“Your Financial Escort”

Date : 02-04-2025

Mail of problem statement received from mentor

**Problem Statement:**

Managing personal finances can be challenging, particularly for individuals who lack financial literacy or struggle with impulse spending. For example, a young professional might find it difficult to stick to a budget, save for future goals, and avoid accumulating debt. Traditional budgeting tools often require manual input and offer limited insights, leaving users feeling overwhelmed and unsure of how to improve their financial situation. Without clear visibility into their spending habits and financial health, users may struggle to make informed decisions about their money.

**Team Members:**

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| --- | --- | --- | --- |
| Group | Learner 1 | Learner 2 | Capstone Project Number |
| 5 | Kanishka K R | Vikram Saravanan S | 5 |

Date : 03-04-2025

**Agenda :**

* Discuss about the project’s key features and the flow of it.

**Key Features:**

**🔹 Bank Transaction**

• To Fetch and categorize transaction history for budget tracking.

**🔹 Real-Time Budget Alerts & Notifications**

• Twilio API sends SMS alerts if a user overspends or misses bill payments.

• Example: "You've exceeded your dining budget by ₹2000 this month!"

**🔹 Multi-Currency Budgeting (Global API)**

• CurrencyLayer API provides real-time currency conversion.

**Optional:**

**🔹 Gamified Financial Challenges**

• Encourages savings via "No Spend Days" and "Save ₹5000 in a Month" challenges.

• Users earn points and rewards for achieving goals.

**🔹Email Receipt Scanning**

• Detect and track subscriptions based on email receipts.

**🔹ML for Prediction**

• Automatic categorize expenses based on transaction descriptions.

**🔹 AI-Powered Financial Assistant**

• Uses OpenAI API to analyse user spending habits and provide personalized budget recommendations.

**ABSTRACT:**

Managing money can be overwhelming, especially when juggling bills, subscriptions, savings, and everyday expenses. Many budgeting apps exist, but they often require too much manual effort, making them difficult to stick with. Our project solves this by building an AI-powered personal finance assistant that helps users track spending, manage debts, and save smarter—all with minimal effort.

Using **ASP.NET Core Web API, Angular, Global public online API and cloud-based AI tools(optional),** the system automatically categorizes transactions, predicts future expenses, and sends smart alerts when a user is likely to overspend. It can also track subscriptions, suggest savings strategies, and help pay off debts faster. With features like gamified challenges, personalized financial advice, and real-time budget monitoring, users can improve their financial habits without stress.

Unlike traditional budgeting apps, this system learns from spending patterns and provides AI-driven recommendations, making financial management smarter and more efficient. The goal is simple: give users full control over their money with minimal effort.

Date : 04-04-2025

**Agenda :**

* Discuss about the project’s micro services and complete the use case.

**Microservices** :

* Authentication & Authorisation
* Bank Transaction (Global API)
* Savings generation with algo
* SendGrid API + Twilio (Pdf generation + email)
* Visualization using Ngx

**Options:**

* News API (Finance news/Tips) / Stock (Alpha Vantage Api)
* Bill Payment Reminder (Google calendar Api)