will also result in data loss. Salesforce stores deleted fields and their data for a maximum of 15 days, during which you can undelete or permanently erase them

Field-level help allows you to provide information about the purpose and function of a field for your users. The text will be available on any detail or edit page where the field appears.

- Check the parent - child



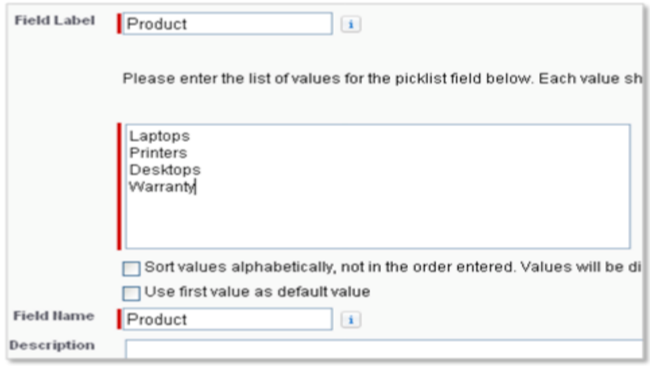
- Field-level help allows you to provide information about the purpose and function of a field for your users. The text will be available on any detail or edit page where the field appears.



- Field-level help allows you to provide information about the purpose and function of a field for your users. The text will be available on any detail or edit page where the field appears.

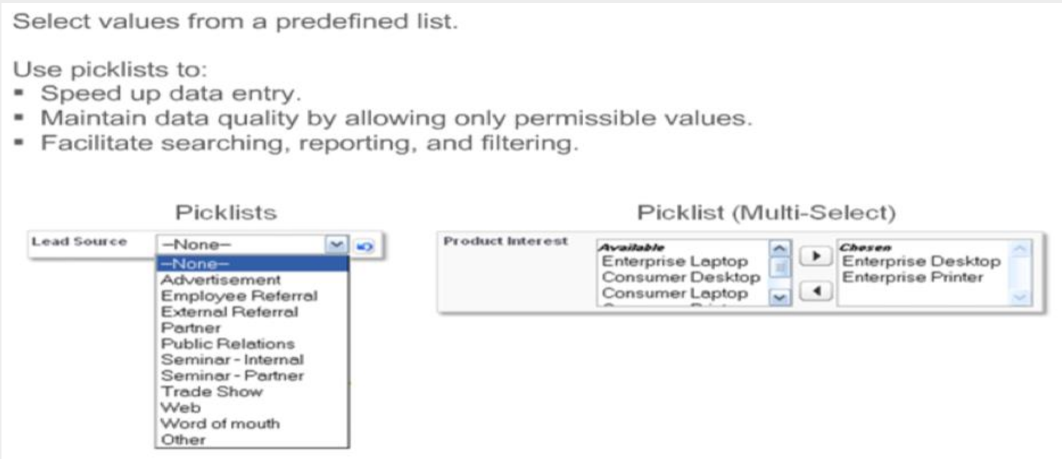
Custom Fields

- Store information and data about custom objects.
- Some examples of available field types include, Text, Formula, Number, Checkbox, and Picklist.
- Allow you to add field level help.
- Enable you to define additional properties, including required, unique, and external ID.
- Can be changed to another data type but may cause data loss.
- When you delete a custom field, both the field and the data are deleted.



- The limit on the number of custom fields per object depends on Salesforce edition.
- Custom fields support a number of data types.

Picklists

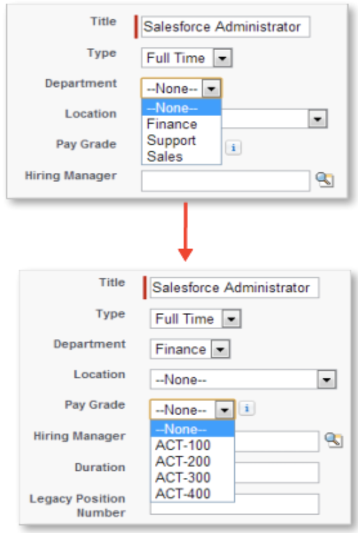


- Allow users to select either single or multiple values from a predefined list during data entry.
- Dependent picklists give you the ability to create multi-level dependencies

- You can link two picklists together to create a controlling-dependent relationship. Users select a value in a controlling picklist, which filters the values available in a second, dependent picklist.

