Unit Testing for Conversational Agents

Best Practices & Testing Methodologies

Presented by

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Question 1: Test Automation in CI/CD

Question

You will be able to automatically run tests when changes are made to the agent after completing which stage of the unit test driven development lifecycle?

- Continuous integration
- Implement agent features
- Refactor and repeat
- Write test cases

Correct Answer

CHECK: Continuous integration

Explanation

Continuous Integration (CI) is the stage where automated testing is configured to run automatically whenever code changes are committed. This enables immediate feedback on code quality and helps catch issues early in the development cycle.

Question 2: Test Result Tracking

Question

Logging and categorizing test case results is part of which phase of tracking test results?

- Knowledge sharing
- Data driven analysis
- Feedback loop
- Granular record keeping

Correct Answer

CHECK: Granular record keeping

Explanation

Granular record keeping involves systematically logging and categorizing every test case result with detailed information. This provides a comprehensive audit trail and enables thorough analysis of test outcomes.

Question 3: A/B Testing Feature

Question

What feature of Conversational Agents is used to conduct A/B testing?

- Prebuilt components
- Validations
- Conversational Agents messenger
- Experiments

Correct Answer

CHECK: Experiments

Explanation

Experiments is the built-in feature that allows you to conduct A/B testing in Conversational Agents. It enables comparing different versions of agent responses or flows to determine which performs better with users.

Question 4: Module Testing

Question

What testing method ensures that a single module of the agent is working correctly?

- End to end testing
- A/B testing
- Integration systems testing
- Unit testing

Correct Answer

CHECK: Unit testing

Explanation

Unit testing focuses on testing individual modules or components in isolation. It verifies that each unit of code performs as expected independently, making it easier to identify and fix defects at the component level.

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Question 5: Full Stack Testing

Question

Which form of end to end testing includes all components of the agent and its system integrations?

- Focused journey
- Full stack
- Modular
- Regression

Correct Answer

CHECK: Full stack

Explanation

Full stack testing validates the entire system from front-end to back-end, including all integrations with external systems. It ensures all components work together seamlessly in a production-like environment.

Question 6: CUJ First Approach

Question

What is the first step when following a "CUJ first" approach to testing?

- Reporting
- Create a catalog
- Defining success criteria
- Prioritization

Correct Answer

CHECK: Create a catalog

Explanation

CUJ (Critical User Journey) first approach begins by creating a comprehensive catalog of all critical user journeys. This catalog documents the essential paths users take through the system, which then guides test case development and prioritization.

Key Takeaways

Testing Lifecycle:

- Continuous Integration enables automated testing
- Granular record keeping tracks results

Testing Methods:

- Experiments for A/B testing
- Unit testing for module validation

End-to-End Testing:

- Full stack testing for complete integration
- CUJ first approach starts with catalog creation

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