MINI PROJECT ABSTRACTS

Group NO: **11**

Submitted by:

Abhiram N (CEC22CS009)

Meenakshi C M (CEC22CS083)

Muhammed Uvaiz Sha (CEC22CS090)

Safeer Sifarath M (CEC22CS109)

PERSONAL FINANCE MANAGER

Abstract

Personal financial management has become increasingly complex in today's fast-paced economic environment, with individuals struggling to effectively track and manage their finances across multiple accounts and payment methods. This project presents the development of a Personal Finance Manager, a comprehensive solution designed to

simplify financial management and promote better financial decision-making. The system will provide users with tools to track income and expenses, manage budgets, monitor investments, and set financial goals.

The proposed solution will feature automated transaction categorization, real-time financial tracking, customizable budget planning, and detailed financial reporting capabilities. Users will benefit from interactive dashboards displaying their financial status, spending patterns, and progress toward financial goals. The system will incorporate data visualization tools to present financial information in an easily digestible format, enabling users to make informed decisions about their money management.

Through this Personal Finance Manager, users will have access to a powerful yet user-friendly platform that promotes financial literacy and responsible money management. The project aims to address the growing need for effective financial management tools while providing users with the insights and capabilities needed to achieve their financial objectives and maintain long-term financial stability.

Current System

The current system for managing personal finances often relies on manual tracking methods, such as spreadsheets or paper records, which can be time-consuming and prone to errors. While some individuals use basic budgeting apps, these often lack comprehensive features for tracking income, expenses, investments, and financial goals in an integrated manner. Additionally, existing solutions may not provide real-time insights, automated categorization of transactions, or personalized recommendations, making it challenging for users to gain a clear understanding of their financial health.

Proposed System

The proposed Personal Finance Manager addresses the limitations of the current system by providing a centralized platform for managing all aspects of personal finances. This system offers automated transaction tracking, real-time financial insights, budget planning, investment monitoring, and goal setting, all within an intuitive and user-friendly interface. By leveraging advanced data analytics and visualization tools, the proposed system enables users to make informed financial decisions, track their progress toward financial objectives, and achieve long-term financial stability efficiently.

SMART STUDY PLANNER

Abstract

The Smart Study Planner is a productivity application designed to assist students in managing their study schedules, prioritizing tasks, and optimizing their learning process. The primary goal is to create an intelligent system that helps students organize their study time based on individual needs and deadlines, improving academic performance while reducing stress.

The planner allows users to input details such as subjects, study hours, and exam dates to generate a personalized study plan. It outlines daily or weekly study goals, assigns task priorities, and ensures a balanced workload. The system tracks progress and provides reminders to keep users on schedule.

By incorporating features like task prioritization, progress tracking, and analytics, the Smart Study Planner promotes effective time management and motivates students by highlighting accomplishments and areas for improvement. This project utilizes Python for back-end logic, SQLite for data storage, and a GUI built with Tkinter for user interaction.

The Smart Study Planner aims to foster better study habits, reduce procrastination, and help students succeed academically through a well-structured and adaptive study plan.

Current System

The current system for managing study schedules often relies on manual methods like paper timetables or basic calendar apps. These lack flexibility and fail to adapt to changing priorities or study patterns. They also do not provide intelligent recommendations, progress tracking, or personalized insights, making it harder for students to optimize their time and focus on academic goals.

Proposed System

The proposed Smart Study Planner offers a dynamic and intelligent approach to managing study schedules. By incorporating features such as AI-based adaptive scheduling, automated reminders, and progress tracking, the system ensures efficient time management tailored to individual needs. It also integrates subject prioritization, real-time adjustments based on performance, and motivational insights to help students stay on track and achieve their academic objectives with ease.

COMMUNITY SKILL EXCHANGE PLATFORM

Abstract

The Community Skill Exchange Platform is an innovative digital platform designed to connect individuals within a community to exchange skills and knowledge. The platform allows users to list the skills they can offer and the skills they wish to acquire, fostering a collaborative environment based on mutual learning and support. By facilitating a barter-based system, where services are exchanged without monetary transactions, the platform encourages community engagement and personal growth. Key features of the platform include user profiles, skill categorization, messaging for communication, and a review system to build trust among participants. The goal of this platform is to empower individuals to share their expertise, gain new skills, and strengthen community bonds through meaningful, skill-based exchanges.

Current System

In the current system, individuals seeking to learn or share skills often rely on informal networks, local workshops, or social media platforms. These methods are typically unorganized and lack a structured approach for connecting people with complementary skill sets. Additionally, there is limited access to verified mentors or a systematic way to track skill development. This fragmentation makes it challenging for individuals to find relevant opportunities for skill exchange or personal growth.

Proposed System

The Community Skill Exchange Platform provides a centralized, digital solution for skill sharing and learning. It connects individuals based on their skills and interests, enabling structured exchanges through verified profiles and a secure platform. Users can participate in one-on-one or group sessions, set goals, and track their progress. The platform incorporates features like reviews, matchmaking algorithms, and virtual tools to ensure a seamless and rewarding experience for both learners and mentors.

System Requirements

1. Hardware Requirements (Development):

- Processor: Intel Core i5 or equivalent (2.5 GHz or higher)
- RAM: 8GB minimum (16GB recommended)
- Storage: 256GB SSD recommended
- Internet connectivity for development and testing

2.Technology Stack:

- Frontend: React Native for cross-platform compatibility and UI development.
- Backend: Node.js with Express for API handling.
- Database: Firebase/SQLite for data storage and management

3. Software Requirements (Development):

- Operating System: Windows 10/11, macOS, or Linux
- Node.js (v14.0 or higher)
- MongoDB (v4.4 or higher)
- Visual Studio Code or preferred code editor
- Android Studio for Android development
- Xcode for iOS development (Mac only) ● Git for version control