Dependent Picklists

- With custom fields, you can define dependencies between picklists.
- When implementing field dependencies, you select which picklist is dependent and which is controlling.
- Using dependent picklists enables you to create simple lists to categorize data.



Look-up Fields

Allow users to select a record from another object, including the User object.

- They can link two records together to create a parent-child relationship.
- Use a lookup filter to limit the records available in the lookup.
- Lookup filter that references another field on the same object to create a dependent lookup.
- For example, add a lookup filter to the case **Contact** field (dependent) so that it only displays contacts related to the account selected in the case **Account Name** field (controlling).

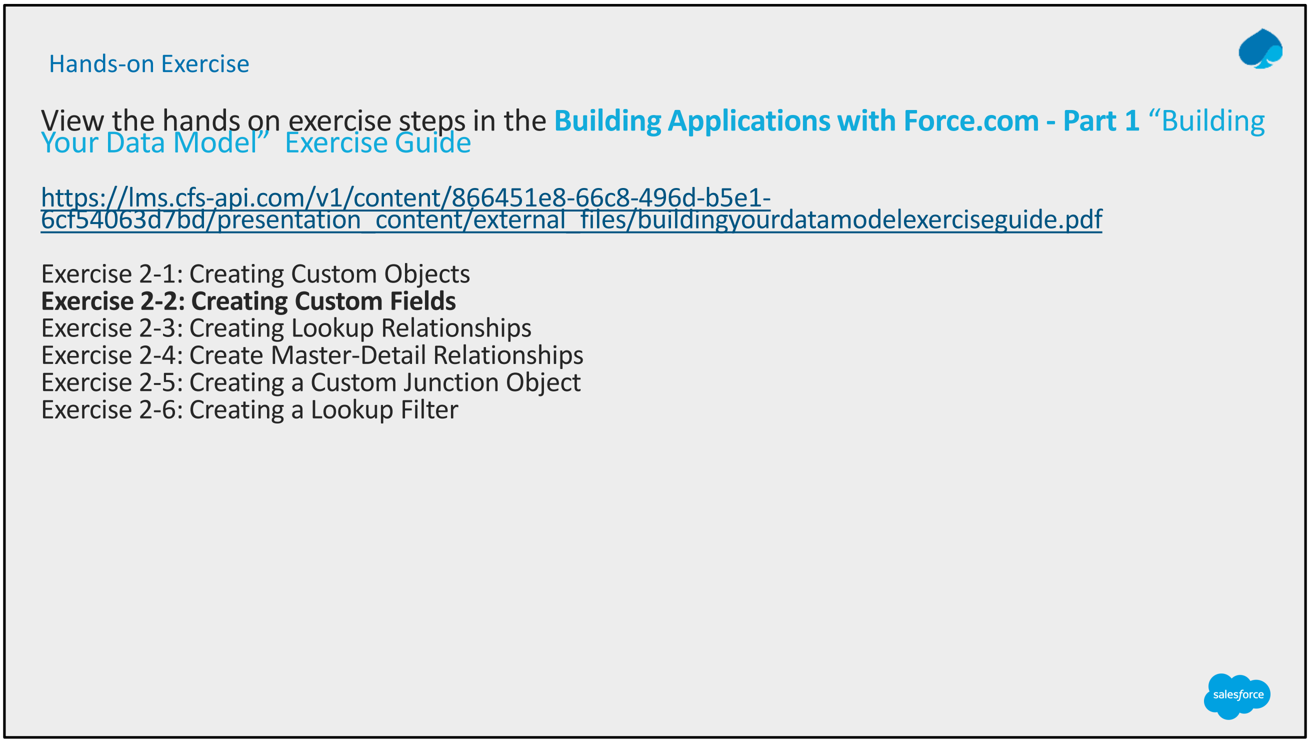
When users change the value in the controlling field, they will see an error message if the dependent lookup value no longer meets the filter criteria.

