

PocketPal: GenAI-Powered Smart Spending Assistant for Students

Problem Statement

Today's students face increasing financial pressure with limited knowledge about budgeting, saving, and investing. Many overspend unknowingly, lack exposure to compounding, and fail to develop healthy financial habits early. Existing apps are either too simple or too complex, and none provide a unified, friendly, AI-powered platform offering personalized financial guidance.

Target Audience & Context

PocketPal is designed for students and young adults, especially across India's Tier 1–3 cities and university towns. They are digital-first, UPI-savvy, yet lack structured financial literacy. PocketPal provides simple tools, native language support, and a non-judgmental guide to help them manage expenses, build savings, and learn investment basics.

Relevance of Problem

Low financial literacy among youth often leads to long-term money stress. With rising digital payments and easy credit, early intervention is critical. PocketPal's gamified, AI-driven approach fosters healthy financial habits, addressing a foundational issue for India's future workforce.

Use of GenAI

PocketPal leverages Open GenAI and multilingual APIs:

- Spendo ChatBot: Conversational financial assistant for queries, budgeting tips, and emotional support.
- Persona Engine: Analyzes spending behavior to offer personalized nudges, challenges, and savings templates.
- Goal Simulator: Visualizes savings growth using compounding and SIP simulations.

Solution Framework

- Quick Onboarding: Goals, manual or SMS-based expense linking, language preference.
- Daily Expense Dashboard: Categorized expense tracking.
- Group Split (SplitSmart): Shared expense management inspired by Splitwise.
- GenAI Chat Support: Continuous engagement via Spendo.
- Reward System: Merit points for savings goals and financial learning.
- Learn & Play: Gamified, bite-sized modules on finance essentials.

Feasibility & Execution

MVP achievable in 30-45 days:

- Frontend: React Native / Flutter
- Backend: Flask/Django + PostgreSQL
- AI APIs: OpenAI, Bhashini
- Other Tools: Firebase/Auth, Chart.js, Twilio (SMS parsing)

Manual entry or SMS parsing initially; fintech API integration in future phases.

Scalability & Impact

Potential reach: 250M+ Indian students & young adults. Possible partnerships with colleges, EdTechs, fintechs, NGOs, and CSR initiatives. Gamification and AI coaching drive long-term behavior change toward financial empowerment.

Hackathon Plan (48 Hours)

Day 1 – Ideation & Setup

- Finalize MVP feature scope
- Set up repo & scaffolding (frontend/backend)
- Build basic UI: onboarding, dashboard
- Integrate GenAI chatbot (Spendo basic version)

Day 2 – Development & Demo Prep

- Implement SMS parsing for expenses
- Add goal simulator & reward system
- Demo leaderboard/group split feature
- Final demo preparation, testing & pitch

Deliverables

- Functional mobile prototype
- Short demo video / live walkthrough
- Final pitch deck

Conclusion

PocketPal makes financial fitness fun, social, and smart for young Indians. With GenAI guidance, language accessibility, and habit-building features, it empowers students to turn their pockets into powerful tools for lifelong financial well-being.