Sales Force (Developer & Admin Module) – Topics

Salesforce is a cloud-based software company whose main product is a customer relationship management (CRM) system. A Salesforce developer specializes in using the Lightning and Apex programming languages to design and implement solutions within the context of the Salesforce platform.

Introduction (4 hr)

- Introduction
- Introduction to Force.com

Welcome to Universal Containers (1 hr)

- Universal Container's Recruiting Application
- Features of the Force.com platform

Building Your Data Model (5 hrs)

- Custom Objects
- Create Custom Objects
- Custom Fields
- Create Custom Fields
- Object Relationships
- Create Lookup Relationships
- Create Master-Detail Relationships
- Create a Custom Junction Object
- Create a Lookup Filter
- Schema Builder

Building Your User Interface (6 hrs)

- Custom Applications
- Create a Custom Application
- Custom Tabs
- Create Custom Tabs
- Custom Page Layouts
- Customize Page Layouts
- Chatter Feed Tracking
- Enable Chatter on the Positions Object
- Navigate the Salesforce1 Mobile Application

- Quick Actions
- Create an Object-Specific Quick Action
- Create a Global Quick Action and a Global Layout for HR

Introducing Business Logic (4 hrs)

- Formula Fields
- Create Formula Fields
- Create Cross-Object Formulas
- Roll-Up Summary Fields
- Create Roll-Up Summary Fields

Migrating Configuration Changes (6 hrs)

- Migrating Configuration Changes
- Change Sets

Accommodating Multiple Users in Your App (1 hr)

- Things to Consider
- Business Requirements for the Recruiting App

Managing Your Users' Experience (20 hrs)

- Licenses
- Overview of Profiles
- Profiles and Permissions
- Create Custom Profiles
- Create Permission Sets
- Profiles and Access to Data
- Change Access Using Field-Level Security
- Profiles and the User Interface
- Create Record Types
- Create Page Layouts
- Lightning Page
- Create Page Layouts and Record Types

Controlling Access to Records (15 hrs)

- Overview of Record Access
- Record Ownership

- Create Custom Object Queues
- Organization Wide Defaults
- Set Organization-Wide Defaults
- Roles and "Groups" of Users
- Implement a Role Hierarchy
- Create a Public Group
- Sharing
- Implement Manual Sharing
- Implement Sharing Rules
- Create Apex Sharing Reasons

Design Data Access Security (4 hrs)

- Access to Data Based on State
- Establish Data Access
- Restricting Access to Highly Sensitive Data
- Restrict Data Access
- Which Tool to Use?

Building Business Processes (4 hrs)

- Typical Business Requirements
- Features of the Force.com Platform that Can Help
- Useful Operators and Functions
- Create Formula Fields to Display Images
- Create Formula Fields to Display Hyperlinks
- Monitoring Processes

Preserving Data Quality (3 hrs)

- Enforcing Conditionally Required Fields
- Create Validation Rules
- Build Validation Rules to Enforce Conditionally Required Fields
- Enforcing Proper Data Format
- Build Validation Rules to Enforce Data Format
- Enforcing Consistency
- Build Validation Rules to Enforce Consistency
- Preventing Data Loss

Automating Business Processes with Workflow and Lightning Process Builder (6 hrs)

- Creating Workflow Rules
- Create Workflow Rules
- Keeping Things Moving with Time-Dependent Workflow
- Set Up Time-Dependent Workflow
- Using the Lightning Process Builder
- Create a Process

Automating Business Processes with Approval Processes (5 hrs)

- Multi-Step Approval Processes
- Create Multi-Step Approval Processes
- Skipping Steps in Approval Processes
- Approval Processes with Parallel Approvers
- Keeping Systems in Sync with Outbound Messaging
- Dynamic Approval Routing
- Create Dynamic Approval Processes

Increasing Data Quality using Flows (4 hrs)