Field History Tracking

Can be enabled on an object to track changes on up to 20 standard or custom fields.

- Changes can be viewed on a record’s History related list or through History reports.
- Track date and time of change.
- Track the user making the change.
- Track old and new values (not on multi-select picklists and large text fields).
- History Tracking can be performed on all custom objects and the following standard objects:
  Accounts, Contacts, Leads, Cases, Solutions, Contracts, Opportunities

Accounts



Task: Create a custom Position object.

Master Detail Relationships

- A relationship between two different types of records that associates the records with each other.
- The master object can be a standard object, such as Account or Opportunity, or a custom object.
- When a master record is deleted, the related detail records are also deleted.
- The Owner field on the detail record is automatically set to the owner of the master record.
- Custom objects on the “detail” side of a master-detail relationship can't have sharing rules, manual sharing, or queues, as these require the Owner field.
- The security settings for the master record control the detail record.
- The master-detail relationship field is required on the page layout of the detail record.

1) Under Master Detail the lookup field on the child record is a required field (e.g. There must be an opportunity for the shipping record)
2) Under Master Detail the lookup field becomes a read only field as soon as the record is saved.
3) The only way to change the association between the child and the parent is by **deleting** the child and re-entering under the new parent.
4) Under Master Detail there is a cascade delete taking place. E.g. Delete an Account and all the associated Contacts, Opportunities, etc. Are also deleted. Under Look up this is not the case. E.g. Deleting a Case record does not result in all the associated Solutions being deleted.
5) Roll up summary fields can only be created on the Parent record of a Master Detail relationship. (10 max)
6) A custom object defined in a Master Detail relationship that appears in a report will display all the object fields as well as all the parent’s fields.

Look-up Relationships

- A relationship between two records to associate records with each other.
- Allows users to click a lookup icon on a record and select another record from a popup window.
- On the associated record, you can display a related list to show all of the records that have been linked to it.
- If a lookup field references a record that has been deleted, by default Salesforce clears the lookup field.
- Alternatively, you can prevent records from being deleted if they're in a lookup relationship.
- Security is controlled by OWD

1) A custom object created with a Look up relationship appears for full OWD options and sharing rules. A custom object created with a Master Detail relationship can only have the option Controlled by Parent.
2) A custom object defined in Look-up relationship that appears in a report will display only the object's fields are displayed. You may need to create a CRT to get other fields in the fields' list

Relationship Types

Lookup Relationship	Master-Detail Relationship
Parent field on child is not required by default.	Parent field on child is required.
Security and access are independent for objects.	Access to parent determines access to children.
Deletion removes the value only from the lookup field.	Deleting a parent automatically deletes the child.
Link objects across multiple layers.	Link objects can be up to 3 layers. A standard object cannot be a child.
A child object can have up to 40 parents.	A child object can have 2 parents.
Lookup field on page layout depends on required/optional choice.	Lookup field on page layout is required.
Cross-object field updates and roll-up summary fields cannot be done.	Cross-object field updates and roll-up summary fields can be done.

Hands-on Exercise – Building Your Data Model

View the hands on exercise steps in the **Building Applications with Force.com - Part 1** "Building Your Data Model" Exercise Guide

https://lms.cfs-api.com/v1/content/866451e8-66c8-496d-b5e1-6cf54063d7bd/presentation_content/external_files/buildingyourdatamodelexerciseguide.pdf

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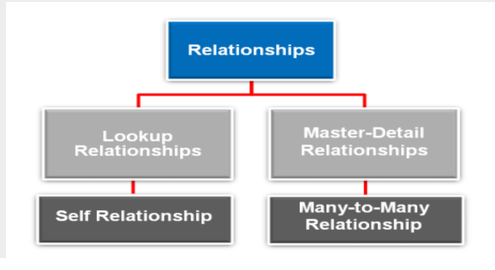
Exercise 2-6: Creating a Lookup Filter

Task: Create a custom Position object.

