

A Project Reported on

“MoneyMind: Focusing on smart financial oversight and control.”

Submitted By:

Shourya raj, UID-23MCI10110

Under The Guidance of:

Mr. Shivam Sharma

(Assistant Professor, UIC)



University Institute of Computing

Chandigarh University,

Mohali, Punjab

CERTIFICATE

This is to certify that **Shourya raj**, a student of **Master of Computer Applications (MCA)** in **Artificial Intelligence and Machine Learning (AIML)**, has successfully completed the Minor Project titled “**MoneyMind: Focusing on smart financial oversight and control.**” under the esteemed guidance of **Mr. Shivam Sharma**, Assistant Professor, University Institute of Computing (UIC), Chandigarh University.

This project was undertaken as part of the academic curriculum and submitted in partial fulfillment of the requirements for the MCA program. The work presented in this project is a result of independent research, diligent effort, and dedication, showcasing the student's ability to bridge theoretical knowledge with practical problem-solving in real-world scenarios.

The project focuses on the development of an innovative financial management app. It demonstrates an efficient approach to streamlining personal financial activities such as tracking balances, monitoring transactions, and receiving real-time notifications. The work reflects the student's understanding of user-centered design, financial data management, and cutting-edge methodologies including iterative prototyping using Figma.

I hereby confirm that this project is original work carried out by the student and has not been submitted elsewhere for the award of any other degree, diploma, or certification.

Dr. Krishna Tuli
Head of the Department
University Institute of Computing

Mr. Shivam Sharma
Project Guide Supervisor
University Institute of Computing

ACKNOWLEDGEMENT

We deem it a pleasure to acknowledge our gratitude to our project guide, **Mr. Shivam** Sharma, under whom we have carried out the project work. His incisive and objective guidance and timely advice encouraged us to continue the work with a constant flow of energy.

We wish to reciprocate in full measure the kindness shown by Dr. Krishan Tuli (H.O.D), University Institute of Computing) who inspired us with his valuable suggestions in completing the project work.

We shall remain grateful to Dr. Manisha Malhotra, Additional Director, University Institute of Technology, for providing us with a strong academic atmosphere by enforcing strict discipline to do the project work with utmost concentration and dedication.

Finally, we must say that no height is ever achieved without some sacrifices made at some end and it is here where we owe our special debt to our parents and our friends for showing their generous love and care throughout the entire period.

Date:

Place: Chandigarh University, Mohali, Punjab

ABSTRACT

The financial management app described in this report serves as a comprehensive tool for users to efficiently manage their finances in an increasingly digitized world. With features designed for tracking card balances, monitoring transactions, and initiating seamless money transfers, the app addresses the growing demand for accessible and user-friendly financial solutions. Developed using iterative design methodologies, the app emphasizes a clean, intuitive interface to simplify the financial management experience for users of all technical backgrounds.

In today's fast-paced society, personal finance management is a critical aspect of daily life, yet many users struggle with organizing their expenditures and maintaining financial discipline. The app seeks to resolve these challenges by offering real-time notifications, clear visual representations of spending patterns, and streamlined navigation. Inspired by the success of similar apps in the market—such as Mint, Google Pay, and YNAB—this application differentiates itself by integrating a central hub for viewing multiple aspects of personal finance, thereby providing a holistic approach.

The advantages of the app lie in its centralization of financial activities, user-friendly navigation, and the ability to track spending and transfers in one place. However, certain challenges, such as potential security vulnerabilities and reliance on stable internet connectivity, must be acknowledged. These limitations highlight the importance of prioritizing robust data security measures and offline functionalities in future iterations. Despite these drawbacks, the app's potential to enhance users' financial awareness and discipline is significant.

Looking ahead, the app has a promising scope for growth, including the incorporation of AI-driven insights to offer personalized budgeting advice, expansion into investment tracking, and improved accessibility features to cater to diverse user needs. Gamification elements, such as financial rewards for achieving savings milestones, could also be introduced to foster user engagement and encourage better financial habits.

In conclusion, this financial management app addresses pressing societal needs by simplifying complex processes and empowering users to make informed financial decisions. Its design principles, combined with a focus on usability and functionality, make it a valuable addition to the landscape of modern financial tools. Future enhancements will ensure its continued relevance and impact in an ever-evolving digital economy.

