

Final Year Design Project Proposal

Smart FinSight

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by

Amina Javid 089288(2022-ks-165)

Somia Naseer 089244(2022-ks-362)

(Morning)

Project Advisor:

Muhammad Kamran

Govt.Graduate College, Civil Lines, Sheikhupura

University of the Punjab, Lahore, Pakistan

(2025)

Smart FinSight

1. Abstract of the proposal

Smart FinSight will help user to track their daily income and expenses in an easy and efficient way. User will create account and log in to access the system. User will be able to add income and expenses manually or through voice input. Notebook will allow users to add notes. The system will analyze user spending behavior and provide smart alerts, suggestions and future expense predictions. The app will allow users to set budgets and monitor their spending. User will view transactions in list, calendar and donut charts formats. System will generate reports and user will be able to download it. This application will reduce manual calculations and support smart financial decision making. Overall, it will provide a reliable and user friendly solution for tracking finances. It will be a cross platform application. It will be developed using flutter and firebase.

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2. INTRODUCTION

Background:

People still track their daily income and expenses manually. Many individuals still rely on notebooks,spreadsheets or mental calculations to track their spending.Its time consuming and inaccurate paper work which is not efficient.Using modern digital systems finance tracking will become easier,more accurate and less time consuming.A digital financial tracking system will help users record transactions,monitor balances and plan budgets more effectively in one place.

Problem Statement:

People use notebooks,registers or spreadsheets to record their daily income and expenses.This process is time consuming and records can easily be lost,damaged or misplaced.All information is written manually and calculations are done by hand which often leads to mistakes.Generating reports is also difficult and time consuming.Many people do not keep proper records of their spending so they are unable to understand where their money is going.They are unable to identify overspending patterns or predict future expenses.They are struggling to control their spending.These challenges highlight the need for a digital financial application to efficiently resolve these issues.

Stakeholders & Interests

Stakeholders	Description	Interests/Benefits
Users	Who will use the app to record income and expenses, set budget and reminders, track daily finances, add voice inputs, write notes, generate reports and receive smart alerts, suggestions and future expense predictions.	Users will be able to track finances efficiently, understand spending patterns, receive behavior based alerts, get smart suggestions, predict future expenses and generate reports to improve budgeting decisions.

Objectives:

- User will be able to track their daily income and expenses.
- User will be able to set budget and track the remaining amount.
- System will analyze user behavior and provide smart alerts, suggestions and predictions.
- Income, expenses and overall summaries will be displayed clearly using charts.
- User will be able to save important notes and set reminders.
- System will allow user to generate reports for easy tracking.
- System will automatically record income and expenses through voice input.
- Tracking income and expenses will be simple and efficient.

Scope:

Scope In:

- The project will develop a mobile app to track income and expenses.
- User will be able to set budgets and view financial summaries in charts.
- The system will generate financial reports.
- Smart, alerts, insights and expense prediction will be provided.
- User will be able to save notes and set reminders.
- AI voice input will allow automatic transaction entry.
- The app will ensure secure and organized financial records keeping.

Scope Out:

- Inaccurate voice input may lead to wrong data entry.
- An internet connection will be required for some features.
- The app will not support multiple languages.
- Real time bank account synchronization will not be available.

3. LITERATURE REVIEW

Related Work:

Several finance tracking apps like CashBook, AndroMoney, MoneyTracker, Moneyfy, vocash and Danalyze allow user to record income and expenses. These apps do not analyze user behavior or provide suggestions and predictions. These apps provide basic transaction tracking and simple reports. Most of them lack voice based transaction entry, budget planning, notebook, reminder, calendar and visual charts. Many apps also offer limited

free features and required premium access for reports. The proposed Smart FinSight will overcomes these issues by using AI powered voice input, behavior based smart finance assistant, budget planning and report generation. The app will also provide notebook, reminder, calendar and visual charts making expense tracking smarter, easier and more efficient available all in one place.

