WiseWal.ai

PHASE 5 - Final Implementation

Team 2

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Problem and our solution

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Problem statement

Tracking expenses, planning budgets and getting financial advice - all currently have different apps. There's a need for one stop place to perform all of this.

Our High-level Solution

WiseWal.ai offers a comprehensive solution by merging traditional financial tracking with cutting-edge AI technology.

Challenges addressed

Lack of insight into spending habits, difficulty in adhering to budgets, and overwhelming nature of financial decision-making.

Empowering Users by AI

AI-driven insights and personalized advice, empowering users to make informed financial decisions, optimize spending habits, and plan budgets more effectively.

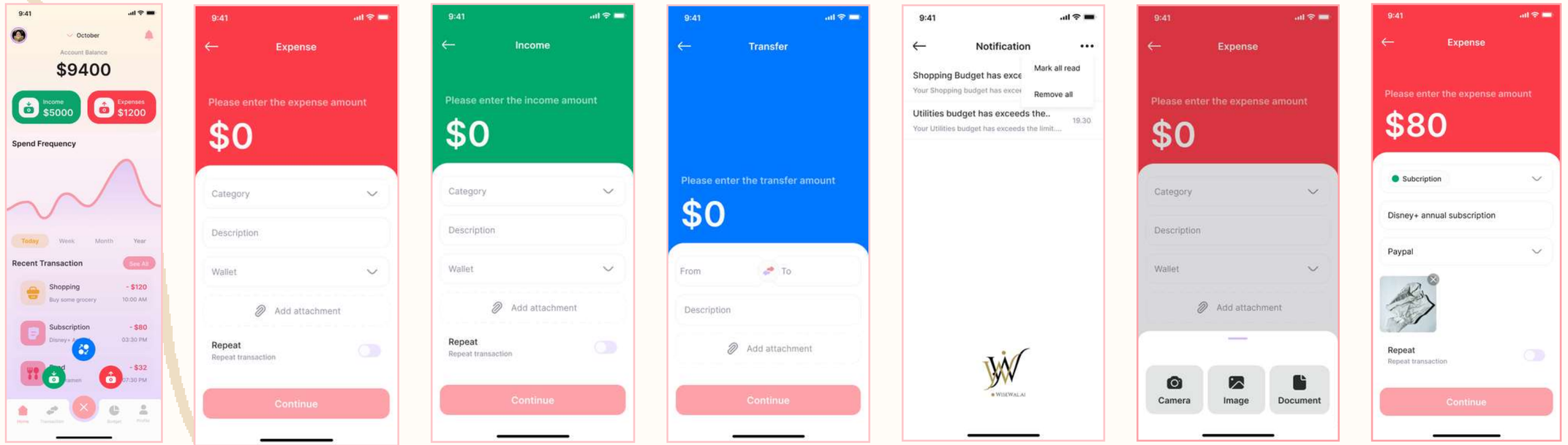
The Representative Tasks

1. Adding expense/income and updating it:

Users can add details of their income and expenses, including amounts, sources, and dates.

Why this task:

- Fundamental task - core of financial tracking and management.
- Recording income/expenses - crucial for analyzing spending patterns and making informed financial decisions.



