Subject: Technical Assessment Project - Software Engineering Position

Dear Candidate

Thank you for your interest in the Software Engineer position at [Company Name]. We've reviewed your application and would like to proceed with our technical assessment phase.

We believe in evaluating candidates through practical, real-world scenarios. Here's your project challenge:

Project: Voice Command Shopping Assistant is a voice-based shopping list manager with smart suggestions.

Required Features:

1. Voice Input:

- Voice Command Recognition: Allow users to add items to the shopping list using voice commands (e.g., "Add milk," "I need apples").
- Natural Language Processing (NLP): Understand and process varied user phrases for flexibility (e.g., "I want to buy bananas" vs. "Add bananas to my list").
- Multilingual Support: Enable voice commands in multiple languages.

2. Smart Suggestions:

- Product Recommendations: Based on previous shopping history or preferences, suggest items that the user is likely to need (e.g., "It looks like you're running low on bread").
- Seasonal Recommendations: Suggest items that are in season or on sale.
- Substitutes: Offer alternatives if a product is unavailable or if the user prefers a different option (e.g., suggest almond milk if the user mentions regular milk).

3. Shopping List Management:

- Add/Remove Items: Allow users to add, remove, or modify items using voice commands (e.g., "Remove milk from my list").
- Categorize Items: Automatically categorize items (e.g., dairy, produce, snacks) for better organization.
- Quantity Management: Specify quantities using voice (e.g., "Add 2 bottles of water" or "Buy 5 oranges").

4. Voice-Activated Search:

- Item Search: Allow users to search for specific items by voice, including details like brand, size, or price range (e.g., "Find me organic apples").
- Price Range Filtering: Voice-based filter to specify price ranges or brands (e.g., "Find toothpaste under $5").

11. UI/UX:

- Minimalist Interface: Easy-to-use interface with a simple display of the shopping list.
- Visual Feedback: Display recognized items and actions in real time (e.g., show added items or confirmations).
- Mobile/Voice-Only Interface: Optimized for mobile devices and voice-only interactions.

12. Hosting:

- Deploy on a reliable platform (e.g., AWS, Firebase, Google Cloud) to manage voice recognition and interactions.

Technical Requirements:

- Clean, production-quality code
- Basic error handling
- Loading states for better UX
- Simple documentation explaining your approach

Technical Freedom:

- Use any frameworks/technologies you're comfortable with
- Free to use AI/ML services (any free tier)
- Collect test data from public sources

Deliverables:

1. Working application URL
2. GitHub repository with source code and README
3. Brief write-up of your approach (200 words max)

Timeline:

- Project deadline: 1st Sep 2025
- Time investment: Maximum 8 hours

We'll evaluate based on:

- Problem-solving approach
- Code quality
- Working functionality
- Documentation

Next Steps:

1. Confirm receipt of this email
2. Submit your GitHub repository link and hosted application URL by the deadline
3. We'll review and respond within 3 business days

Questions? Feel free to ask. Good luck!

Best regards, [Your Name] [Company Name]