INTRODUCTION

In today's rapidly evolving digital landscape, managing personal finances has become a critical component of daily life. The increasing shift towards cashless transactions and the growing reliance on digital tools underscore the necessity for innovative solutions that simplify financial management. Users face numerous challenges, from tracking their expenses and monitoring transactions to ensuring security in their financial dealings. As financial habits and needs become more intricate, the demand for an intuitive, user-friendly platform that addresses these concerns continues to rise.

This financial management app is designed to respond to these emerging needs by offering a seamless, centralized solution. It aims to empower users by streamlining the process of tracking card balances, managing transactions, and transferring funds, all through a single interface. Inspired by the key features of existing applications like Mint, Google Pay, and YNAB, this app distinguishes itself with its commitment to usability and real-time data updates. By addressing both the functional and aesthetic aspects of financial management, the app ensures users have complete control over their financial health.

The screens designed in the app highlight its emphasis on simplicity and clarity. The integration of features such as real-time transaction updates and notifications ensures transparency, while the intuitive design promotes ease of use for people across different demographics. This app's structure is not merely about financial tracking—it is about fostering financial awareness and discipline in the modern user.

Objectives

The development of this app is guided by three primary objectives:

1. **To Simplify Financial Management:** Consolidating all key financial activities—such as tracking balances, managing transactions, and receiving notifications—into one cohesive platform.
2. **To Enhance User Experience:** Designing an interface that is visually appealing yet straightforward, ensuring accessibility for users of varying tech proficiencies.
3. **To Promote Financial Discipline:** Encouraging users to maintain better financial habits through transparent tools and real-time alerts.

With these objectives, the app aspires to go beyond being a simple tool. It aims to serve as a proactive partner in users' financial journeys, aiding them in making informed decisions while addressing the evolving needs of the modern society.

Methodology

3.1 Design Tools and Frameworks

The development of this financial management app heavily relied on Figma, a collaborative design tool known for its versatility and ease of use in creating wireframes, prototypes, and interactive components. Figma's cloud-based platform allowed real-time collaboration, enabling multiple contributors to work simultaneously on the project. This feature was particularly beneficial during the iterative design process, as feedback from users and team members could be incorporated instantly without disrupting workflow. The tool's robust capabilities—such as asset libraries, auto-layouts, and component grouping—streamlined the design process and ensured consistency across all screens.

To maintain a coherent and visually appealing interface, the app's design adhered to Material Design principles. These guidelines provided a framework for creating intuitive layouts, clear visual hierarchy, and responsive elements. By following these principles, the design achieved a balance between aesthetic appeal and functionality, ensuring that every feature was accessible and straightforward for users. Particular attention was given to aspects such as typography, color schemes, and spacing, which played a critical role in enhancing readability and user engagement.

Additionally, the team utilized various usability testing frameworks to analyze user interaction with the prototypes. This combination of design tools and frameworks ensured that the app met high standards of usability, accessibility, and performance, while also being adaptable for future improvements.

3.2 Research Methods

Research was a cornerstone of the app's development process, with emphasis placed on understanding user behavior, preferences, and pain points. User surveys were conducted to gather quantitative and qualitative data on financial habits, app usage patterns, and expectations from a financial management tool. Participants from diverse demographics provided insights into what features were most crucial, such as real-time notifications and simplified navigation. These surveys revealed common pain points, including difficulty in tracking multiple accounts and concerns about security, which directly influenced the design objectives.

Usability testing played a vital role in refining the app. Participants were invited to interact with early prototypes, allowing the team to observe navigation flow, ease of use, and comprehension of features. Feedback highlighted areas requiring improvement, such as the clarity of certain icons and the contrast of text in certain

sections. Iterative testing ensured that user concerns were addressed at every stage, leading to a more polished product.

The research methods not only validated design decisions but also provided a user-centric perspective that guided the app's development. By combining surveys with usability testing, the project team created a product that resonated with user needs and expectations.

3.3 Design Process

The design process was structured into three key stages: Wireframing, Prototyping, and Feedback Integration, each contributing to the creation of a user-centric interface.

