

Project Report – Budget Dashboard

➤ Abstract

This project is a web-based **Budget Dashboard** that helps users manage their personal finances in a simple and interactive way. It allows people to log in securely, add their income and expenses, set savings goals, and see their financial data through easy-to-understand charts. The dashboard is built with modern web technologies and focuses on being user-friendly, responsive, and visually appealing.

➤ Introduction

Keeping track of money can often feel difficult without a proper system. The idea behind this project was to build a tool that makes managing daily finances easier and even a little enjoyable. The Budget Dashboard gives users the ability to record transactions, categorize them, and view their spending and income patterns through charts. In addition to tracking expenses, users can also set personal savings goals and monitor their progress. This turns the dashboard into not just a tracker, but also a motivator for better money habits.

➤ Tools Used

- **HTML, CSS, JavaScript** – for building the main structure and logic of the application.
- **Tailwind CSS** – for designing a modern, responsive interface quickly.
- **Firebase (Auth + Firestore)** – for user login/registration and securely storing user data.
- **Chart.js** – to create clear and interactive charts for financial insights.
- **Google Fonts (Inter)** – to make the text clean and easy to read.

➤ Steps in Building the Project

1. Designing the Interface

The dashboard UI was built using Tailwind CSS with a dark theme, smooth animations, and responsive layouts for both desktop and mobile.

2. Adding Authentication

Firebase Authentication was set up so that users can register or log in with their email and password. Logged-in users see their personal dashboard.

3. Transaction System

Users can add transactions by selecting type (income/expense), amount, and category. These records are stored in Firebase Firestore, organized per user.

4. Savings Goals

A feature was added where users can set financial goals (like “Buy a Laptop –

₹50,000”). They can then track progress with a progress bar and update saved amounts.

5. **Charts and Data Visualization**

With Chart.js, several charts were included:

- Pie & Doughnut: Show expense categories.
- Bar Chart: Compare income vs expenses.
- Waterfall: Show cash flow month by month.
- Combination Chart: Show balance trends along with income/expenses.

6. **Improving the Experience**

Toast notifications were added (e.g., “Transaction Added”) along with hover effects and smooth animations to make the app feel more interactive.

➤ **Conclusion**

The Budget Dashboard turned out to be a useful personal finance tool that combines functionality with design. It not only helps users track spending but also motivates them to save by setting goals. The real-time database updates from Firebase make the experience smooth and reliable, while the charts provide a clear picture of financial health.

In the future, this project could be enhanced with features like predictive analytics, integration with bank APIs, or reminders for bill payments.