

# Finance Manager & Expense Tracker

**Presented By : Aditya Aman**

# Overview

**A brief look at what we will discuss on this project**

I have developed a finance manager and expense tracker with Clerk authentication, where users can create accounts, track income and expenses with categories, and manage multiple accounts effortlessly. The platform features an aesthetic UI for an intuitive experience. An AI-powered receipt scanner provides automatic expense insights, and at the end of each month, the system sends budget alerts via email if spending exceeds the set limit, helping users stay financially organized.



# Problem Statement

Managing finances effectively can be challenging, especially when tracking multiple accounts, categorizing expenses, and staying within a budget. Many individuals struggle with manual expense tracking, leading to overspending and poor financial planning. Additionally, analyzing receipts and monitoring transactions across different accounts can be time-consuming and inefficient. There is a need for an automated, AI-powered solution that simplifies financial management, provides real-time insights, and alerts users when they exceed their budget.



# **Project Vision and Mission**



**To revolutionize personal finance management by integrating AI-driven insights, seamless automation, and an intuitive user experience, helping individuals track, analyze, and optimize their expenses effortlessly.**

**To build a secure, efficient, and intelligent finance management system that leverages AI for smart expense analysis, real-time tracking, and automated budget planning, ensuring users gain better financial control and decision-making power.**

# Tech Stack

01

**Next.js** – A React framework for building a fast, SEO-friendly, and fully responsive UI with server-side rendering (SSR) and static site generation (SSG).

02

**NeonDB** – A serverless PostgreSQL database optimized for handling financial data efficiently and ensuring seamless scalability.

03

**Clerk** – A secure authentication system allowing users to sign up and log in using email authentication for enhanced security.

04

**ShadCN & Styled Components** – Provides a modern, elegant, and customizable UI, ensuring an intuitive and visually appealing user experience.

05

**Generative AI** – Integrated for AI-driven expense analysis, allowing users to get smart insights on spending patterns and financial management.

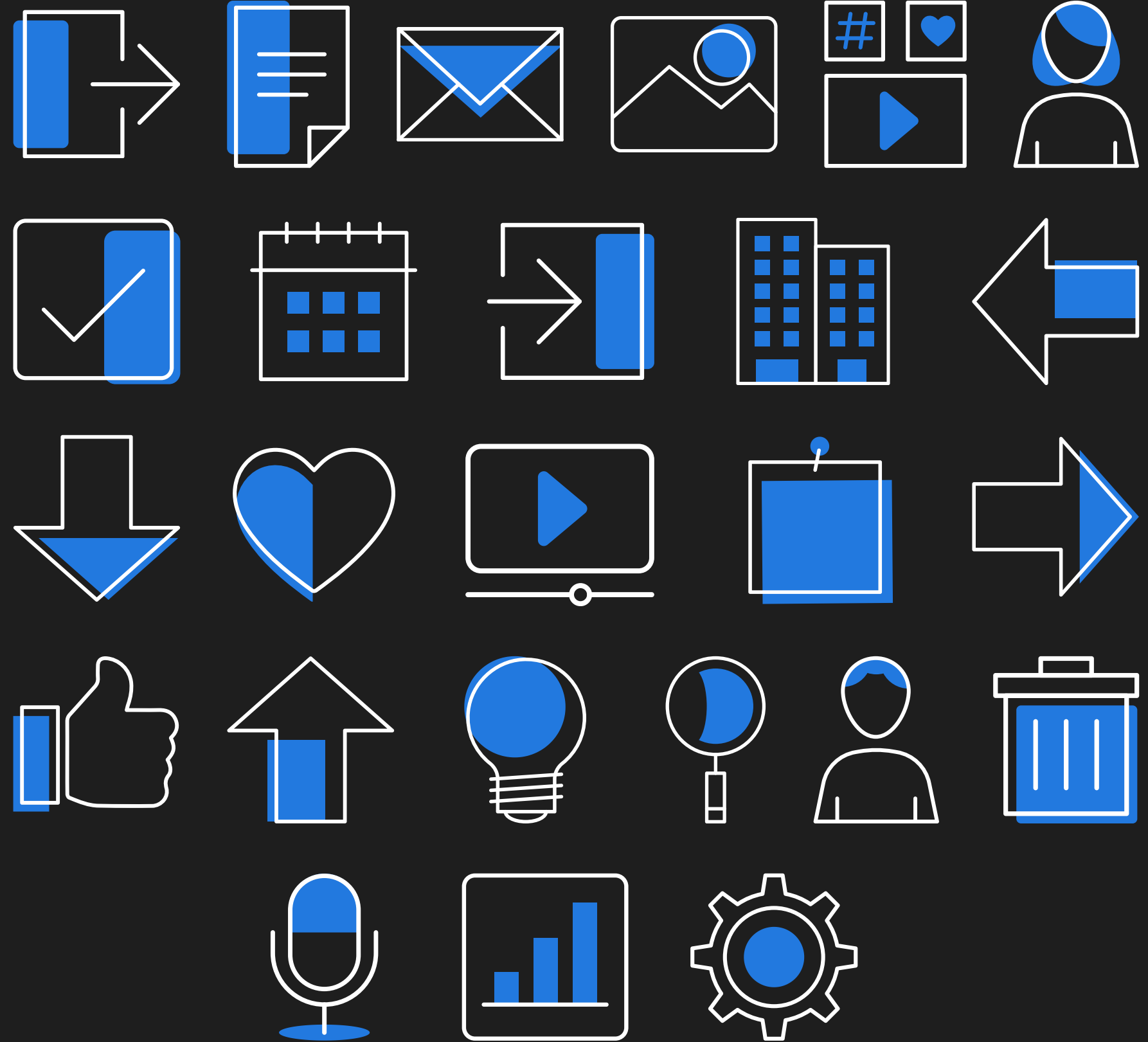
# Challenges faced

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- **Secure Authentication** – Ensuring safe user login and data privacy with Clerk.
- **AI Integration** – Implementing accurate expense analysis and receipt scanning using Generative AI.
- **Database Optimization** – Managing real-time financial data efficiently with NeonDB.

# Final Reflection & Future Steps

Building this finance manager app strengthened my expertise in AI-driven analytics, secure authentication, and real-time data management. Overcoming challenges in AI integration, receipt scanning, and database performance made the system more efficient. Moving forward, I plan to enhance AI predictions, introduce voice-based tracking, support multiple currencies, and provide personalized budget recommendations for a smarter financial experience.



# Thank You Very Much !

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