1. Empathize – Understanding User Needs

To begin the design process, I researched the common challenges faced by individuals in managing their personal finances. Many users struggle with budgeting, expense tracking, and maintaining financial discipline. The aim was to design a mobile-first solution that empowers users to take control of their money with ease, accessibility, and clarity.

2. Define – Setting Clear Goals

Based on the initial research, the app was shaped around the following objectives:

- Simplify financial tracking and oversight
- Offer visually intuitive budget analytics
- Provide reminders and alerts for payments and spending limits
- seamless onboarding and user experience

3. Ideate – Brainstorming and Planning

Wireframes and user flows were mapped out to determine the structure and user journey of the app. Key screens identified were:

- Splash Screen
- Login/Signup
- Dashboard with financial summary
- Expense Tracker
- Budget Planning Interface
- Notifications & Reminders
- Settings/Profile

4. Design – High-Fidelity UI Creation in Figma

Using **Figma**, I designed each screen with a consistent visual language:

- **Typography:** *Poppins* for headers to convey structure, and *Roboto* for body text for readability.
- **Color Palette:** A calm, finance-friendly blend of **teal, soft green, and white** to evoke trust and clarity.
- **UI Elements:** Cards, charts, toggles, and input fields were styled with minimal shadows and generous padding to enhance usability.
- **Navigation:** A bottom tab bar and hamburger menu were used for easy access to core features.

5. Prototype – Interactive User Flows

Clickable prototypes were developed in Figma to test:

- Onboarding flow (from Splash to Dashboard)
- Adding and categorizing expenses
- Setting a monthly budget and viewing insights

This helped refine transitions and interactions for a smoother experience.

6. Test – Gathering Feedback

The prototype was shared with peers and mentors for feedback. Key insights were:

- Simplify the signup flow even more
- Include tooltips for first-time users
- Enhance the visibility of spending alerts

Changes were made based on this feedback to improve accessibility and user confidence.

7. Final Touches – Optimization & Consistency

- Ensured color contrast ratios for accessibility
- Created reusable Figma components and styles
- Organized layers and frames for developer handoff

The first stage, Wireframing, involved developing low-fidelity wireframes to outline the app's basic structure and navigation flow. These wireframes focused on functionality rather than visual design, ensuring that all essential features—such as

transaction history, notifications, and money transfer options—were logically positioned. The wireframes also helped identify potential bottlenecks in user flow, allowing the team to address these issues early in the design process.

In the Prototyping phase, high-fidelity prototypes were created to bring the wireframes to life. These prototypes incorporated interactive elements, such as clickable buttons and dynamic transitions, to simulate the end-user experience. Visual design was emphasized in this stage, with careful attention given to typography, color schemes, and iconography. The prototypes were designed to be as close to the final product as possible, enabling the team to test user interaction in a realistic environment.

Finally, Feedback Integration involved analyzing usability testing outcomes and incorporating changes based on user suggestions. Adjustments were made to improve visual hierarchy, simplify navigation, and enhance the clarity of interactive elements. Iterative improvements ensured that the app aligned with user expectations, resulting in a design that was both functional and appealing.

STEP

1. Set Up the Environment

- Opened Figma (Version 124.4.7) on a desktop or laptop device.
- Created a new project titled "**MoneyMind**".
- Set the canvas size suitable for mobile and desktop layouts to ensure responsive design.

2. Create the Layout

- Used the **Frame Tool** to define the structure of each screen including the dashboard, transaction history, sign-in/sign-up pages, OTP verification, and savings interface.
- Divided each frame into clear sections such as: header, content area, and navigation bar.

3. Design Header and Sorting Options

- Applied the **Text Tool** to add key labels like *"Welcome Back"*, *"Total Balance"*, *"Transactions"*, etc.
- Designed dropdown menus and buttons (e.g., "Filter by Date", "Sort by Amount") using **Shapes** and converted them into **Components** for reuse.

4. Add Content Previews

- Inserted **placeholders for cards, recent transactions, and notifications** using the Image Upload and Shape tools.
- Used the **Typography Tool** to add sample transaction details and labels (e.g., *Ajay sent you ₹7000, Medicine - ₹300, etc.*).

5. Enhance Visual Appeal

- Applied **gradients and shadows** to the background and card elements using the **Gradient Tool**.
- Implemented a **clean, calming color palette** (soft green, teal, and white) to reinforce a sense of trust and professionalism.
- Chose modern, readable fonts (*Poppins, Roboto*) to ensure clarity.

