DEVCOR

Developing Applications Using Cisco Core Platforms and APIs

Description:

<p>The Developing Applications using Cisco Core Platforms and APIs (DEVCOR) v1.0 course helps you prepare for Cisco DevNet Professional certification and for professional-level network automation engineer roles. You will learn how to implement network applications using Cisco® platforms as a base, from initial software design to diverse system integration, as well as testing and deployment automation. The course gives you hands-on experience solving real world problems using Cisco Application Programming Interfaces (APIs) and modern development tools.</p>

Students will be able to:

Describe the architectural traits and patterns that improve application maintainability
Describe the architectural traits and patterns that improve application 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 securing user and system data in applications
Describe the necessary steps for securing applications
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

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Course requirements:

Knowledge of program design and coding with focus on Python
Familiarity with Ethernet, 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)

This course is intended for:

Network engineers expanding their skill-base to include software and automation
Developers expanding expertise in automation and DevOps
Solution architects moving to the Cisco ecosystem
Infrastructure developers designing hardened production environments.
Senior network automation engineer, Senior software developer, Senior system integration programmer
Senior infrastructure architect, Senior network designer, Senior test development engineer

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Literature:

<p>All participants will get original Cisco student and lab guides and time limited remote access to lab environment.</p>

Hardware:

<p>Labs are practiced on Cisco delivered Virtual lab environment. Classrooms are equipped with high-performance computers with Internet access and the possibility of wireless connection.</p>

Syllabus:

Designing for Maintainability
Designing for Serviceability
Implementing ChatOps Application
Describing Advanced REST API Integration
Securing Application Data
Securing Web and Mobile Applications
Automating Application-Release
Deploying Applications
Understanding Distributed Systems
Orchestrating Network and Infrastructure
Modeling Data with YANG
Using Relational and Non-Relational Databases

<p>* Points in italics are defined as self-study according to the Cisco's company official curriculum.</p>