INTEGRATING WITH THE SALESFORCE PLATFORM

OVERVIEW
Integrating with the Salesforce Platform covers the key elements of how to design and implement all types of integrations with the Salesforce platform. The course introduces the major integration mechanisms available on the Salesforce platform, such as the APIs and the built-in declarative functionalities. Participants explore the technologies that play critical roles in integrating with the platform, including the SOAP and REST APIs, Apex, the Streaming API, and outbound messaging. Cutting-edge integrations, such as integrating with Amazon’s Alexa, Facebook’s Messenger platform, and Heroku are also covered.

Note: To get the most out of this course, you should be comfortable reading and writing object-oriented code.

WHO SHOULD TAKE THIS COURSE?
Integrating with the Salesforce Platform is ideal for customer developers, system integrators, architects, and independent software vendors (ISVs) new to the platform who want to learn how to design and build integrations with the Salesforce platform cloud applications.

WHEN YOU COMPLETE THIS COURSE, YOU WILL BE ABLE TO:
- Identify various integration techniques.
- Develop methods for integrating with the Salesforce platform.
- Identify the advantages of various integration techniques.
- Integrate with the Salesforce platform web services.
- Build custom web services.
- Integrate with the Streaming and Bulk APIs.
- Use Salesforce Connect and Heroku Connect to implement declarative integrations.
- Implement single sign-on, social sign-on, and social customer service.
- Embed external applications into the Salesforce user interface using Force.com Canvas.

PREREQUISITES
It is not necessary to be a Salesforce platform developer to take this course; however, we recommend that participants be familiar with the Salesforce platform and proficient in an object-oriented programming language such as Java or C#. Familiarity with JavaScript frameworks, such as Node.js, is also recommended, but not required.
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MODULES & TOPICS

Integration Overview
- Assessing Your Architectural Landscape
- Evaluating business problems from an integration perspective
- An introduction to working with the Salesforce APIs

Security
- Salesforce Platform security

Salesforce Identity and Single Sign-on
- Introduction to Salesforce Identity and Single Sign-on
- Single Sign-on using SAML
- Single Sign-on Delegated Authentication
- Social Sign-on

Working with Salesforce Data
- sObjects and relationships
- SOQL
- SOSL

SOAP API
- The Architecture
- Working with the SOAP API
- Working with the partner WSDL
- Debugging and testing

JSON
- JSON Basics
- JSON and Java
- JSON and C#

REST APIs
- An introduction to the Salesforce REST APIs
- The REST API

Integrating with Facebook Messenger and Amazon Alexa
- Integrating the Salesforce platform with Amazon Alexa
- Salesforce Bot for Facebook Messenger

Bulk API
- An overview of the Bulk API
- Using the Bulk API to modify data
- Querying with the Bulk API
- Bulk API 2.0

Streaming API
- The architecture
- Working with the PushTopic Streaming API
- Understanding Message Durability
- Working with the Generic Streaming API
- Key Streaming API facts

Declarative Integration Features
- Outbound messaging
- Salesforce Connect
- Salesforce to Salesforce
- Social Customer Service

Integrating Using Heroku Connect
- Integrating with an RDBMS

Using the Data Loader as an Integration Client
- Data Loader overview
- Including Data Loader in architecture

Apex and Integration
- Introduction to Apex
- Custom Apex web services
- Apex callouts
- Email services

Embedding Web Pages and Applications within Salesforce
- Designing for Salesforce and the Salesforce1 mobile application
- Mashups and Visualforce
- Canvas

Computer Telephony Integration (CTI)
- Computer Telephony Integration

Design Workshop
- Review
- Architecting a solution