

## Build Chatbots Using Google Dialogflow Training

## COURSE CONTENT

### GET IN TOUCH

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#### About Multisoft

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#### **About Course**

The Build Chatbots Using Google Dialogflow training by Multisoft Systems is designed to equip participants with the essential skills to create intelligent and responsive conversational agents. Dialogflow, a powerful tool from Google, enables developers to build chatbots that understand natural language and interact seamlessly across platforms like websites, mobile apps, Google Assistant, and more.

#### Module 1: Overview of Contact Center Al

- $\checkmark$  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 AI.
- ✓ Describe the role each component plays in a CCAI solution.

#### Module 2: Conversational Experiences

- ✓ List the basic principles of a conversational experience.
- ✓ Explain the role of Conversation virtual agents in a conversation experience.
- ✓ Articulate how STT (Speech to Text) can determine the quality of a conversation 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 conversation experiences.
- ✓ Explain the different elements of a conversation (intents, entities, etc).
- ✓ Use sentiment analysis to help with the achievement of a higher-quality conversation experience.
- Improve conversation 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.

#### Module 3: Fundamentals of Designing Conversations

- ✓ Identify user roles and their journeys.
- ✓ Write personas for virtual agents and users.
- ✓ Model user-agent interactions.

#### Module 4: Dialogflow Product Options

- ✓ Describe two primary differences between Dialogflow Essentials (ES) and Dialogflow Customer Experience (CX).
- ✓ Identify two design principles for your virtual agent which apply regardless of whether you implement in Dialogflow ES or CX.
- ✓ Identify two ways your virtual agent implementation changes based on whether you implement in Dialogflow ES or CX.
- ✓ List the basic elements of the Dialogflow user interface.

# Module 5: Fundamentals of building conversations with Dialogflow ES

- ✓ List the basic elements of the Dialogflow CX 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.
- ✓ Demonstrate how to add access to a knowledge base for your virtual agent to answer customer questions straight from a company FAQ.

#### Module 6: Maintaining Context in a Conversation

- ✓ Create follow-up intents.
- ✓ Recognize 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.



#### Module 7: Moving From Chat to Voice Virtual Agent

- $\checkmark$  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.
- $\checkmark\,$  Consider the modifications needed when moving to production.
- ✓ Be aware of the telephony integration for voice in a production environment.

#### Module 8: Testing and Logging

- ✓ Use Dialogflow tools for troubleshooting.
- ✓ Use Google Cloud tools for debugging your virtual agent.
- ✓ Review logs generated by virtual agent activity.
- ✓ Recognize ways an audit can be performed.

#### Module 9: Taking Actions with Fulfillment

- ✓ Characterize the role of fulfillment with respect to Contact Center AI.
- ✓ Implement a virtual agent using Dialogflow ES.
- ✓ Use Cloud Firestore to store customer data.
- ✓ Implement fulfillment using Cloud Functions to read and write Firestore data.
- ✓ Describe the use of Apigee for application deployment.

#### Module 10: Integrating Virtual Agents

- Describe how to use the Dialogflow API to programmatically create and modify the virtual agent.
- ✓ Describe connectivity protocols: gRPC, REST, SIP endpoints, and phone numbers over PSTN.
- ✓ Describe how to 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 (such as Salesforce and Zendesk).
- Describe virtual agent integration with enterprise communication platforms (such as Genesys, Avaya, Cisco, and Twilio).
- Explain the ability that telephony providers have of identifying the caller and how that can modify the agent design.
- ✓ Describe how to incorporate IVR features in the virtual agent.

#### Module 11: 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.

#### Module 12: Drawing Insights from Recordings with SAF

✓ Analyze audio recordings using the Speech Analytics Framework (SAF).

#### Module 13: Intelligence Assistance for Live Agents

- ✓ Recognize use cases where Agent Assist adds value.
- ✓ Identify, collect and curate documents for knowledge base construction.
- ✓ Describe how to 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.



#### Module 14: Compliance and Security

- ✓ Describe two ways security can be implemented on a CCAI integration.
- ✓ Identify current compliance measures and scenarios where compliance is needed.

#### **Module 15: Best Practices**

- ✓ 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 Diagflow'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.

#### Module 16: Implementation Methodology

- ✓ Identify the stages of the Google Enterprise Sales Process.
- ✓ Describe the Partner role in the Enterprise Sales Process.
- ✓ Detail the steps in a Contact Center AI project using Google's ESP.
- $\checkmark$  Describe the key activities of the Implementation Phase in ESP.
- ✓ Locate and understand how to use Google's support assets for Partners.