

Develop Conversational Agents on Google Cloud

Category: AI, Data & Analytics | **Vendor:** Google Cloud

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Conversational Agents, part of AI Applications, is an intelligent, conversational (GUI) interface. Conversational Agents uses an AI development system with access to SDKs and APIs in multiple languages. In this course, you will learn how to leverage Conversational Agents to design and build conversational agents on Google Cloud.

About This Course

Conversational Agents, part of AI Applications, is an intelligent, conversational (GUI) interface. Conversational Agents uses an AI development system with access to SDKs and APIs in multiple languages. In this course, you will learn how to leverage Conversational Agents to design and build conversational agents on Google Cloud.

Who Should Attend

- Conversational designers, developers, and business analysts.

Prerequisites & Entry Requirements

General Prerequisites:

- Some familiarity with a graphical user interface for Conversational Agents will ease the learning process. Understanding JSON is helpful.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

- Understand the different kinds of conversations available with an artificial intelligent (AI) agent.
- Design an AI agent for a deterministic intent-based domain.
- Understand how a user's request is translated into an action and response.
- Use webhooks to access data and products that are not part of the agent.
- Handle user errors and unexpected requests.
- Use the graphical user interface (GUI) to develop an agent.
- Gain a working knowledge of the testing tools available in the GUI.
- Integrate a chatbot into external user interfaces.
- Incorporate generative AI features into your agent.

Detailed Course Outline

Module 01: Introduction to Conversational Agents

Topics:

- Google's goals for virtual agents
- Virtual agent product suites

Objectives:

- Describe the goals of virtual agent development and product suites.

Activities:

- Lab: Exploring the Conversational Agents User Interface

Module 02: Introduction to conversational design

Topics:

- Convergent and divergent approaches
- Conversation design strategy

Objectives:

- Understand virtual agent design.

Module 03: Steering bot design basics

Topics:

- Use cases
- Virtual agents
- Start pages
- Routes
- Pages

Objectives:

- Design a basic steering bot using Conversational Agents.

Module 04: Implementing bot design

Topics:

- Use case review
- Agent architecture
- Creating the virtual agent
- Creating the route
- Testing the route

Objectives:

- Create an agent, a route, intents, and pages.
- Implement routes without parameters.
- Use test agent for testing.

Activities:

- Lab: Conversational Agents: Bot Building Basics

Module 05: Entities

Topics:

- Introduction to entities

- System entity types
- Custom entity types
- Managing entities in an agent

Objectives:

- Access entity parameters.
- Create custom regular expression (RegEx) entities.
- Create custom list entities.
- Use current recommended practices for extending a system entity class.

Module 06: Parameters

Topics:

- Introduction to parameters
- Parameters from intents
- Preset parameters
- Parameters from webhooks

Objectives:

- Manipulate parameters using various methods.

Activities:

- Lab: Conversational Agents: Parameter Manipulation

Module 07: Event handlers

Topics:

- Definition of event handlers
- Page, flow event handler, and scope rules
- Form event handler and scope rules

Objectives:

- Understand event handlers and how they are used in Conversational Agents.

Module 08: Versions and environments

Topics:

- Version management in Conversational Agents
- Environment management in Conversational Agents

Objectives:

- Use version testing.
- Use environments for different audiences.

Activities:

- Lab: Conversational Agents: Managing Environments

Module 09: Testing

Topics:

- Validation
- Publication
- Simulation

Objectives:

- Validate for static analysis.
- Publish to pretest user acceptance testing (UAT).
- Simulate for unit testing.

Activities:

- Lab: Debugging the Agent Using Test Agent

Module 10: Fulfillment

Topics:

- Introduction to fulfillment
- Examples of static fulfillment

Objectives:

- Use text, conditional, and custom fulfillment.

Module 11: Integrations

Topics:

- Google Messenger
- Conversational Phone Gateway

Objectives:

- Configure Google Messenger and Conversational Phone Gateway.

Module 12: Webhooks

Topics:

- Why have a webhook?
- Types of webhooks
- Setting up a fulfillment webhook
- Modifications for a JSON response webhook

Objectives:

- Recognize the different types of webhooks.
- Set up a webhook with fulfillment response.
- Set up a webhook JSON response.

Module 13: Route groups

Topics:

- Introduction to route groups
- Managing a route group

Objectives:

- Set up a flow route group.
- Set up a session route group.

Activities:

- Lab: Configuring a Route Group for Your Virtual Agent

Module 14: Design techniques

Topics:

- The concept of a flow
- Steering bot designs

- The concept of guardrails

- Design principle

Objectives:

- Use flows to speed the development of an agent.

- Use guardrails to prevent problems in agent design.

Module 15: Generators and generative fallback

Topics:

- Overview of generators

- Overview of generative fallback

Objectives:

- Use generators and generative fallback in virtual agents.

Activities:

- Lab: Conversational Agents with Generative Fallbacks, Introduction to Conversational Agents, Introduction to conversational design, Steering bot design basics, Implementing bot design, Entities, Parameters, Event handlers, Versions and environments, Testing, Fulfillment, Integrations, Webhooks, Route groups, Design techniques, Generators and generative fallback

Skills You Will Learn:

- Understand the different kinds of conversations available with an artificial intelligent (AI) agent.
- Design an AI agent for a deterministic intent-based domain.
- Understand how a user's request is translated into an action and response.
- Use webhooks to access data and products that are not part of the agent.
- Handle user errors and unexpected requests.
- Use the graphical user interface (GUI) to develop an agent.
- Gain a working knowledge of the testing tools available in the GUI.
- Integrate a chatbot into external user interfaces.
- Incorporate generative AI features into your agent.

Frequently Asked Questions

Q: What delivery options are available for Develop Conversational Agents on Google Cloud?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
-

Q: How many CPD hours does this course provide?

The 3-day Develop Conversational Agents on Google Cloud course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Develop Conversational Agents on Google Cloud training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Develop Conversational Agents on Google Cloud?

Yes, we provide corporate training, dedicated training, and closed classes for Develop Conversational Agents on Google Cloud. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Develop Conversational Agents on Google Cloud, AI & Data Science, DCAGC, Google Cloud, vILT

Q: Why choose Nexus Human for Develop Conversational Agents on Google Cloud?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Develop Conversational Agents on Google Cloud training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

 Email: info@nexushuman.com

 Website: www.nexushuman.com

 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)