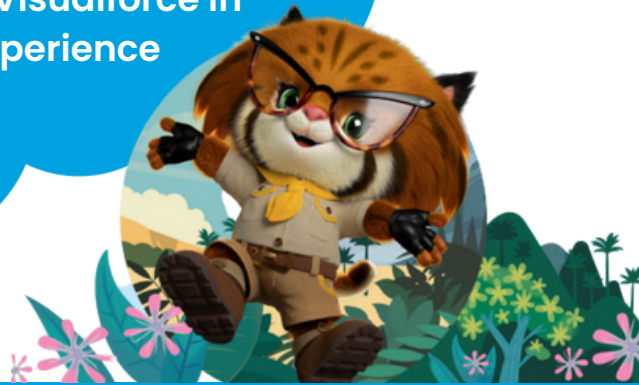


DEX450

Programmatic Development
using Apex and Visualforce in
Lightning Experience



TOPICS

No-Code Automation

- Create Formula Fields
- Create Roll-Up Summary Fields
- Understand Record Types and Dynamic Forms
- Review Additional Automation Tools

Apex Coding

- Define Apex
- Identify Key Characteristics of Apex and Other Coding Languages
- Examine the Role of Transactions and Governor Limits in Writing Apex
- Build a Simple Apex
- Discover sObjects, Primitive Data Types, and Basic Control Statements

Org Data Retrieval Using SOQL & SOSL

- Define SOQL
- Write a Basic SOQL Query
- Process Query Results with Apex
- Create a Query Dynamically at Run-Time
- Define a Relationship Query



- Query Parent-Child Relationships Using SOQL
- Write Child-to-Parent and Parent-to-Child Relationship Queries
- Define SOSL
- Search Data Using SOSL

Org Data Manipulation Using DML

- Define DML
- Identify Different Methods for Invoking DML Operations
- Use Apex to Invoke DML Operations and Handle DML Errors

Deployment

- Define Deployment
- Deploy Code Using Change Sets
- Examine Managed, Unmanaged, and Unlocked Packages
- Explore Salesforce DX
- Discover the Salesforce DevOps Center

Apex Trigger Essentials

- Define Apex Triggers
- Review Apex Trigger Use Cases
- Examine Trigger Definition Syntax
- Use Trigger Context Variables

Apex Class Essentials

- Define Apex Classes
- Review Apex Class Use Cases
- Identify Apex Class Data Access Capabilities

Order of Execution, Apex Transactions, & Platform Events

- Define the Salesforce Order of Execution



- Discover How Triggers May be Used and Impacted by the Order of Execution
- Examine the Apex Transaction Lifecycle
- Learn Static Attributes of Memory Lifecycles
- Implement Error Logging Using Platform Events

Apex Testing

- Define the Apex Testing Framework
- Create Apex Test Data
- Write and Run an Apex Test
- Review Apex Testing Best Practices

Design Strategies for Efficient Apex Solutions

- Identify Apex Code Writing Best Practices
- Use Input Data Batches to Write Apex Triggers and Classes
- Write Efficient Database Querying and DML Code

Apex Trigger Design Strategies

- Define No-Code Solutions to Implement Complex Business Logic
- Improve Pro-Code Solutions Using No-Code Functionality

Visualforce

- Define Visualforce
- Display Record Data in a Visualforce Page
- Examine Custom Controllers and Controller Extensions
- Explore List Controllers
- Identify Fundamental Considerations for Visualforce Development



Lightning Components

- Review the Lightning Component Framework
- Create Custom Lightning Web Components
- Retrieve and Display Record Data
- Utilize Lightning Web Component Events
- Perform a DML Operation
- Surface Custom Lightning Web Components