Gap Analysis:

Existing Platforms	Limitations	Proposed Solution
CashBook [1]	No AI voice entry, no behavior based smart assistant, reports required premium access, no budgeting support, no charts or visual spending analysis.	Our app will provide AI voice input, behavior based smart finance assistant, free PDF and Excel reports, budget tracking, visual charts for clear spending analysis.
AndroMoney [2]	No AI based voice entry, no behavior based assistant, complex user interface, no PDF/Excel report generation.	Our app will provide AI powered voice entry, behavior based assistant, simple interface, free PDF and Excel reports, budget tracking.
MoneyTracker [3]	No AI voice entry, no behavior based assistant, does not support PDF/Excel report generation.	Our app will offer AI voice input, behavior based assistant, a simple and user friendly interface, free PDF and Excel report generation.
Moneyfy [4]	No AI based voice data entry, no behavior based assistant, no PDF/Excel report generation, limited budget planning features.	Our app will offer AI voice auto entry, behavior based assistant, PDF/Excel reports, smart budget planning.
Vocash [5]	No behavior based assistant, no budget planning, no notebook feature, limited free plan, complex user interface.	Our app will include behavior based assistant, budget planning, Notebook feature, full free access and an easy to use interface.
Danalyse [6]	AI chat available but doesn't work and no data entry, no behavior based assistant, no reminders, no notebook, no report generation.	Our app will offer AI voice entry, manually transaction entry, behavior based assistant, reminders, notebook and report generation.

3. FYDP OVERVIEW

FYDP Title: Smart FinSight

Sr. No	Roll Numbers	Name	Signatures
1.	089288	Amina Javid	
2.	089344	Somia Naseer	

FYDP Goals

The project will create an easy to use app for tracking income and expenses.

The app will help user set and track monthly and yearly budgets.

The system will display clear charts for income,expenses and overall summaries.

The system will monitor user financial activity and provide alerts, suggestions and predictions.

The app will include an AI voice feature for quick data entry.

User will be able to generate pdf and excel reports.

The system will allow user to save notes and set reminders.

All financial records will be kept safe and secure.

The app will be designed with a simple and attractive user interface.

FYDP Objectives

The system will maintain a complete and accurate record of income and expenses.

Budgets will be set and remaining amounts will be tracked automatically.

The system will analyze user behavior and provide smart alerts, suggestions and predictions.

Income,expenses and overall summaries will be displayed clearly using charts.

The system will provide reminders for important tasks and a notebook for saving notes.

AI voice input will allow quick and automatic data entry in the transaction list.

FYDP Success Criteria

This system will be succeeded if:

The app will run smoothly and easy to use without errors.

User will be able to record income and expenses easily.

User will be able to set budgets and track them efficiently.

The app will provide alerts, suggestions and predictions based on user activity.

The app will automatically save transaction through voice input.
User will be able to generate reports.
User will be able to set reminders and save notes efficiently.
Assumptions:
User will have basic knowledge of using mobile app.
User will enter correct information into the system.
User will have internet access to use the app.
Firebase services will work properly and securely.
Risks & Obstacles
Incorrect data entered by the user or misunderstood by AI may effect calculations and reports.
Predictions may be wrong if there isn't enough past data.
Large amounts of stored data may slow app performance.
Poor internet connectivity may delay voice processing and cloud syncing.
Voice recognition may not work properly in noisy environments.
Organization Address: Govt. Graduate College, Civil Lines, Sheikhupura
Target End Users : Users
Suggested Project Supervisor: Muhammad Kamran
Approved By: Muhammad Kamran
Date: October 16, 2025

4.TOOLS, LIBRARIES AND TECHNOLOGIES WITH REASONING

Table 2 Tools Technologies and Libraries

	Tools	Version	Rationale
Tools	Visual Studio Code	1.106.3	IDE with extension
	Draw.io	15.8.7	UML Diagram
Libraries	GitHub	Latest	Version control
	Flutter Dev Tools	2.22.0	Debug
Libraries	Python	3.12.0	Backend / ML
	Libraries	Version	Rationale
Libraries	Firebase Authentication	5.15.0	User authentication
	Firebase Firestore	5.16.0	Data storage
Technologies	Fl_chart	Latest	Charts
	Firebase Cloud Messaging	14.9.0	Notifications and alerts
Technologies	Pdf	3.11.0	Pdf report
	Excel	4.0.3	Excel report
Technologies	Speech_to_text	6.6.0	Voice input
	Scikit-learn	1.2.2	ML
Technologies	Numpy	1.26.0	Data Process
	Pandas	2.1.0	Data Process
Technologies	Technology	Version	Rationale
	Flutter	3.35.7	Cross Platform
Technologies	Firebase	4.6.0	Backend services
	Gemini AI API	Latest	AI,ML
Technologies	Flask API	Latest	Backend services

5.WORK DIVISION

Table 3 Project Team Members Work Division

Sr. No	Roll Number	Name	Role Assignment & Work Division
1.	089288	Amina Javid	Frontend,Backend and Documentation
2.	089344	Somia Naseer	Frontend,Backend and documentation

6. References

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