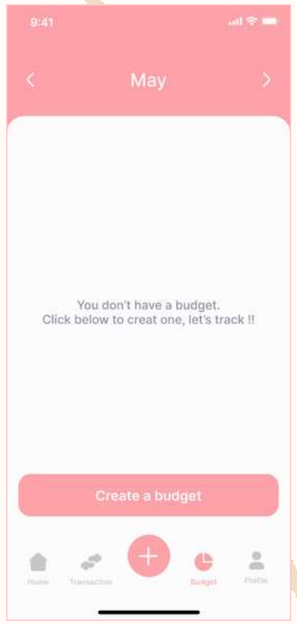
The Representative Tasks

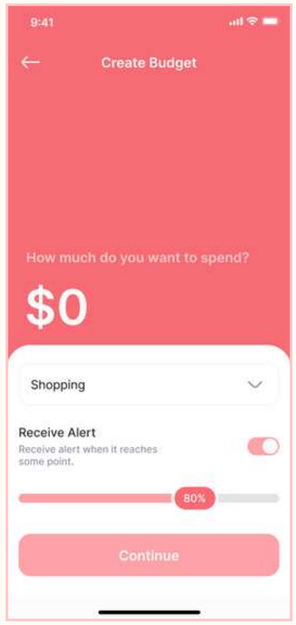
2. Budget Planning

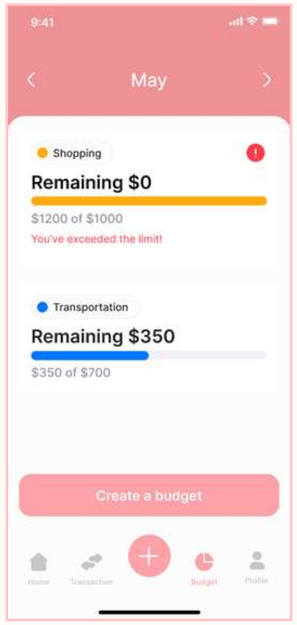
Users can establish a budget by entering their expected income and allocating funds and can also define specific budget thresholds.

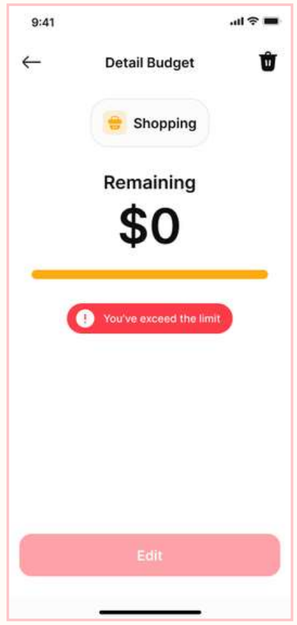
Why this task:

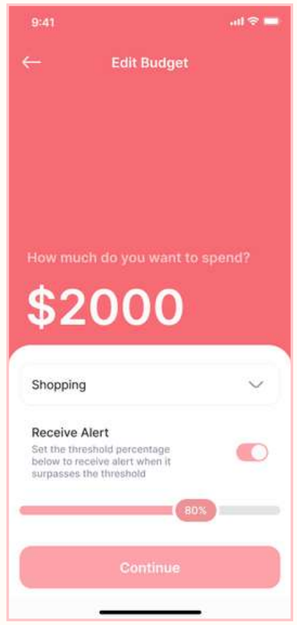
- Budgeting is a key aspect of financial planning. By providing tools to create budgets and set thresholds, users gain control over their spending and can work towards their financial goals.
- This task directly addresses the need for better budget management.