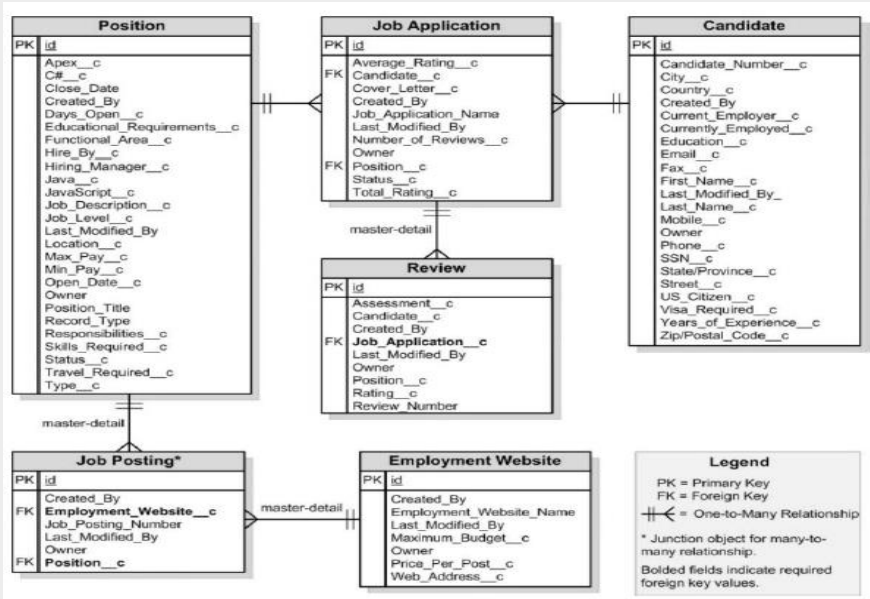
Many-to-Many Relationships

- A many-to-many relationship allows each record of one object to be linked to multiple records from another object and vice versa.
- Many-to-many relationships are implemented through the use of junction objects.



A relationship where each side of the relationship can have many children on the other side.

ERD - Entity Relationship Diagram



You can use master-detail relationships to model *many-to-many* relationships between two standard objects, two custom objects, or a custom object and a standard object.

Hands-on Exercise

View the hands on exercise steps in the **Building Applications with Force.com - Part 1** "Building Your Data Model" Exercise Guide

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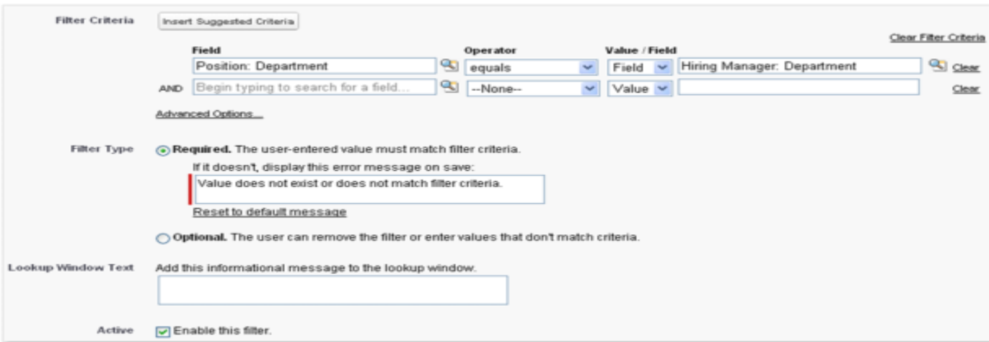
Exercise 2-6: Creating a Lookup Filter

Task: Create a custom Position object.

