Automating and Programming Cisco Collaboration Solutions v1.0 (300-835)

Exam Description: Automating and Programming Cisco Collaboration Solutions v1.0 (CLAUTO 300-835) is a 90-minute exam associated with the CCNP Collaboration Certification and DevNet Professional Certification. This exam tests a candidate's knowledge of implementing applications that automate and extend Cisco Collaboration platforms, including programming concepts, APIs and automation protocols, and Python programming. The course, Implementing Cisco Collaboration Automation Solutions, helps candidates to prepare for this exam.

The following topics are general guidelines for the content likely to be included on the exam. However, other related topics may also appear on any specific delivery of the exam. To better reflect the contents of the exam and for clarity purposes, the guidelines below may change at any time without notice.

10%	**1.0**	**Network Programmability Foundation**
	1.1	Utilize common version control operations with git (add, clone, push, commit, diff, branching, and merging conflict
	1.2	Describe characteristics of API styles (REST, RPC, and SOAP)
	1.3	Describe the challenges encountered and patterns used when consuming APIs synchronously and asynchronously
	1.4	Interpret Python scripts containing data types, functions, classes, conditions, and looping
	1.5	Describe the benefits of Python virtual environments
	1.6	Identify the roles of load balancer, firewall, DNS, and reverse proxy in collaboration application deployment

25%	**2.0**	**Unified Communication**
	2.1	Construct API calls to automate CUCM user/phone moves, adds, changes, and using the AXL SOAP API
	2.2	Construct API calls to automate dialplan and cluster config using the AXL API
	2.3	Describe the capabilities and use of the CUCM CTI APIs TAPI/JTAPI
	2.4	Describe the capabilities and use of the CUCM Serviceability Perfmon API and CDR interface
	2.5	Describe the capabilities and use of the IP Phone Services API
	2.6	Describe the capabilities of Finesse REST APIs and Gadgets

25%	**3.0**	**Cloud Collaboration**
	3.1	Describe Webex Teams REST API capabilities, use, application architectures, authentication mechanisms, and token types
	3.2	Implement administrative operations on Webex Teams organizations, users, licenses, and compliance events using the Webex Teams REST API
	3.3	Construct a Python script to automate creation of Webex Teams spaces and memberships
	3.4	Construct a Python script to implement notification

	3.5	Construct API calls to implement interactive bots
	3.6	Describe the application components involved in conversational bots (Botkit components and ecosystem)
	3.7	Create a HTML web application embedding Webex Teams and messaging, audio / video using Webex Teams Widgets
	3.8	Describe the capabilities and use for the various Webex Teams SDKs

20%   4.0   Collaboration Endpoints

	4.1	Construct API calls to automate Cisco collaboration room devices using the xAPI SSH interface and xAPI HTTP API (configuration, customization and branding, and making a call)
	4.2	Construct a script to monitor Cisco collaboration room device events using the xAPI Python SDK
	4.3	Describe the capabilities, use, creation, and deployment of custom controls for Cisco collaboration room devices using the In-Room Controls Editor
	4.4	Describe the capabilities, use, creation, and deployment of Cisco collaboration room device JavaScript Macros using the Macro Editor

20%   5.0   Meetings

	5.1	Describe Webex Meetings API capabilities and use to manage users, meetings, events, and trainings
	5.2	Describe Webex Meeting API authentication mechanisms
	5.3	Construct API calls to implement users and meetings management for Webex Meetings
	5.4	Construct API calls to configure Cisco Meeting Server using the REST API