Lab Solution Slides on Cloud Data Objects, Validations, and Interface

<u>Week 7</u>

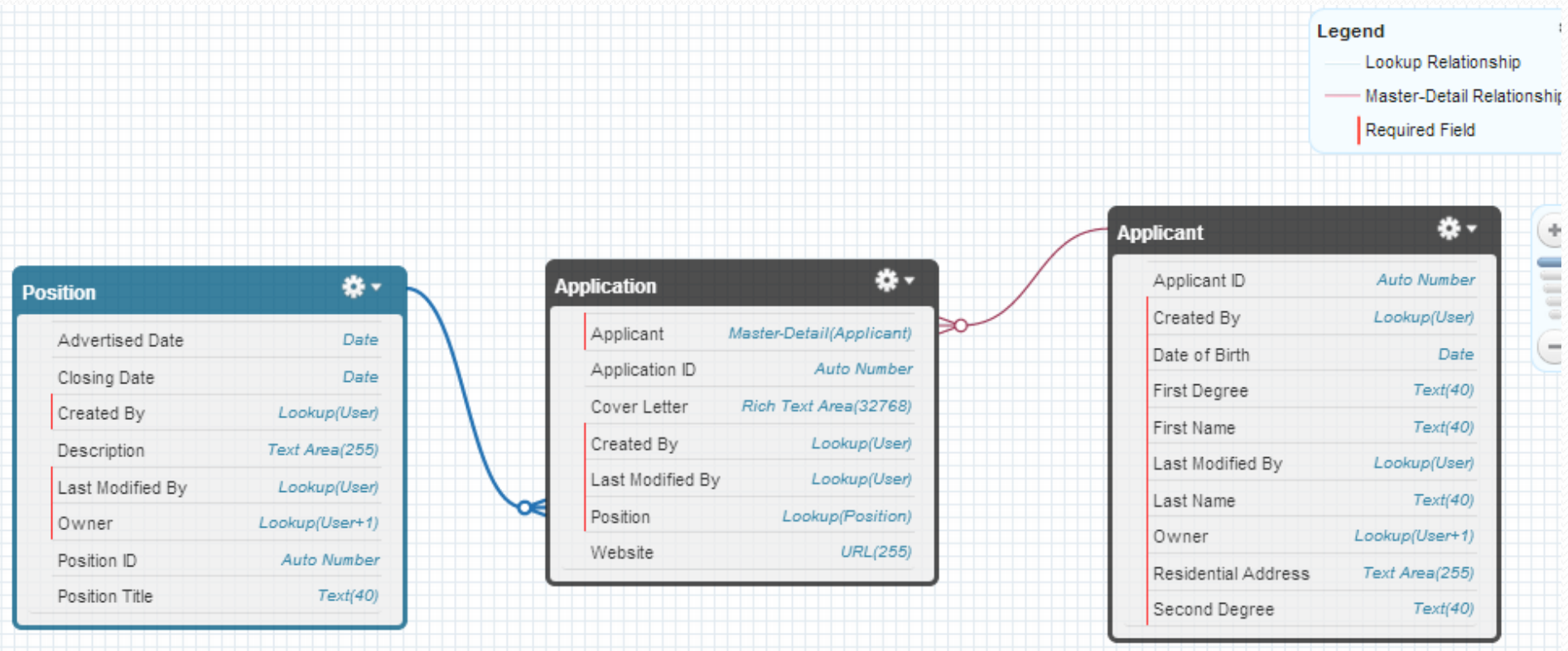School of Software
Faculty of Engineering and Information Technology
University of Technology Sydney

