

FinSmart — AI-Powered Personal Finance Assistant

A smart, offline-capable finance management system built using Flask, SQLite, Machine Learning (XGBoost), and Python. FinSmart helps users track expenses, analyze spending behavior, predict financial risk, get loan insights, and receive personalized financial guidance.

Features

1. Core Financial Management

- Add Expense: Log daily transactions category-wise.
- Show Summary: View total spend, category breakdown, and financial overview.
- Suggest Monthly Budget: AI recommends a healthy budget based on spending patterns.
- Get Saving Tips: Simple, actionable suggestions to increase savings.
- Download Report: Export financial summary for offline use.

2. Loan & Credit Intelligence

- Loan Approval Prediction
- Credit Score Check
- Eligible Loan Offers
- EMI Calculator

3. Account & Utility Tools

- Alerts/Reminders
- Edit Profile
- Home Navigation

Coming Soon: Advanced AI Modules

- AI Emotional Finance Coach
- Risk Personality Analyzer
- Financial Crisis Predictor

Project Architecture

(omitted tree for pdf brevity)

Tech Stack

Backend: Flask

DB: SQLite

ML: XGBoost, Scikit-learn

Frontend: HTML, CSS, Bootstrap

How to Run

1. Clone repo
2. Create venv
3. Install requirements
4. Init DB
5. Run app

Research Areas

- Emotion-aware finance
- Behavioral risk profiling
- Predictive financial stability