DEVCOR 2.0 (DEVELOPING APPLICATIONS USING CISCO CORE PLATFORMS AND APIS) 2.0

Objetivo

This training will help you: - Describe the architectural traits and patterns that improve application maintainability and serviceability - Identify steps to design and build a ChatOps application - Implement robust Representational State Transfer (REST) API integrations with network error handling, pagination, and error flow control - Describe the necessary steps for applications and their user and system data - Identify common tasks in automated application release process - Describe best practices for application deployment - Describe methodologies for designing distributed systems - Describe the concepts of infrastructure configuration management and device automation - Utilize Yet Another Next Generation (YANG) data models to describe network configurations and telemetry - Compare various relational and nonrelational database types and how to select the appropriate type based on requirements - Take full advantage of the network and software development practices when implementing applications to fulfill business needs - Design and implement automated workflows for network provisioning - Design and develop applications built on Cisco platforms - Design and implement integration of custom applications with Cisco platforms and devices - Understand challenges in network programmability and system integration - Gain knowledge for protocols, solutions, and designs to acquire professional-level and expert-level DevOps roles - Earn 64 CE credits toward recertification. 350-901 Developing Applications Using Cisco Core Platforms and APIs is a 120-minute exam associated with the Cisco Certified DevNet Specialist â Core certification and satisfies the core exam requirement for the Cisco Certified DevNet Professional and Cisco Certified DevNet Expert certifications. The exam tests your knowledge of software development and design, including: - Using APIs - Cisco platforms - Application deployment and security - Infrastructure and automation

PÃºblico Alvo

- Network Automation Engineer - Software Developer - System Integration Programmer - Infrastructure Architect - Network Designer - Test Development Engineer

PrÃ©-Requisitos

The knowledge and skills you are expected to have before attending this training are: - Knowledge of program design and coding with focus on Python - Familiarity with Ethernet, Transmission Control Protocol Internet Protocol (TCP/IP) and internet-related networking - Understand the utilization of APIs - Understanding of software development and design methodologies - Hands-on experience with a programming language (specifically Python) These skills can be found in the following Cisco Learning Offering: - Developing Applications and Automating Workflows using Cisco Platforms 1.0 (DEVASC)

Carga HorÃ¡ria

40 horas (5 dias).

ConteÃºdo ProgramÃitico

Designing for Maintainability

Designing for Serviceability

Implementing ChatOps Application

Advanced REST API Integration

Securing Application Data

Securing Web and Mobile Applications

Automating Application Release

Deploying Applications

Exploring Distributed Systems

Orchestrating Network and Infrastructure

Modeling Data with YANG

Using Relational and Nonrelational Databases

Lab Outline
- Construct Sequence Diagram
- Construct Web Sequence Diagram
- Use Paginated REST API Endpoint
- Use REST API Error Control Flow Techniques
- Evaluate Application for Common OWASP Vulnerabilities
- Resolve Merge Conflicts with Git
- Containerize Application Using Docker
- Integrate Application into Existing CI/CD Environment
- Diagnose Problems Using Application Logs
- Automate and Manage Cisco IOS XE Network Infrastructure with Terraform and GitLab CI/CD Pipelines
- Configure Network Parameters Using Ansible
- Synchronize Firepower Device Configuration
- Utilize RESTCONF for Network Configuration
- Query Relational Database
- Query Document Store
- Query Time Series Database
- Query Graph Database