Data model for the case study
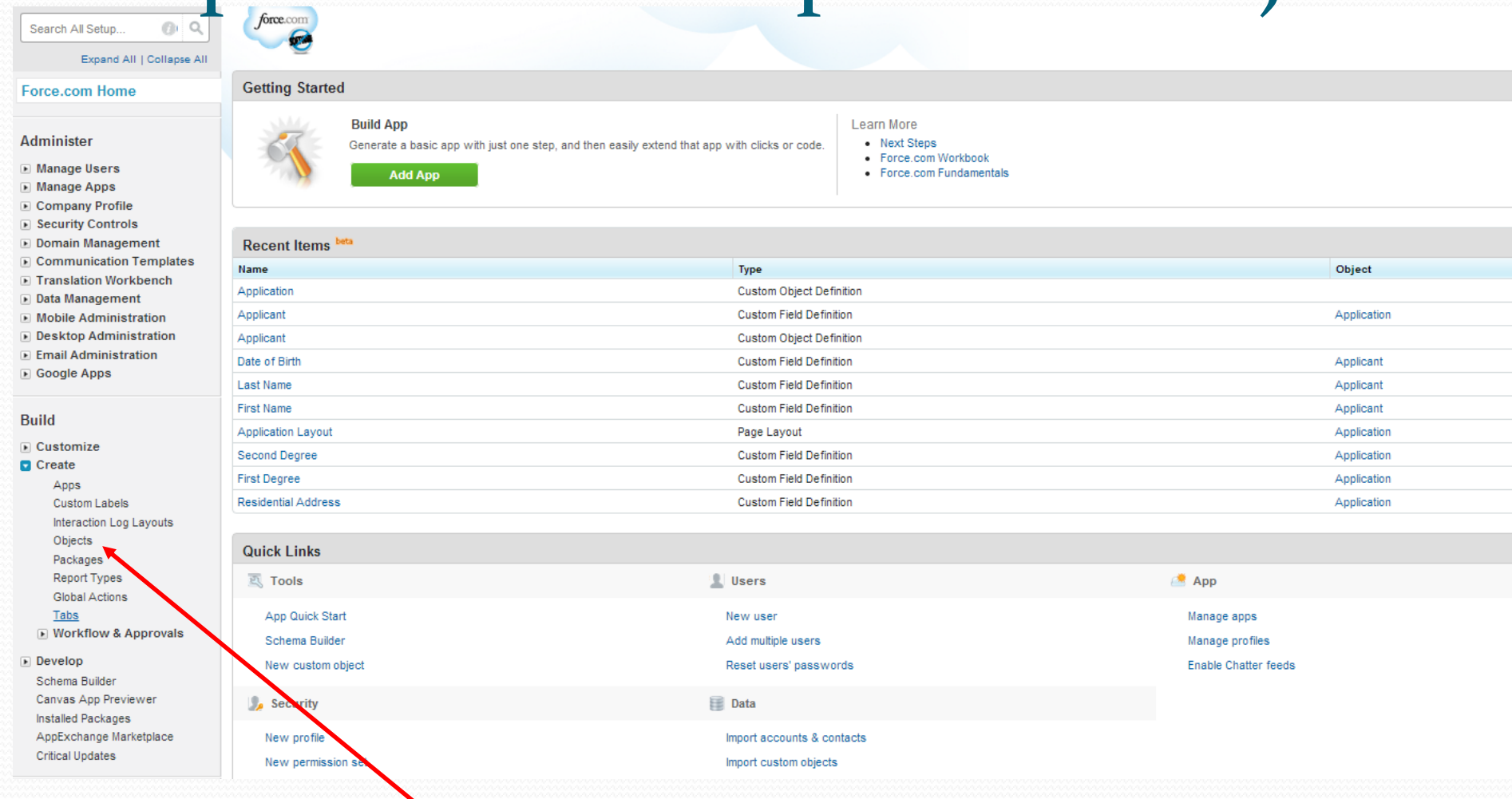

Figure: Data model for the mini- HRM application for Company A

Steps involved in the solution

- **<u>Step 1</u>**: Create a *<u>position</u>* object. This object should have the attributes *Position ID*, *Position Title*, *Description*, *Advertised Date*, and *Closing Date*
  - (<u>Step 1.1</u>) Define a validation Rule on the *Closing Date* Field