6. Prototype Sorting Interactions

- Enabled interactive behaviors using Figma's **Prototype Mode**.
- Added transitions and interactions for dropdowns and navigation buttons to simulate real-time sorting and tab-switching functionalities.

7. Review and Adjust

- Reviewed each layout for visual consistency, spacing, and responsive alignment.
- Adjusted margins, paddings, and font sizes to maintain usability across devices.

8. Test the Prototype

- Used **Figma's Presentation Mode** to preview all app screens and flows.
- Shared the design with peers and faculty for feedback.
- Implemented final refinements based on suggestions regarding contrast, label clarity, and user flow enhancements.

This structured approach ensured that the app was developed systematically, with each stage building upon the previous one to create a cohesive and user-friendly product.

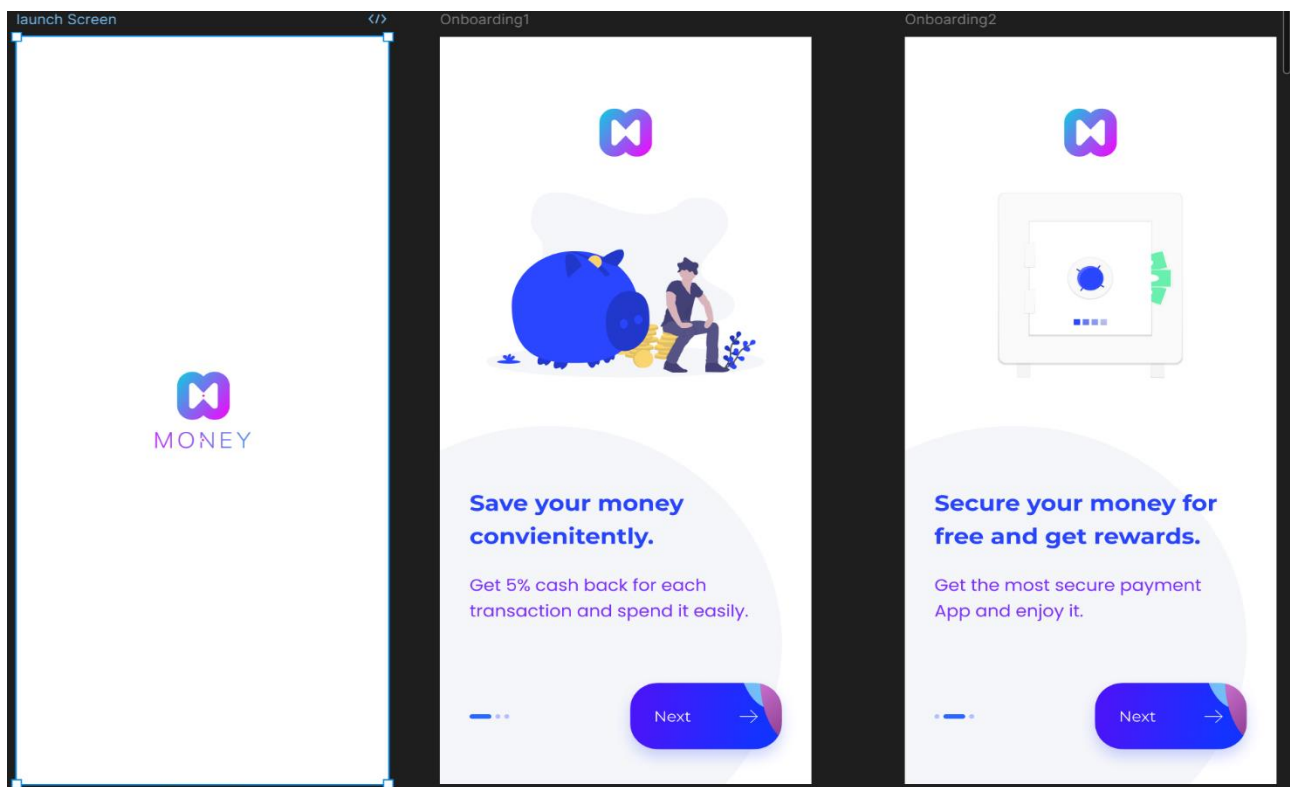
Results and Discussion

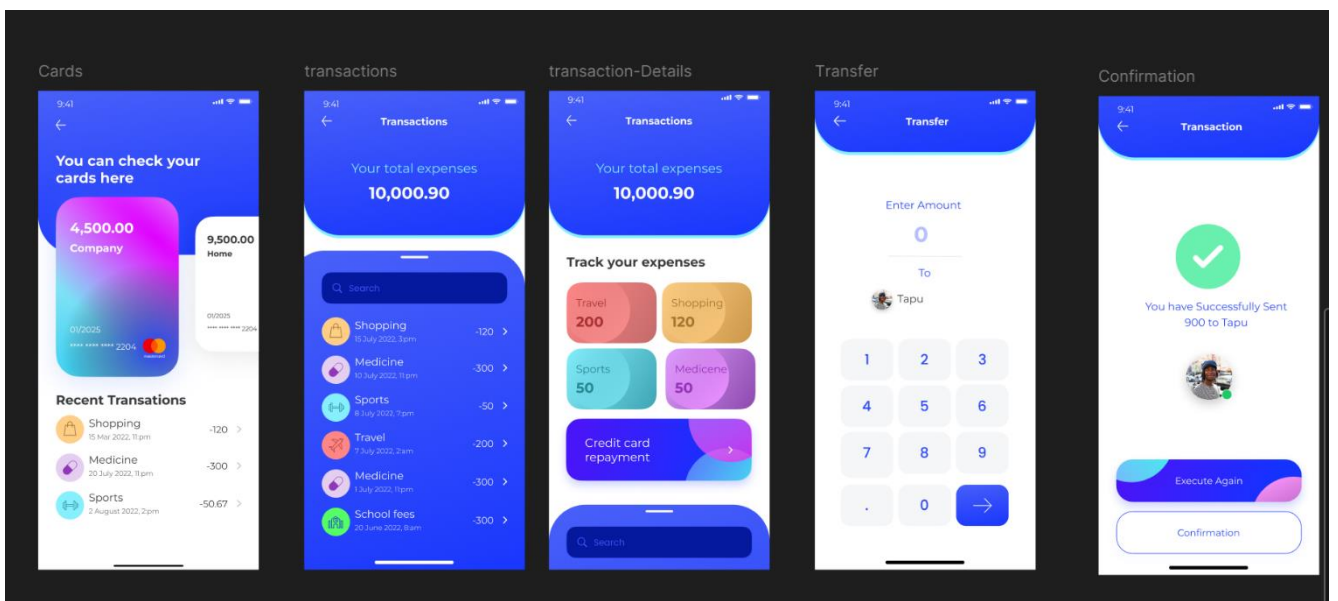
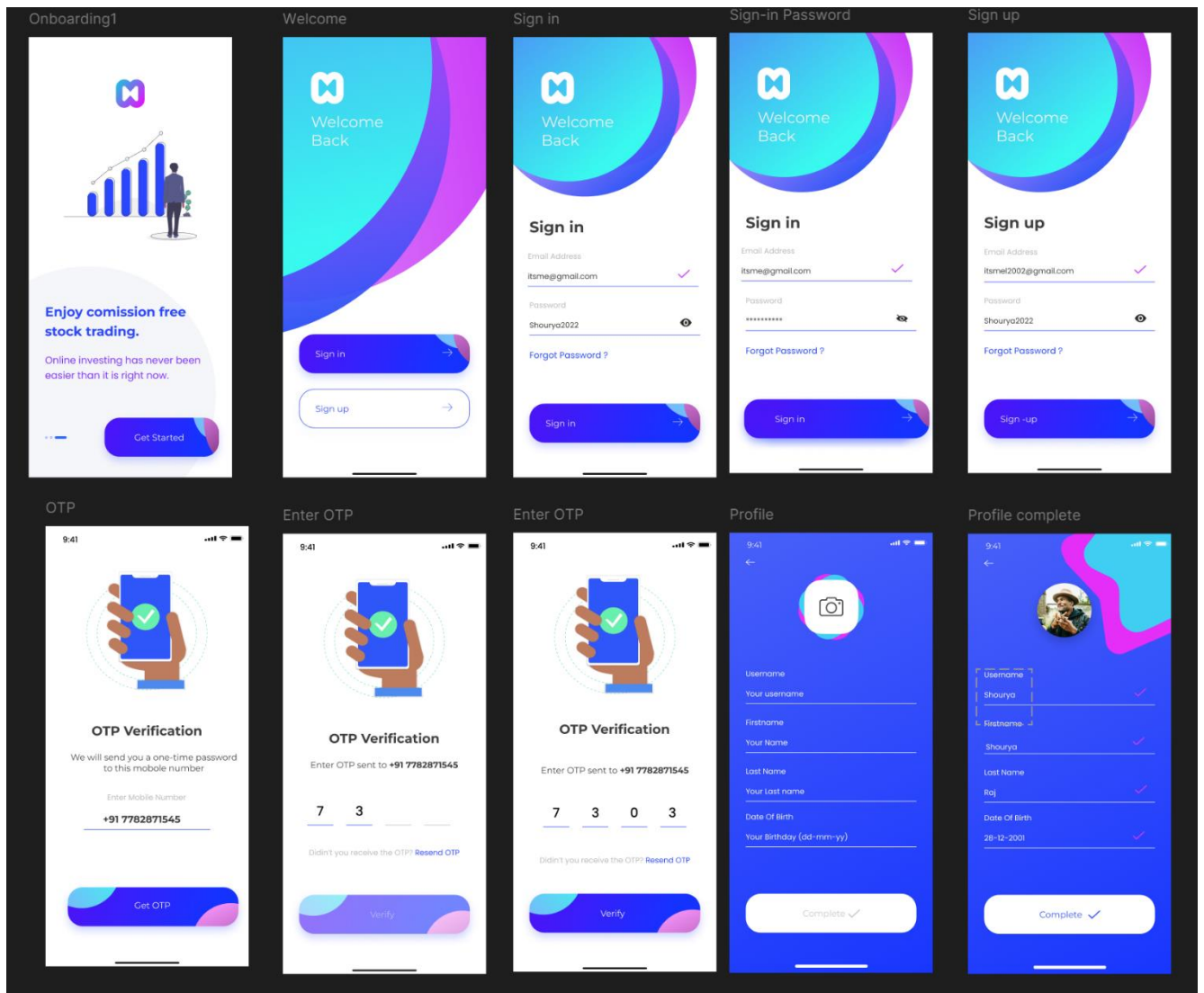
Design Outcomes