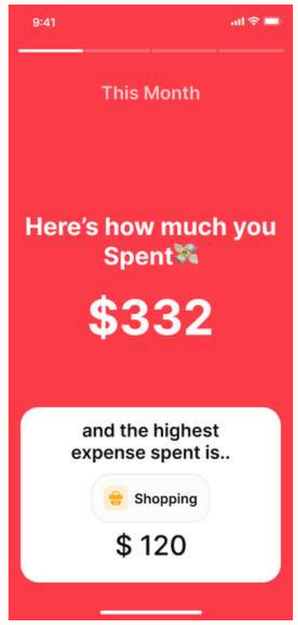


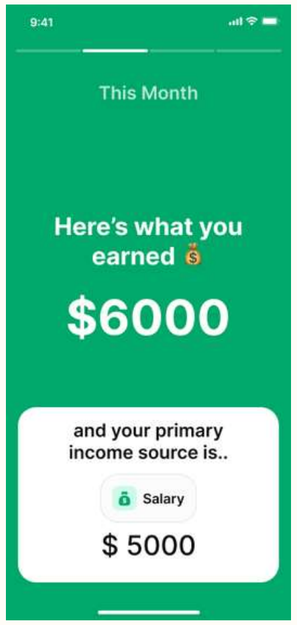












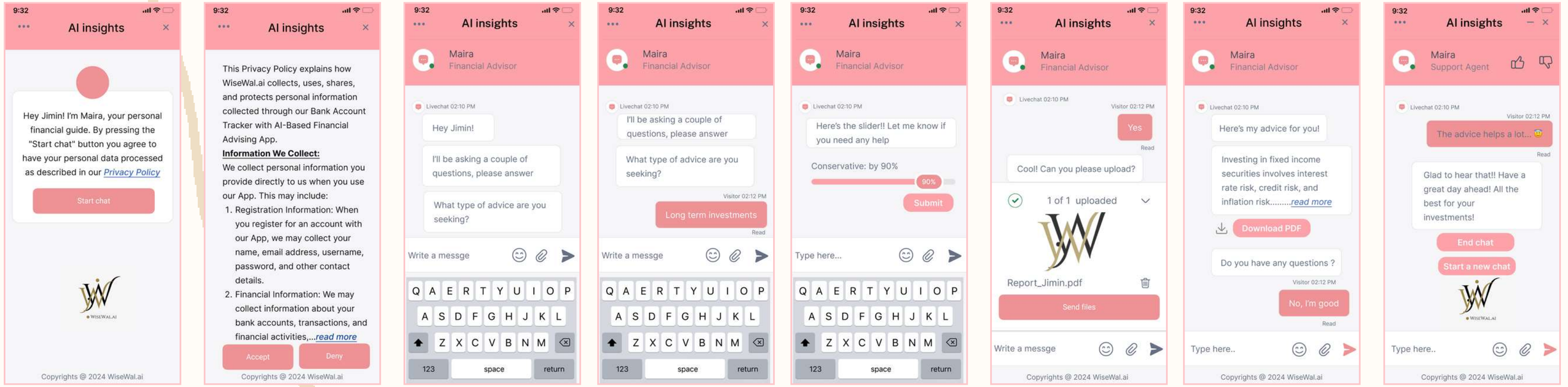
The Representative Tasks

3. AI Advice by Chatbot Maira

Users can have a conversation with this AI-based chatbot to obtain any sort of financial advice - offering personalized insights on savings, investment opportunities, and expense optimization. Users can also complete a questionnaire to specify their financial goals, status, and needs, enabling tailored advice.

Why this task:

- AI-driven insights add value by providing users with actionable recommendations based on their financial behavior.
- Offering Personalized advice/recommendations - helps to make more informed decisions aligned with financial objectives.



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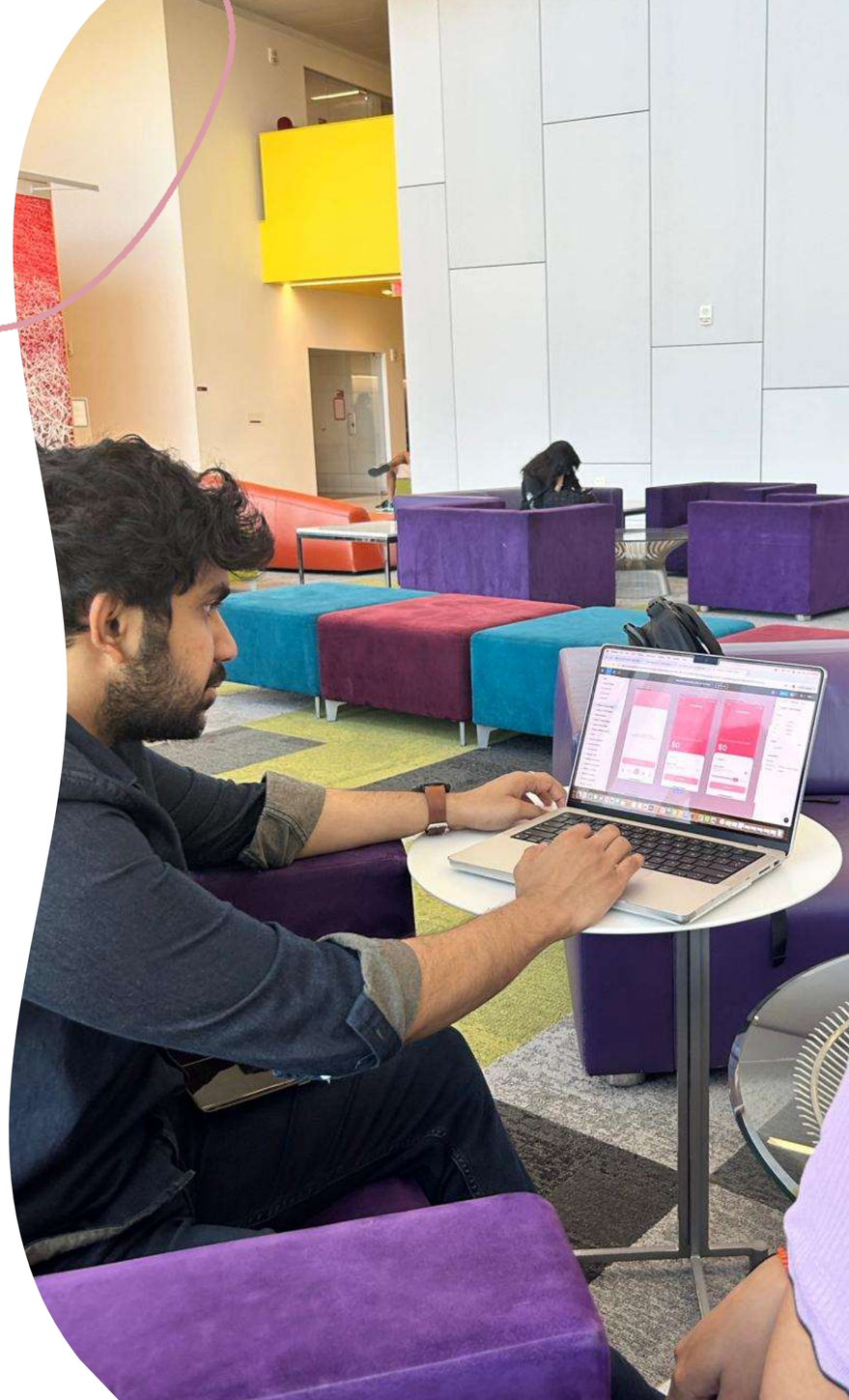
The Study Design