- **<u>Step 2</u>**: Create an *<u>applicant</u>* object. This object should have the attributes *First Name*, *Last Name*, *Residential Address*, *Data of Birth*, *First Degree*, and *Second Degree*
  - (<u>Step 2.1</u>) Define customized page layout for the applicant object

- **<u>Step 3</u>**: Create an *<u>application</u>* object to store the relevant information of each submitted application. This object would be a junction object, and would have:
  - Master-detail relationship with the "Applicant" object; (and)
  - Look-up relationship with the "Position" object

Step 1: Create the position object

Select on "Objects" in the Build Section to create a new object

Step 1: Create the position object

Custom Objects

Custom objects are database tables that allow you to store data specific to your organization in salesforce.com. You can use custom objects to extend salesforce.com functionality or to build new application function

Once you have created a custom object, you can create a custom tab, custom related lists, reports, and dashboards for users to interact with the custom object data. You can also access custom object data through

	New Custom Object	Schema Builder		
Action	**Label**	**Master Object**	**Deployed**	**Description**
Edit | Del	Candidate		✓	Details of an applicant who has applied for the job. A given candidate might apply for more than one job at a given point in time.
Edit | Del	Contact		✓	
Edit | Del	Customer		✓	This object is used to store the details of the individual customer
Edit | Del	Customer Record		✓	
Edit | Del	Employee		✓	This object contains the information of employees in Company X
Edit | Del	Employment Website		✓	Information about a particular information website
Edit | Del	Job Application		✓	The details of an actual job application that is being made
Edit | Del	Job Posting	Position, Employment Website	✓	Represents the junction object between a position and an employment website
Edit | Del	Position		✓	Contains the list of all positions available in the company
Edit | Del	Review	Job Application	✓	Object for storing the review performed by an interviewer
Edit | Del	Student		✓	This is the object corresponding to the student

Select on "New Custom Object" to create a new object

Figure : Activities in creating a new object (Position)

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Step 1: Define the position object

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label `Position`   Example: **Account**

Plural Label `Positions`   Example: **Accounts**

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name `Position`   Example: **Account**

Description `This object is used to model a new job position that is created within the organization`

Specify meta-data for the position object

Context-Sensitive Help Setting ⦿ Open the standard Salesforce.com Help & Training window
○ Open a window using a Visualforce page

Content Name `--None-- ▼`

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for the API.

Record Name `Position ID`   Example: **Account Name**

Data Type `Auto Number ▼`

Display Format `P-{0000}`   Example: **A-{0000}** What Is This?

Starting Number `0001`

Optional Features

☑ Allow Reports
☑ Allow Activities
☑ Track Field History

Figure: Activities in creating a new object (Position)

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Step 1: Define a tab for the position object

New Custom Object Tab

Step 1. Enter the Details

Choose the custom object for this new custom tab. Fill in other details.

Select an existing custom object or create a new custom object now.

Object   Position

Tab Style   Can

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.

Splash Page Custom Link   --None--

Enter a short description.

Description   This tab is for accessing the position object and its instances

Define and associate a tab for the position object

Figure: Activities in creating a new object (Position)

Step 1: Define the position object

Custom Object
Position

Custom Object Definition Detail

[Edit] [Delete]

Singular Label	Position
Plural Label	Positions
Object Name	Position
API Name	Position__c

Created By   Farookh Hussain, 29/04/2013 10:36 AM

Define custom attributes of the position object

Standard Fields

Action	Field Label	Field Name	Data Type
	Created By	CreatedBy	Lookup(User)
	Last Modified By	LastModifiedBy	Lookup(User)
Edit	Owner	Owner	Lookup(User,Queue)
Edit	Position ID	Name	Auto Number

Custom Fields & Relationships

[New] [Field Dependencies] [Set History Tracking]

No custom fields defined

Figure: Activities in creating a new object (Position)