The financial management app demonstrates a thoughtful and well-executed design approach aimed at enhancing user experience and functionality. The design emphasizes simplicity and clarity through its visually appealing interface, ensuring that users can navigate the app with ease. Each screen is structured with a clear visual hierarchy, guiding the user's attention to critical features such as card balances, recent transactions, and notifications. This approach reduces cognitive load and enables users to quickly locate essential functions without confusion.

Interactive elements, such as buttons for money transfers and notifications, have been seamlessly integrated to provide an engaging user experience. These features are not only responsive but also visually distinct, ensuring that users understand their purpose and can interact with them intuitively. Furthermore, the design adheres to Material Design principles, ensuring consistency across the app while maintaining a modern aesthetic. Accessibility considerations, such as readable fonts and adequate contrast, have been incorporated to cater to a diverse audience.

The app's navigation system is another highlight of its design. By grouping related functions and features logically, the user flow has been streamlined. Users can easily move between screens without unnecessary clicks, enhancing overall efficiency. Real-time transaction updates and notifications ensure transparency, allowing users to stay informed about their financial activities at all times.





User Feedback

To refine the app design, user feedback was gathered through surveys and usability testing. Participants appreciated the app's intuitive layout and the inclusion of features like real-time notifications and transaction history. Many users highlighted the simplicity of the navigation system, noting that it reduced effort and saved time during financial management activities.

However, areas for improvement were identified during the testing phase. Users suggested enhancing the contrast of certain screens for better readability, particularly for individuals with visual impairments. Additionally, some participants recommended adding explanatory tooltips to icons and buttons to improve clarity for first-time users. These suggestions were carefully considered and integrated into subsequent design iterations, resulting in a more polished and user-friendly interface.

