



# Customer Experiences with Contact Center AI

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Duración  
35 horas



Modalidad  
Aula Virtual



Learning by  
doing



Curso  
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## Objetivos:

- Define what Google Contact Center AI is
- Explain how Dialogflow can be used in contact center applications
- Describe how natural language understanding (NLU) is used to enable Dialogflow conversations
- Implement a chat virtual agent
- Implement a voice virtual agent
- Describe options for storing parameters and fulfilling user requests
- Deploy a virtual agent to production
- Identify best practices for design and deployment of virtual agents
- Identify key aspects, such as security and compliance in the context of contact centers.

## Requisitos:

- Completed Google Cloud Product Fundamentals or have equivalent experience

## Material del curso:

Documentación Oficial de Google Cloud - Customer Experiences with Contact Center AI

## Perfil del docente:

- Formador Certificado por GCP
- Más de 5 años de experiencia profesional
- Más de 4 años de experiencia docente
- Profesional activo en empresas del sector IT

## Metodología:

- "Learning by doing" se centra en un contexto real y concreto, buscando un aprendizaje en equipo para la resolución de problemas en el sector empresarial.
- Aulas con grupos reducidos para que el profesional adquiera la mejor atención por parte de nuestros instructores profesionales.
- El programa de estudios como partners oficiales es confeccionado por nuestro equipo de formación y revisado por las marcas de referencia en el sector.
- La impartición de las clases podrá ser realizada tanto en modalidad Presencial como Virtual.



## Contenidos:

### Modulo 0: Course Overview

### Modulo 1: Overview of Contact Center AI

- Define what Contact Center AI (CCAI) is and what it can do for contact centers
- Identify each component of the CCAI Architecture: Speech Recognition Dialogflow, Speech Synthesis, Agent Assist, and Insights
- Describe the role each component plays in a CCAI solution

### Modulo 2: Google Implementation Methodology

- Identify the stages of the Google Implementation Methodology
- Enumerate the key activities of each implementation stage
- Acknowledge how to use Google's support assets for Partners

### Modulo 3: Conversational Experiences

- List the basic principles of a conversational experience
- Explain the role of conversation virtual agents in a conversational experience
- Articulate how STT (speech to text) can determine the quality of a conversational experience
- Demonstrate and test how speech adaptation can improve the speech recognition accuracy of the agent
- Recognize the different NLU (natural language understanding) and NLP(natural language processing) techniques and the role they play on conversational experiences
- Explain the different elements of a conversation (intents, entities, etc)
- Use sentiment analysis to help with the achievement of a higher-quality conversational experience
- Improve conversational experiences by choosing different TTS voices(Wavenet vs Standard)
- Modify the speed and pitch of a synthesized voice
- Describe how to leverage SSML to modify the tone and emphasis of a synthesized passage

### Modulo 4: Fundamentals of building conversations with Dialogflow

- Identify user roles and their journeys
- Write personas for virtual agents and users
- Model user-agent interactions
- List the basics elements of the Dialogflow user interface
- Build a virtual agent to handle identified user journeys
- Train the NLU model through the Dialogflow console
- Define and test intents for a basic agent
- Train the agent to handle expected and unexpected user scenarios
- Recognize the different types of entities and when to use them
- Create entities
- Define and test entities on a basic agent
- Implement slot filling using the Dialogflow UI



- Describe when Mega Agent might be used

## Modulo 5: Maintaining context in a conversation

- Create follow up intentsRecognize the scenarios in which context should be used
- Identify the possible statuses of a context (active versus inactive context)
- Implement dialogs using input and output contexts

## Modulo 6: Moving from Chat agent to Voice agent

- Describe two ways that the media type changes the conversation
- Configure the telephony gateway for testing
- Test a basic voice agent
- Modify the voice of the agent
- Show how the different media types can have different responses
- Consider the modifications needed when moving to production
- Be aware of the telephony integration for voice in a production environment

## Modulo 7: Taking actions with fulfillment

- Define the role of fulfillment with respect to CCAI
- Characterize what needs to be collected in order to fulfill a request
- Identify existing backend systems on the customer infrastructure
- Use Firestore to store mappings returned from functions
- Appreciate that the interaction with customers' data storages will vary based on the customer's data warehouses
- Implement fulfillment using Cloud Functions
- Implement fulfillment using Python on AppEngine
- Describe the use of Apigee for application deployment

## Modulo 8: Testing and Logging

- Debug a virtual agent by testing intent accuracy
- Debug fulfillment by testing the different functions and integrations with backend systems through API calls
- Implement version control to achieve more scalable collaboration
- Log conversations using Cloud Logging
- Recognize ways that audits can be performed

## Modulo 9: Environment Management

- Create Draft and Published versions of your virtual agent
- Create environments where your virtual agent will be published
- Load a saved version of your virtual agent to Draft
- Change which version is loaded to an environment

## Modulo 10: Intelligent Assistance for Live Agents

- Recognize use cases where Agent Assist adds value



- Identify, collect, and curate documents for knowledge base construction
- Set up knowledge bases
- Describe how FAQ Assist works
- Describe how Document Assist works
- Describe how the Agent Assist UI works
- Describe how Dialogflow Assist works
- Describe how Smart Reply works
- Describe how real-time entity extraction works

## Modulo 11: Integrating a virtual agent with third parties

- Use the Dialogflow API to programmatically create and modify the virtual agent
- Describe connectivity protocols: gRPC, REST, SIP endpoints, and phone numbers over PSTN
- Replace existing head intent detection on IVRs with Dialogflow intents
- Describe virtual agent integration with Google Assistant
- Describe virtual agent integration with messaging platforms
- Describe virtual agent integration with CRM platforms (eg. Salesforce and Zendesk)
- Describe virtual agent integration with enterprise communication platforms(eg. Genesys, Avaya, Cisco, and Twilio)
- Explain the ability that telephony providers have of identifying the caller and how that can modify the agent design
- Incorporate IVR features in the virtual agent.

## Modulo 12: Drawing insights from call recordings

- Analyze audio recordings using the Speech Analytics Framework (SAF)

## Modulo 13: Methods of compliance with federal regulations

- Describe two ways that security can be implemented on a Contact CenterAI integration
- Identify current compliance measures and scenarios where compliance is needed

## Modulo 14: Best practices for virtual agents

- Convert pattern matching and decision trees to smart conversational design
- Recognize situations that require escalation to a human agent
- Support multiple platforms, devices, languages, and dialects
- Use Dialogflow's built-in analytics to assess the health of the virtual agent
- Perform agent validation through the Dialogflow UI
- Monitor conversations and Agent Assist
- Institute a DevOps and version control framework for agent development and maintenance
- Consider enabling spell correction to increase the virtual agent's accuracy

## Modulo 15: Course Summary

- Recapitulate what was covered during this course



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