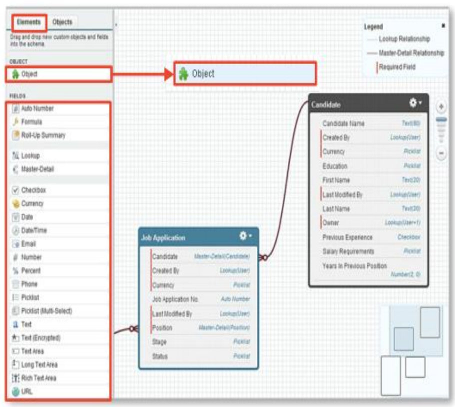
Lookup Filters

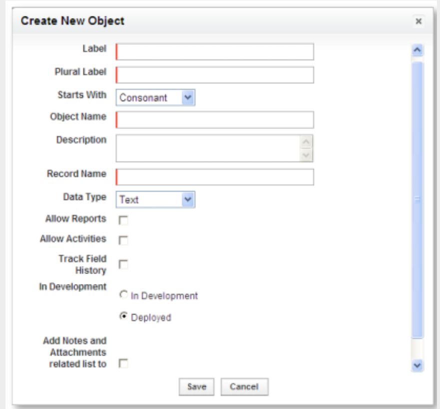
Lookup filters:
- Limit search results for related fields.
- Can compare fields to other fields or static values.
- Can be required or optional.



Schema Builder

- Provides a dynamic environment to add new custom objects, custom fields, and relationships
- Provides a graphical view of Salesforce objects and their relationships
- Can be accessed by navigating to **Setup | Schema Builder**





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Building your User Interface

- Custom Applications
- Custom Tabs
- Modify Page Layouts

Video: Building Your User Interface

See how to modify the user interface with page layouts, custom applications and custom tabs.(29 min)
Custom Applications, Custom Tabs, Modify Page Layouts, …

How to Get to this training video ?

- You need an **@partnertraining.com account**.
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- Browse to http://help.salesforce.com and log in with your @partnertraining.com account.
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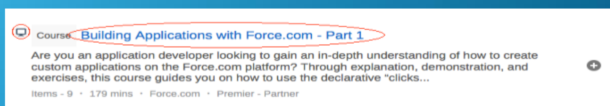

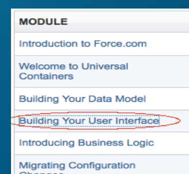

- Select the module “Building Your User Interfacel”:
- Enjoy the 29 min video.
- Direct Link: (only works after you’ve logged in with your @partnertraining.com account, paste in browser)
  https://help.salesforce.com/HTTrainingModulesDetail?courseId=a1S30000000gvGyEAI

Hands-on Exercise

View the hands on exercise steps in the **Building Applications with Force.com**
"Building Your User Interface" Exercise Guide

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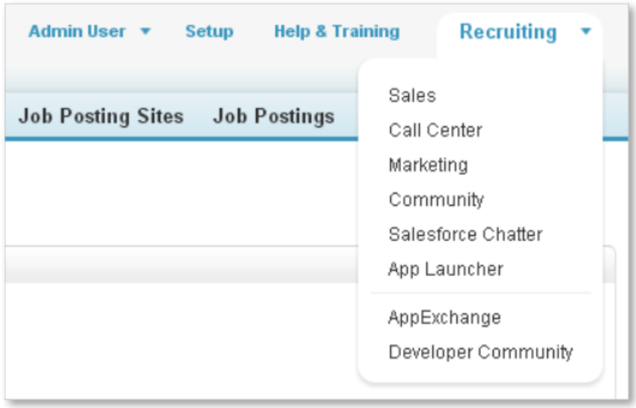
Exercise 3-1: Creating a Custom Application
Exercise 3-2: Creating Custom Tabs
Exercise 3-3: Customizing Page Layouts

Task: Create a custom Position object.

Custom App

- There are three declarative ways to make changes to the user interface: custom applications, custom tabs, and page layouts.
- A Force.com custom app consists of a name, a description, an ordered set of tabs, and optionally, a custom logo and a landing page.
- Salesforce provides standard applications such as Sales and Call Center.
- You can create custom applications to meet your unique business needs.



