Equibank

Project Prototype Part 3.1 by Team Berlopa

Project Description:

Equibank is a voice-controlled banking interface designed for visually impaired users. This prototype focuses on the core functionalities of checking balances, transferring funds, and paying the users bills. Thus, empowering the user to manage their finances independently through voice commands and text-to-speech feedback despite their impairment.

Requirements Summary:

- Accessible interface: Voice commands and audio feedback for all functionalities
- User-friendly navigation: Clear and concise voice prompts for menu options and actions
- Secure transactions: User verification and confirmation steps for financial operations
- Reliable performance: Accurate voice recognition and fast response times

Prototype Description:

In this prototype simulation of our mobile app, the user can:

- Activate the system with a voice command (e.g. "Start Equibank")
- Navigate app menu using voice commands (e.g. "Check balance," "Transfer money,")
- Receive audio instructions, feedback, and confirmations throughout the transaction process
- Verify user details and authorize transaction with voice commands

User Scenario:

Han is a visually impaired working adult who wants to check his account balance. However, finds it difficult due to his disability. So, he uses the Equibank application and

says, "Start Equibank", then the application confirms and responds upon activation. Han then instructs the application to "check balance", then Equibank's asks for confirmation for security then reads out his current balance. Now that she has finished her task, she closes the application by saying "close Equibank".

Rationale:

The prototype was chosen because it gives a feeling of familiarity and has portability for visually impaired individuals. The AI provides audio messages that give a comfortable conversational experience to the user advantages include intuitiveness and ease of use with voice commands. Limitations include the need for a smartphone and potential background noise affecting voice recognition.

Changes to Requirements:

The core requirements for banking would go first like balance checks, money transfers, and bill payments, more additional features like transaction history based on user feedback are in the vision.

Initial Evaluation Plan:

We'll assess usability based on accessibility, user-friendliness, and user satisfaction. Our plan includes:

- Benchmark Tasks: Visually impaired users will perform tasks like checking balances and transferring funds to evaluate efficiency and ease of use.

- Think-aloud Protocol: Users will verbalize their thoughts while completing tasks, revealing potential usability issues.

- Subjective Questionnaire: Users will answer questions about clarity of instructions, ease of navigation, and overall satisfaction with the interface.