

You

I just built an AI search system for training guides, what stages of testing can I do and what possible tests can I do for it?

Copilot

Congratulations on building your AI search system! Testing is a crucial step to ensure its reliability and effectiveness. Here are some stages of testing and possible tests you can perform:

### 1. Training, Validation, and Testing:

- **Training:** During this stage, your AI model learns patterns and relationships from a dataset.
- **Validation:** Fine-tune and optimize the model using validation data.
- **Testing:** Assess the model's performance on new data.

### 2. AI-Specific Testing Considerations:

- **Data Quality:** Validate the quality of your training data.
- **Model Accuracy:** Evaluate how well the model predicts outcomes.
- **Bias Detection:** Check for biases in predictions.
- **Robustness:** Test the model's behavior under different conditions.
- **Exploratory Testing:** Experiment with various scenarios.

### 3. Tools and Techniques:

- **Visual Testing:** Assess the application's look and feel using image-based learning and screen comparisons.
- **Declarative Testing:** Specify test intent in natural or domain-specific language, letting the system decide how to perform the test.

Remember that AI testing is iterative, and continuous improvements are essential. Good luck with your testing process! 😊🚀

You

How can I experiment with various scenarios for exploratory testing?

Copilot

Certainly! Exploratory testing involves actively exploring the application to uncover issues. Here are some techniques you can use:

### 1. Ad Hoc Testing:

- Freestyle exploration without predefined test cases.
- Investigate different features, inputs, and edge cases.

### 2. Scenario-Based Testing:

- Create realistic user scenarios.
- Test how the system responds to specific actions or sequences.

### 3. Boundary Testing:

- Push system boundaries (e.g., maximum input length, extreme values).
- Observe how the application handles these situations.

### 4. Negative Testing:

- Purposefully input incorrect data.

- Verify error handling and graceful degradation.

## 5. Exploring Data Variability:

- Use different data sets (valid, invalid, edge cases).
- Observe how the system processes them.

## 6. Time-Related Scenarios:

- Test during peak load times or low-resource conditions.
- Check for performance issues.

Remember, exploratory testing is creative and flexible. Trust your instincts and document your findings. Happy testing! 😊🔍

**You**

What boundaries can I test for this AI search?

**Copilot**

Certainly! When testing your AI search system, consider exploring the following boundaries:

### 1. Input Length:

- Test with very short and very long queries.
- Observe how the system handles different input lengths.

### 2. Special Characters and Symbols:

- Include special characters (e.g., punctuation, emojis).
- Verify if the system processes them correctly.

### 3. Ambiguous Queries:

- Test queries with multiple interpretations.
- Check if the system provides relevant results.

### 4. Synonyms and Variations:

- Use synonyms or similar terms.
- Ensure the system captures context and variations.

### 5. Out-of-Vocabulary Terms:

- Introduce uncommon or domain-specific words.
- Evaluate how the system handles unfamiliar terms.

### 6. Edge Cases:

- Test extreme values (e.g., empty query, very long query).
- Verify robustness and error handling.

Remember to document your findings and iterate on improvements. Happy testing! 😊🔍