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Step 1: Define the position object

Custom Object
Position

Standard Fields [4] | Custom Fields & Relationships [3] | Validation Rules [0] | Page Layouts [1] | Field Sets (BETA) [0] | Search Layouts [6] | Standard Buttons and Links [8] | Custom Buttons and Links [0] | Record Typ
Apex Sharing Recalculation [0] | Object Limits [10]

Custom Object Definition Detail   [Edit] [Delete]

Singular Label	Position	Description	This object is used to model a new job
Plural Label	Positions	Enable Reports	✓
Object Name	Position	Track Activities	✓
API Name	Position__c	Track Field History	✓
		Deployment Status	Deployed
		Help Settings	Standard salesforce.com Help Window
Created By	Farookh Hussain, 29/04/2013 10:36 AM	Modified By	Farookh Hussain, 29/04/2013 10:36 AM

Standard Fields

Action	Field Label	Field Name	Data Type	Controlling Field
	Created By	CreatedBy	Lookup(User)	
	Last Modified By	LastModifiedBy	Lookup(User)	
Edit	Owner	Owner	Lookup(User,Queue)	
Edit	Position ID	Name	Auto Number	

Custom attributes of the position object

Custom Fields & Relationships   [New] [Field Dependencies] [Set History Tracking]

Action	Field Label	API Name	Data Type	Controlling Field	Modified By
Edit	Del	Advertised Date	Advertised_Date__c	Date		Farookh Hussain, 29/04/2013 10:42 AM
Edit	Del	Closing Date	Closing_Date__c	Date		Farookh Hussain, 29/04/2013 10:44 AM
Edit	Del	Description	Description__c	Text Area(255)		Farookh Hussain, 29/04/2013 10:44 AM

Figure: Activities in creating a new object (Position)   9

Step 1.1: Define a validation rule

Figure: Creating a new validation rule

Step 1.1: Check the validation rule

Figure: Check for the correct execution of the validation rule[11]

Step 2: Define the applicant object

Custom Object
Applicant

Standard Fields [4] | Custom Fields & Relationships [6] | Validation Rules [0] | Page Layouts [1] | Field Sets (BETA) [0] | Search Layouts [6] | Standard Buttons and Links [8] | Custom Buttons and Links [0] | Record Types [0] | Apex Sharing Reasons [0] | Apex Sharing Re...

Custom Object Definition Detail

[Edit] [Delete]

Singular Label	Applicant	Description	
Plural Label	Applicants	Enable Reports	✓
Object Name	Applicant	Track Activities	✓
API Name	Applicant__c	Track Field History	✓
		Deployment Status	Deployed
		Help Settings	Standard salesforce.com Help Window
Created By	Farookh Hussain, 29/04/2013 11:39 AM	Modified By	Farookh Hussain, 29/04/2013 11:39 AM

Standard Fields

Action	Field Label	Field Name	Data Type	Controlling Field
Edit	Applicant ID	Name	Auto Number	
	Created By	CreatedBy	Lookup(User)	
	Last Modified By	LastModifiedBy	Lookup(User)	
Edit	Owner	Owner	Lookup(User,Queue)	