The real user study was performed with 3 different users (real users)
The following will be discussed in coming slides -

- Participants
- Hypothesis
- Dependant and Independant Variables



Participants

Participant 1

- Age - mid 20s
- A Doctoral candidate in the Agriculture department of NCSU.
- Tech-savviness - Medium

Participant 2

- Age - Late teens (17-19)
- An undergrad student in the NC Statistics department
- Tech-savviness - Less

Participant 3

- Age - early 20s
- A Masters student in the Engineering Management program at NC
- Tech-savviness - High

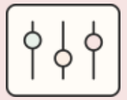
Hypothesis

- **Null Hypothesis** (**H0**)**:** There is no significant difference in user satisfaction and perceived usability between participants who use the financial management app and those who do not.

- **Alternative Hypothesis** (**H1**)**:** Participants who use the financial management app will report higher satisfaction levels and perceive the app as more usable compared to participants who do not use the app.

Dependant and Independant Variables

Independent Variable 1



Use of the Financial Management App: Participants are randomly assigned to either the control group (no app usage) or the experimental group (app usage).

Dependent Variable 1

User Satisfaction: This dependent variable measures participants' satisfaction with the financial management app's interface, features, and overall experience. It reflects how satisfied users are with their interaction with the app and can be assessed through surveys, ratings, or qualitative feedback.

