**Attendance Dashboard Project Setup Guide**

## **1. Project Overview**

This document explains how to set up a **React Dashboard** using:  
✔ **Tailwind CSS** (for styling)  
✔ **MVVM Architecture** (for clean code structure)  
✔ **TypeScript** (for type safety)

## **2. Folder Structure**

src/

├── assets/ # Static files (images, fonts, etc.)

│ ├── images/

│ ├── fonts/

│ └── styles/

│

├── components/ # Reusable UI components

│ ├── common/ # Basic components (Button, Card, Input, etc.)

│ │ ├── Button.tsx

│ │ ├── Card.tsx

│ │ ├── Input.tsx

│ │ └── index.ts # Exports all common components

│ │

│ ├── dashboard/ # Dashboard-specific components

│ │ ├── StatWidget.tsx

│ │ └── Chart.tsx

│ │

│ └── layout/ # Layout components (Header, Sidebar, etc.)

│ ├── Header.tsx

│ ├── Sidebar.tsx

│ └── MainLayout.tsx

│

├── models/ # Data types/interfaces

│ ├── User.ts

│ └── index.ts # Exports all models

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├── services/ # API & data-fetching logic

│ ├── ApiService.ts

│ └── AuthService.ts

│

├── stores/ # State management (MobX/Zustand)

│ ├── RootStore.ts

│ └── UserStore.ts

│

├── utils/ # Helper functions

│ ├── debounce.ts

│ └── format.ts

│

├── viewmodels/ # Business logic (MVVM)

│ ├── DashboardViewModel.ts

│ └── UsersViewModel.ts

│

├── views/ # Page components

│ ├── Dashboard/

│ │ └── index.tsx

│ ├── Users/

│ │ └── index.tsx

│ └── Login/

│ └── index.tsx

│

├── App.tsx # Main App Router

└── main.tsx # Entry point

## **3. Required Installations**

Run these commands in **Terminal** (at project root):

### **A. Core Setup**

npm install react react-dom react-router-dom

npm install typescript @types/react @types/node --save-dev

### **B. Styling**

npm install tailwindcss postcss autoprefixer

npx tailwindcss init -p

### **C. State Management**

npm install mobx mobx-react-lite

# OR (if using Zustand)

npm install zustand

### **D. API Handling**

npm install axios

npm install @tanstack/react-query # Optional (recommended)