Introduction

This report presents an AI-first approach to simulating user feedback for app features using refined customer personas. While traditional user testing methods involve beta testing, surveys, and compensation for participants, this beta version aims to streamline this process by generating realistic feedback and simulating personas to help feature evaluation before real-world deployment.

Simulation Algorithm

This simulation was implemented by using a rule-based approach that relies on predefined persona traits and their interaction with app features. In this simulation, the function generates feedback based on the persona’s preferences and technological experience. The process follows these steps; define personas with attributes such as name, age, technological experience level, feedback style, and UI preferences, for each feature, simulate feedback by evaluating how a persona might respond, and store and format feedback for display or further analysis.

Persona Definition and Creation Process

For this project, three representative personas were defined to simulate a range of user demographics. The first one was a tech-savvy teenager with a high tech experience, a blunt feedback style and a minimalist UI preference. The second user was a 35 year old busy professional with a medium tech experience, a direct feedback style and minimalist UI preference. The last user was a 70 year old user with low tech experience, a polite feedback style and a traditional, non-minimalist UI preference.

Use Cases and Examples

This project simulated feedback for features such as a new search button, voice-to-text input, and dark mode toggle. A sample output for the teenager was “I liked the dark mode toggle, but it could be faster.” An example output for the elderly user was “I was confused by the new search button. Maybe make it easier?”