- Understanding Visual Workflow
- Creating Flows
- Create a Flow
- Create a New Version of a Flow
- Deploying Flows
- Deploy a Flow

Auditing Processes (3 hrs)

- Auditing Configuration Changes
- Audit Changes Using Setup Audit Trail
- Auditing Data
- Audit Changes to Data
- Keeping Track of Unauthorized Changes

Back-End Programming (20 hrs)

- Apex Development Process
- Apex Development Tools
- Apex Governor Limits
- Developer Console
- Visual Studio Code

- Anonymous Window
- Apex class
- Data Types
- sObject Data Types
- Enum Data Types
- Collections Data Types
- OO implementation in Apex
- Apex Class Variables and Methods
- Access Modifiers
- Class Constructors
- The 'this' Keyword
- Inheritance
- Logic Building using Apex
- Sharing
- Interface
- System Classes and Methods
- Exercises
- Quiz

SOQL and SOSL (15 hrs)

- Relationships in Apex
- Summary and Quizzes and Recap
- Basic Syntax of SOQL
- SOQL Functions
- SOQL Variable Binding
- SOQL "for" Loops
- SOQL Keywords
- Relationship Queries
- SOQL vs SOSL
- Summary and Quizzes and Recap
- Data Manipulation Language (DML)
- SaveResult Class
- Transaction Control
- Database.DMLOptions
- DML and Loops
- SOQL, DML, and Governor Limits

Apex Trigger (4 hrs)

- Triggers and Their Execution Order
- Creating and Viewing Triggers
- Trigger Context Variables
- Understanding Trigger Events
- Apex Trigger Best Practices
- Summary and Quizzes and Recap
- Exceptions
- Exception Statements

System Exception (3 hrs)

- Exception Methods
- Catching Different Exception Types
- Custom or User-Defined Exception Handling
- Summary and Quizzes
- Debugging Using Debug Logs
- Anonymous Blocks—Another Debugging Tool

Testing (6 hrs)

- Overview of Unit Tests and Test Classes
- System Test Class Methods
- Accessing Private Variables and Methods in Test Classes
- Test Data—Overview
- Unit Tests
- Summary and Quizzes
- Different Development Environments

Data Management (7 hrs)

- Exporting Data
- Deleting Data
- Inserting Data
- Updating Data
- Salesforce Record IDs
- Mass Transfer Ownership of Records
- Upsert Data
- External IDs
- Object Relationships
- Tools for Data Management
- Apex Data Loader

- Upload Positions
- Which Tool Do You Use?
- Upsert Candidates
- Upsert Remaining Object Data
- Bulk API

Enhancing the User Interface Using Visualforce (10 hrs)

- What is Visualforce?
- Which is Best Solved Using Visualforce?
- Creating a Visualforce Page
- Create a Visualforce Page
- Parts of Visualforce page
- Use a Standard Controller and Override a Standard Page
- Find Components and Their Attributes
- Complete the Offer Quick Edit Page
- Create the Candidate Page
- Create the Review Page
- Templates in Visualforce
- Create the Console Page Template and Job Application Console Page
- Static Resources in Visualforce
- Add the Confidential Image to the Job Application Console
- Visualforce Design Recommendations

Additional Uses for Visualforce (8 hrs)

- Applying CSS to a Visualforce page
- Including a website and list of records in a Visualforce page
- Add Web Content to a Visualforce Page
- Create a Mass Edit List Page
- Deploying a Flow with Visualforce
- Deploy a Flow using Visualforce
- Including Visualforce in a page layout
- Display the Job Site
- Using JavaScript and AJAX to extend Visualforce
- Create a Partial Page Update for Conditional Fields
- Exposing a Visualforce page to the Internet

Lightning Component Development (16 hrs)

- Lightning Record Page
- Aura
- Lighting App development
- Lightning Component
- CSS and JavaScript in Lightning

Other Topics (16 hrs)

- LWC
- Sandbox
- Report & Dashboard
- Flow