Hands-on Exercise

View the hands on exercise steps in the **Building Applications with Force.com**
"Building Your User Interface" Exercise Guide

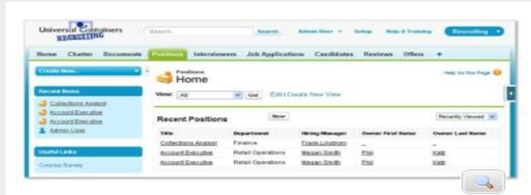
https://lms.cfs-api.com/v1/content/3369d5e3-7116-4772-ad54-b90d9eace3bc/presentation_content/external_files/buildingyouruserinterfaceexerciseguide.pdf

Exercise 3-1: Creating a Custom Application
Exercise 3-2: Creating Custom Tabs
Exercise 3-3: Customizing Page Layouts

Task: Create a custom Position object.

Custom Tabs

- Custom Object Tabs
- Web Tabs
- Visualforce Tabs



Hands-on Exercise

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Exercise 3-1: Creating a Custom Application
Exercise 3-2: Creating Custom Tabs
Exercise 3-3: Customizing Page Layouts
3-4: Enable Chatter on the Position Object
3-5: Create an Object-Specific Quick Action
3-6: Create a Global Quick Action and a Global Layout for HR

Task: Create a custom Position object.

Page Layouts

A page layout controls the position and organization of the fields, sections, buttons and related lists that are visible to users when viewing or editing a record.
Page layouts also help us control the visibility and editability of the fields on a record. We can set fields as read-only or hidden, and we can also control which fields require users to enter a value and which don't.

- Page layouts are powerful tools for creating a good experience for our users, but it's crucial that
- we remember one important rule: *page layouts should never be used to restrict access to sensitive*
- *data that a user shouldn't view or edit. Although we can hide a field from a page layout, users*
- can still access that field through other parts of the app, such as in reports or via the API.

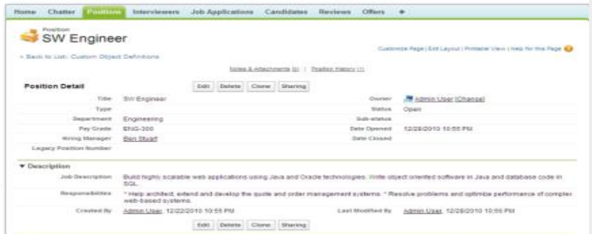
Page Layouts

Page Layout defines the organization of:

- Fields.
- Custom links.

Page Layout customizations include:

- Field locations.
- Page section customizations.
- Field properties.

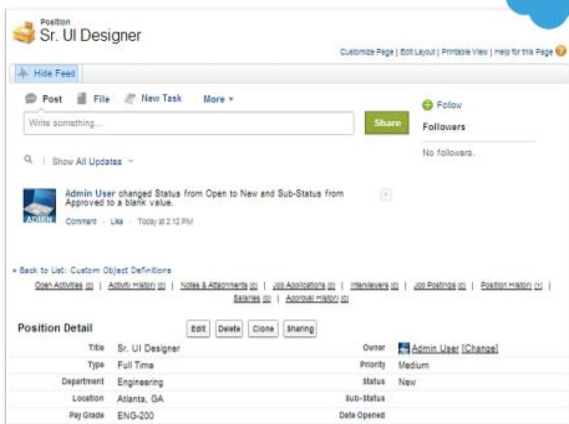


Establish unique layouts for different business scenarios. Use Visualforce pages to customize beyond the Salesforce look and feel.

Adding Chatter To The Page Layout

- Enable Chatter to allow users to follow records and see updates on the records they follow.
- Configure what fields trigger a Chatter update.

CLICK PATH: Setup | Customize | Chatter | Feed Tracking



Hands-on Exercise (Optional)

View the hands on exercise steps in the **Building Applications with Force.com**
"Building Your User Interface" Exercise Guide

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Exercise 3-1: Creating a Custom Application
Exercise 3-2: Creating Custom Tabs
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Exercise 3-6: Create a Global Quick Action and a Global Layout for HR

Task: Create a custom Position object.