Dependent Variable 2

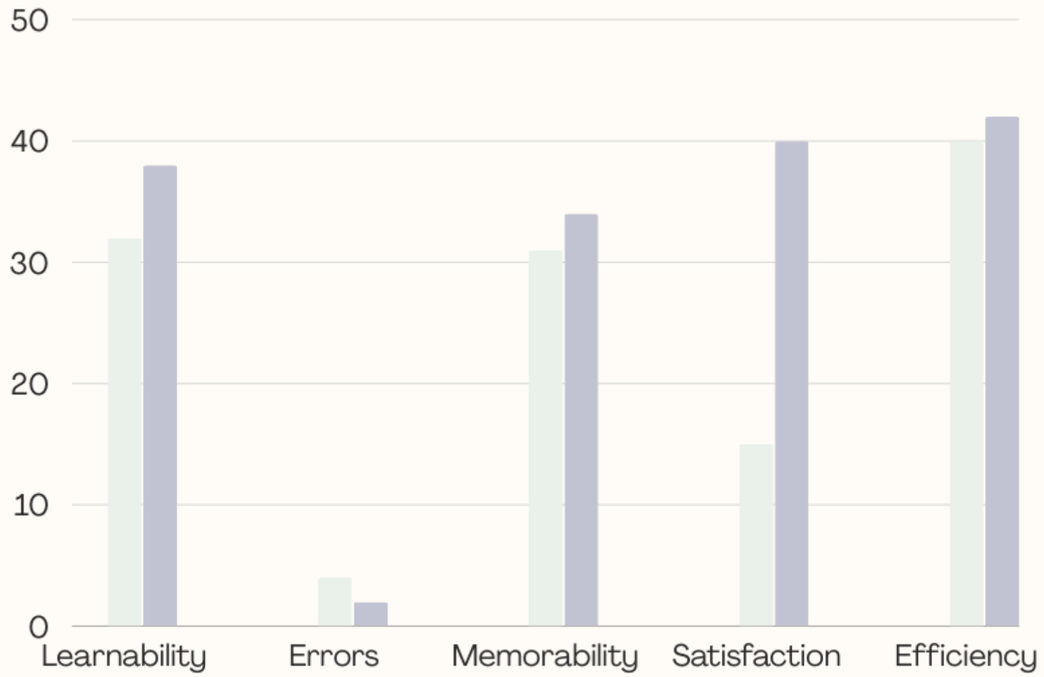
Perceived Usability: Another dependent variable is participants' perception of the app's usability. This includes how easy it is for them to navigate the app, perform tasks such as entering income and expenses, setting budgets, and accessing financial insights. Perceived usability can be measured using standardized usability scales, task completion rates, and qualitative feedback.

Results from User Study

Participants	Participant 1	Participant 2	Participant 3
Major Issues found and fixed	The form to enter expenses does not validate the type of expense, potentially allowing users to submit incorrect data. **Fix:** Implemented dropdown menus with predefined categories to reduce user error.	Inconsistent labeling of action buttons across different screens. Some screens use "Proceed", others use "Continue". **Fix:** Standardize the labels across all screens to maintain consistency.	Users cannot undo accidental expense entries easily. **Fix:** Add an "undo" button to reverse recent entries quickly.
	After setting a new budget, there is no immediate feedback or confirmation provided to the user. This absence can leave users uncertain whether their changes were saved. **Fix:** Implement a clear, visible confirmation message or notification whenever a budget is successfully set or updated.	The date formats vary between screens (MM/DD/YYYY on some and DD/MM/YYYY on others). **Fix:** Standardize the date format across the application based on the user's locale.	The application expects users to remember the budget limit set months ago without displaying it in the notification. **Fix:** Include the set budget limit within each notification about exceeding the budget.
Positive feedback	Color theme of the UI is professional as well as appealing	The integration of the financial advising section along with the savings/expense tracking is one new and rare approach	The flow of the user's task right from adding an entry of income/expense, planning budget, to the step of obtaining the AI advice is very smooth and seamless.

Results

Usability goals summary - from results of User study



Reflections

The Iterative Design Process Takeaway:	Milestone 1: Project Proposal	Milestone 2: Requirement Gathering	Milestone 3: Low Fidelity Prototype	Milestone 4: High Fidelity Prototype	Milestone 5: Implementation
Importance of empathy and user-centered approach	Set clear objectives and features based on target audience needs	Effective user interviews to uncover pain points and needs	Focusing on basic app layout and structure	Refine visual design and interactive elements	Translating design into functional code while adjusting for technical constraints
Continuous improvement through user feedback	Early user research essential to validate and refine features	Feedback leads to design revisions for better usability and navigation	Identified improvements in navigation and label clarity through testing	Adjustments based on feedback to enhance user engagement	Ensuring design consistency and cross-device compatibility
Integration of design principles and user research	Adjustments made for flexibility in budget tools based on feedback	Emphasize more extensive usability testing for robust feedback	Importance of broader user testing and stakeholder involvement	Need for more comprehensive user testing during this phase	Stressing on collaboration between design and development teams

Thank you!