Custom Fields & Relationships
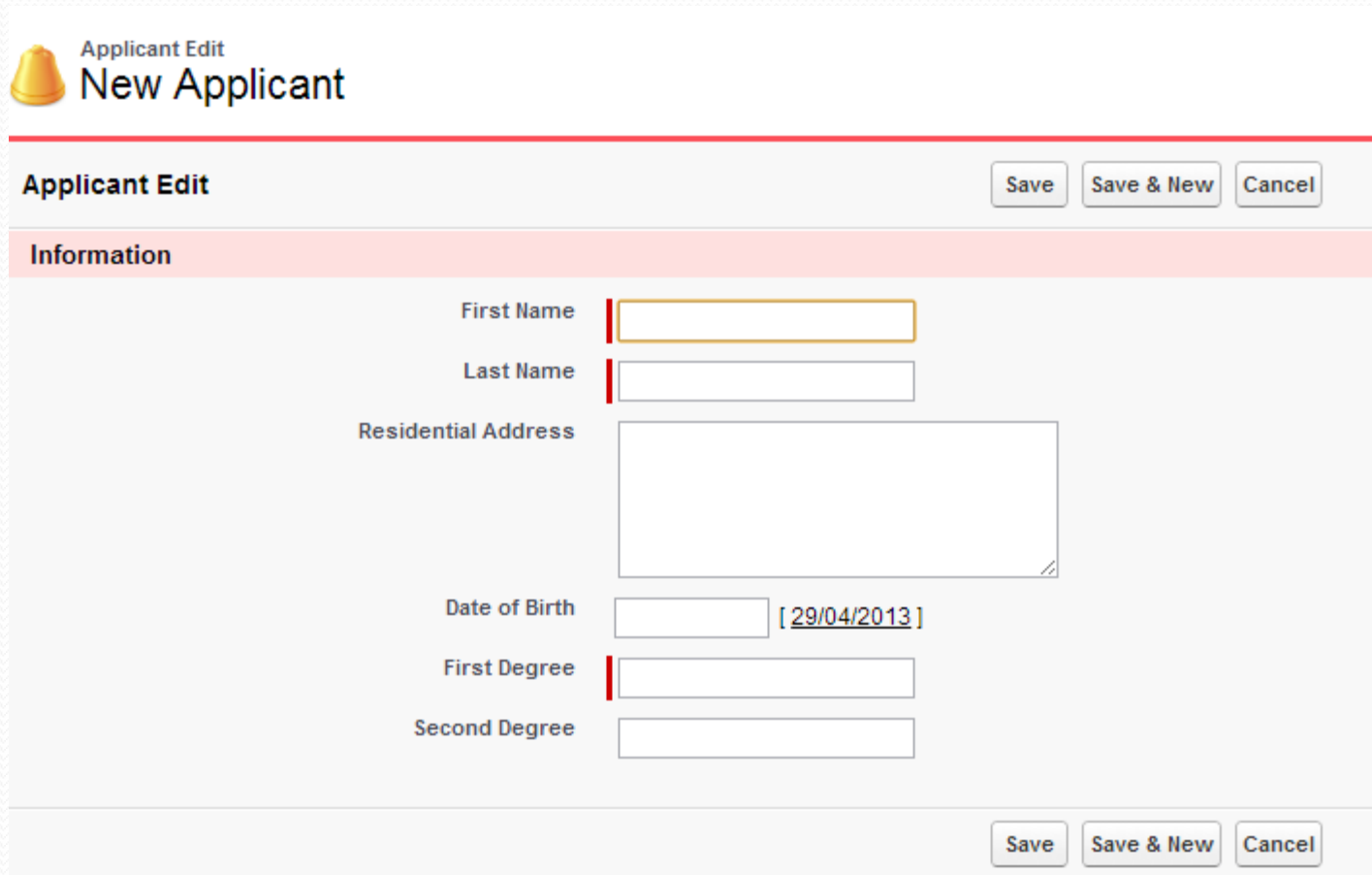
[New] [Field Dependencies] [Set History Tracking]

Action	Field Label	API Name	Data Type	Controlling Field	Modified By
Edit | Del	Date of Birth	Date_of_Birth__c	Date		Farookh Hussain, 29/04/2013 11:49 AM
Edit | Del	First Degree	First_Degree__c	Text(50)		Farookh Hussain, 29/04/2013 11:50 AM
Edit | Del	First Name	First_Name__c	Text(50)		Farookh Hussain, 29/04/2013 11:41 AM
Edit | Del	Last Name	Last_Name__c	Text(50)		Farookh Hussain, 29/04/2013 11:42 AM
Edit | Del	Residential Address	Residential_Address__c	Long Text Area(32768)		Farookh Hussain, 29/04/2013 11:48 AM
Edit | Del	Second Degree	Second_Degree__c	Text(50)		Farookh Hussain, 29/04/2013 11:53 AM

Custom attributes of the applicant object

Figure: Define the applicant objects and its custom attributes

Step 2.1: Customizing the page layout

Figure: Page layout of the applicant object prior to customization

Step 2.1: Customizing the page layout

Related Lookup Filters

No related lookup filters defined.