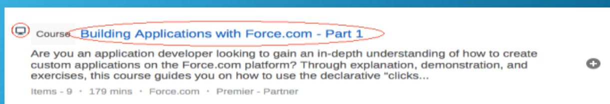
Roll-Up Summary and Formula Fields

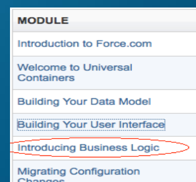
Video: Introducing Business Logic

This module introduces basic business logic functionality. Students will see how to create different formula fields. (16 min)

How to Get to this training video ?

- You need an **@partnertraining.com account**.
- To avoid a mixup with saved credentials open a private window in a new browsr.
- Browse to http://help.salesforce.com and log in with your @partnertraining.com account.
- Search for "Building Application with Force.com part 1"
- Make sure to select this training (pay attention to the video logo):





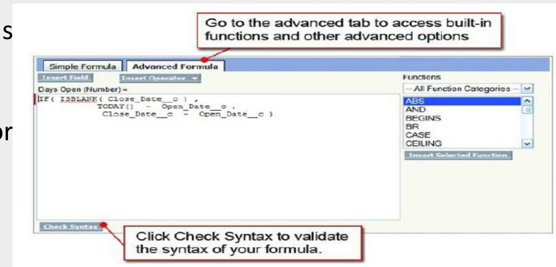
- Select the module "Introducing Business Logic":
- Enjoy the 16 min video.
- Direct Link: (only works after you've logged in with your @partnertraining.com account, paste in browser) https://help.salesforce.com/HTTrainingModulesDetail?courseId=a1S30000000gvGyEAI

Formula Fields

- Custom Formula Fields allow you to define calculations that reference other fields to display new numeric, text, or date values
- They are read-only, and do not display on record edit pages.
- Can reference fields on the same object, or a parent or lookup object.
- Cannot reference currency codes, description or custom long text area fields, or multi-select picklists.
- Are not searchable, or available for lead conversion or data exports.

Formulas

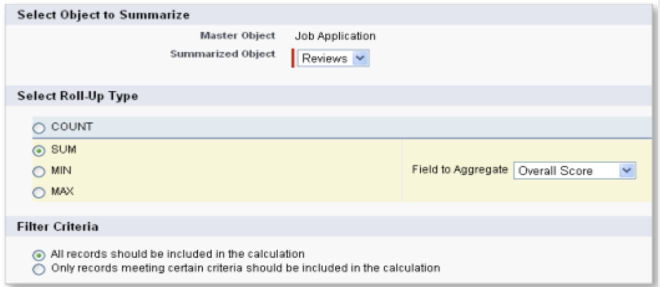
- A type of custom field. Formula fields automatically calculate their values based on the values of merge fields expressions, or other values.
- Use the Simple Formula tab for basic calculations involving numerical fields from the same object.
- Use the Advanced Formula tab for more complex calculations involving functions, non-numerical fields, or fields from parent objects
- A cross-object formula references fields from parent objects.
- Use the Insert Field browser on the Advanced Formula tab to access fields from up to 10 parent levels.



- Use cross object formulas to avoid duplicating data.

Creating Roll-Up Summary Fields

- Calculate values from a set of related records, such as those in a related list
- Are read-only fields that can display the sum, minimum, or maximum value or record count of a field in a related list
- Can be added for all custom master-detail relationships and for some standard relationships
- Can be created to automatically display a value on a master record based on the values of records in a detail record



Example: A custom account field called Total Invoice Amount displays the sum of invoice amounts for all related invoice custom object records in the Invoices related list on an account

Hands-on Exercise

View the hands on exercise steps in the **Building Applications with Force.com - Part 1** "Introducing Business Logic" Exercise Guide

https://lms.cfs-api.com/v1/content/0c89551c-1c8d-444a-a483-d9dd491cb92b/presentation_content/external_files/introducingbusinesslogicexerciseguide.pdf

Exercise 4-1: Create Formula Fields
Exercise 4-2: Create Cross-Object Formulas
Exercise 4-3: Create Roll-Up Summary Fields

Task: Create a custom Position object.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Thank you