The incorporation of user feedback into the design process underscores the importance of iterative development. By addressing user concerns and preferences, the app evolved to meet the diverse needs of its target audience, ultimately delivering a satisfying and efficient experience.

Discussion

The development of the financial management app highlights the importance of adopting a user-centered approach in addressing modern financial challenges. This discussion explores the design's ability to meet project objectives while analyzing its broader implications and potential areas for improvement.

The app effectively fulfills its primary goal of simplifying financial management for users. By consolidating essential features, such as tracking card balances, monitoring transactions, and receiving real-time notifications, the app provides a comprehensive platform for financial oversight. Users no longer need to rely on multiple tools, as the app brings all necessary components into a single, streamlined interface. The integration of real-time updates ensures transparency, empowering users to make informed financial decisions promptly. Additionally, the design's clean aesthetic and logical navigation flow further enhance usability, catering to users of varying technical expertise.

However, as with any project, challenges and limitations remain. While user feedback has been instrumental in shaping the design, certain areas for improvement were identified. For instance, concerns about data security must be addressed to ensure user trust, especially in the context of sensitive financial information. Incorporating advanced encryption techniques and multi-factor authentication could mitigate such risks. Similarly, the app's reliance on stable internet connectivity may pose accessibility issues for users in regions with inconsistent networks. Developing

offline functionalities for basic features, such as viewing recent transactions, could enhance accessibility and broaden the app's appeal.

The app's innovative approach to financial management positions it as a valuable tool in today's society, where digital transactions are increasingly prevalent. Its success underscores the potential of iterative design methodologies, as user feedback played a crucial role in refining the interface and enhancing overall satisfaction. The iterative improvements, particularly in visual hierarchy and interactive elements, highlight the value of continuously engaging with end users to deliver a product that aligns with their needs.

Looking forward, the app has significant potential for future growth. Expanding its scope to include investment tracking, AI-driven budgeting insights, and gamification elements could elevate user engagement and retention. By addressing the identified challenges and embracing emerging technologies, the app can continue to evolve, cementing its relevance in a rapidly changing digital economy. Overall, the project demonstrates a strong foundation and serves as a testament to the power of user-centered design in creating impactful digital solutions.

Conclusion

The financial management app described in this report embodies a modern and innovative approach to addressing the challenges of personal finance in today's digital age. Designed to simplify the complexities of financial tracking, the app successfully integrates core functionalities—such as monitoring card balances, viewing transactions, and enabling seamless money transfers—within a user-friendly and visually appealing interface. The iterative design process, driven by user feedback and supported by tools like Figma, underscores the importance of placing user needs at the forefront of development.

This app holds immense relevance in a society increasingly dependent on digital transactions. It eliminates the need for multiple financial tools by providing a centralized platform that caters to a wide range of user needs. Real-time updates and notifications ensure transparency and empower users to make informed decisions promptly. The clear visual hierarchy and intuitive navigation foster an accessible experience for users of varying technical expertise, highlighting the app's emphasis on inclusivity and ease of use.

While the app achieves its primary objectives, certain challenges remain. Data security is a paramount concern when handling sensitive financial information. Robust measures, such as advanced encryption and multi-factor authentication, will be essential for building and maintaining user trust. Additionally, the app's reliance on stable internet connectivity may limit accessibility in regions with inconsistent

network coverage. Addressing these limitations in future iterations will be vital for expanding the app's user base and ensuring its sustained success.

Looking ahead, the app offers significant scope for growth. Integrating advanced technologies, such as AI-driven insights, could enhance personalization by offering tailored budgeting advice and predictive analytics. Expanding functionality to include investment tracking and financial planning tools could position the app as a comprehensive solution for personal finance management. Gamification elements, such as rewards for achieving savings goals, could further encourage user engagement and foster financial discipline. Moreover, incorporating accessibility features, like voice commands and compatibility with assistive devices, would make the app more inclusive.

In conclusion, this financial management app serves as a testament to the power of user-centered design and iterative development. It not only meets contemporary needs but also lays the foundation for future enhancements that can adapt to the evolving demands of users. By addressing its limitations and embracing innovation, the app has the potential to become an indispensable tool in the digital economy, empowering individuals to achieve greater financial clarity and control. MoneyMind: Focusing on smart financial oversight and control.”