Validation Rules　　　　　　　　　New

No validation rules defined.

Triggers　　　　　　　　　New

No triggers defined

Page Layouts　　　　　　　　　New　Page Layout Assignment

Action	Page Layout Name	Created By	Modified By
Edit | Del	Applicant Layout	Farookh Hussain, 29/04/2013 11:39 AM	Farookh Hussain, 29/04/2013 11:53 AM

Field Sets (BETA)　　　　　　　　　New

No field sets defined.

Search Layouts

Customize the existing page layout of the applicant object

Figure: Customizing the applicant object page layout

Step 2.1: Customizing the page layout

Fields
Buttons
Related Lists

Quick Find | Field Name

Section	Date of Birth	Last Name
Blank Space	First Degree	Owner
Applicant ID	First Name	Residential Address
Created By	Last Modified By	Second Degree

Applicant Sample

Highlights Panel

Customize the highlights panel for this page layout...

Applicant Detail

Standard Buttons
Custom Buttons

Edit Delete Clone Sharing

Personal Details

🔒 Applicant ID	GEN-2004-001234
* ● First Name	Sample First Name
* ● Last Name	Sample Last Name
Residential Address	Sample Residential Address
Date of Birth	29/04/2013

Qualifications

| * ● First Degree | Sample First Degree |
| Second Degree | Sample Second Degree |

Information (Header visible on edit only)

System Information (Header visible on edit only)

Custom Links (Header visible on edit only)

Figure: Customizing the applicant object page layout

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Step 2.1: Customizing the page layout

Figure: Page layout after customization

Step 3: Define the application object

Custom Object
Application

Standard Fields [3] | Custom Fields & Relationships [4] | Validation Rules [0] | Page Layouts [1] | Field Sets (BETA) [0] | Search Layouts [6] | Standard Buttons and Links [8] | Custom Buttons and Links [0] | Record Types [0] | Obj

Custom Object Definition Detail   [Edit] [Delete]

Singular Label	Application	**Description**	
Plural Label	Applications	**Enable Reports**	✓
Object Name	Application	**Track Activities**	✓
API Name	Application__c	**Track Field History**	✓
		Deployment Status	Deployed
		Help Settings	Standard salesforce.com Help Window
Created By	Farookh Hussain, 29/04/2013 12:22 PM	**Modified By**	Farookh Hussain, 29/04/2013 12:22 PM

Standard Fields

Action	Field Label	Field Name	Data Type	Controlling Field
Edit	Application ID	Name	Auto Number	
	Created By	CreatedBy	Lookup(User)	
	Last Modified By	LastModifiedBy	Lookup(User)	

Custom Fields & Relationships   [New] [Field Dependencies] [Set History Tracking]

Action	Field Label	API Name	Data Type	Controlling Field	Modified By
Edit | Del	ApplicantID	ApplicantID__c	Master-Detail(Applicant)		Farookh Hussain, 29/04/2013 12:27 PM
Edit | Del	Cover Letter	Cover_Letter__c	Rich Text Area(32768)		Farookh Hussain, 29/04/2013 12:32 PM
Edit | Del	Position	PositionID__c	Master-Detail(Position)		Farookh Hussain, 29/04/2013 12:25 PM
Edit | Del	Website	Website__c	URL(255)		Farookh Hussain, 29/04/2013 12:32 PM

Custom attributes of the application object

<u>Figure</u>: Define the application object

Step 3: Defining new applications

Figure: Define new applications