Jarvis Al Voice Assistant Testing Checklist

1. Core Functionalities

Wake Word Detection: Detects "Hey Jarvis" and activates

Password/Voice Authentication: Authenticates user before access

Voice Input (Listen): Captures spoken commands accurately

Voice Output (Speak): Speaks responses clearly without overlaps

GPT Integration: Processes questions via OpenAI API

Open Apps: Commands like "Open Finder", "Open Brave" work

Open Websites: Commands like "Open YouTube in Brave"

System Commands: Executes shutdown, restart, etc.

Error Handling: Handles invalid inputs gracefully

Exit Behavior: Stops listening and shuts down properly

2. Edge Cases Testing

Misheard Wake Words: Ignores random noise

Partial Commands: Handles incomplete commands

Silent Environment vs Noisy: Consistent in both conditions

Rapid Commands: Handles back-to-back commands properly

API Failure Simulation: Handles API quota exceeded or timeout errors

Microphone Unavailable: Graceful handling without crash

3. Performance & Stress Testing

Long Session Stability: Works over extended periods

High CPU Load: Maintains responsiveness under load