

Finance Buddy: Your Personalized Path to Financial Freedom

The Problem: Financial literacy is a critical life skill often overlooked in traditional education. Many individuals, regardless of age or income, struggle with effective budgeting. Existing budgeting applications frequently fall short in providing truly personalized financial guidance, leading to frustration and disengagement.

The Solution: **Finance Buddy** is an innovative mobile application designed to empower users with smarter budgeting and financial goal tracking. By combining cutting-edge AI personalization with a gamified learning approach, Finance Buddy transforms the often daunting task of managing finances into an accessible, engaging, and sustainable journey. Our app leverages Retrieval Augmented Generation (RAG) to deliver highly personalized financial analysis, ensuring that each user receives tailored advice and support to achieve their long-term financial aspirations.

Key Features:

- **Smart Personalization:** Users begin by providing details about their spending habits, income, and financial goals. Finance Buddy's intelligent system then crafts a unique financial plan, adapting to individual needs and behaviors.
- **Smart Dashboard:** The app offers a clear, intuitive, and easy-to-read layout of a user's spending history. This visual representation allows users to quickly grasp their financial situation and identify areas for improvement.
- **Goal Setter:** Users can set specific financial goals, such as saving for a trip, a large purchase, or long-term security. Finance Buddy provides regular reminders to help users stay on track and offers interactive tools to monitor progress and ask questions about their financial journey.
- **Image Evaluation:** Users can incorporate photos of their receipts as expenses rather than manually including all expenses in-app. The users' spending habits will then be evaluated as normal in the Dashboard and Goal Setter categories.
- **Gamified Learning:** Financial literacy will be taught through a game similar to Duolingo, allowing users to earn points based on their learning progress. Users will be able to compete with other friends on the app for streaks, correctness and more.

Target Users: Finance Buddy is designed for a broad audience – anyone committed to smarter budgeting and achieving their financial objectives. This includes students saving for travel, young professionals planning for significant investments, and individuals seeking long-term financial security. The app's adaptable nature ensures it caters to diverse financial situations and goals.

Technology Stack: The development of Finance Buddy relies on a robust and modern technology stack:

- **iOS Swift (or React Native):** The primary framework for building a responsive and user-friendly mobile application.

- **Firestore:** A comprehensive platform for backend services, including user authentication, real-time database capabilities, and cloud storage.
- **Budget Categorization Model (AI Model):** An advanced artificial intelligence model responsible for automatically categorizing transactions and providing insightful spending analysis.
- **Secure Handling of Bank Statements:** Implementing robust security measures to ensure the safe and confidential handling of sensitive financial data.

Justification: Our team recognizes the critical importance of financial literacy for students and young professionals. Finance Buddy provides an excellent opportunity to apply and extend our knowledge in various technical domains, including mobile app development, backend API creation, AI/LLM integration, and UI/UX design. We aim to complete a Minimum Viable Product (MVP) encompassing core functionalities such as the smart dashboard, goal setting, reminders, and AI assistance within a single semester. Each team member possesses valuable industry experience in fast-paced environments and agile development methodologies, ensuring the successful completion of this complex project.

Market Opportunity: The personal finance software market is experiencing significant growth, projected to exceed \$2.5 billion by 2030 globally. The U.S. financial technology user base currently stands at 80 million Americans, a number continuously expanding as more users embrace AI-powered budgeting solutions. This burgeoning market presents a substantial opportunity for Finance Buddy to carve out a significant niche and contribute to the growing demand for intelligent and accessible financial management tools.