Tecnvirons Pvt LTD

Interactive Dashboard Assignment

Time: 15/9/25 | Focus: Modern UI + Charts/Graphs

Simple Goal

Create a **beautiful**, **interactive dashboard** with data from any backend. Show us your UI design skills and ability to use modern libraries.

Tech Stack (Choose One)

Option A: React

Must Use These Modern Libraries:

- 1. Recharts or Chart.js For charts/graphs
- 2. Framer Motion For smooth animations
- 3. TanStack Query For API calls
- 4. Tailwind CSS For modern styling

Option B: Flutter

Must Use These Modern Libraries:

- 1. FL Chart or Syncfusion Charts For charts/graphs
- 2. Flutter Animate For animations
- 3. Riverpod For state management
- 4. HTTP package For API calls

Backend Options (Pick Any One)

Easy Options:

- 1. Supabase Create free account, make simple tables
- 2. JSON Server Local fake API with sample data

- 3. Airtable API Spreadsheet as database
- 4. Any REST API you prefer

Sample Data Ideas:

- Sales data (revenue, products, regions)
- User analytics (signups, activity, demographics)
- Task/project data (completion rates, priorities)
- Any business data you like!

Requirements (Keep It Simple!)

Part 1: Setup

- Set up project with chosen tech stack
- Create or connect to your backend/API
- Install required libraries

Part 2: Dashboard UI

Must Have Components:

- 1. Stats Cards
 - o 3-4 key metrics at the top
 - Numbers with icons and colors
 - Smooth counter animations
- 2. Chart #1: Line/Bar Chart
 - Show trends over time
 - Interactive tooltips
 - Smooth animations when data loads
- 3. Chart #2: Pie/Donut Chart
 - Show data breakdown/categories
 - o Interactive hover effects
 - Color-coded segments
- 4. Data Table
 - List view of raw data
 - Sortable columns
 - Search/filter functionality

Modern UI Requirements:

- **Dark theme** (professional look)
- Responsive design (works on mobile)
- Loading states (skeleton screens, not spinners)
- Smooth animations throughout
- Clean, minimal layout

Part 3: Interactivity

- Date range filters
- Click interactions on charts
- Hover animations
- Search functionality

Part 4: Polish

- Test responsiveness
- Smooth all animations
- Clean up code

Design Guidelines

Make It Look Crazy Good:

- Modern colors: Dark background, colorful accents
- Typography: Different font weights, proper hierarchy
- Spacing: Consistent padding/margins
- Shadows: Subtle depth with box-shadows
- Gradients: Use in charts and cards
- Icons: Use throughout for visual interest

Animation Requirements:

- Cards should fade in on page load
- Charts should animate in with stagger effect
- Numbers should **count up** smoothly
- Hover effects on every interactive element

★ Video Deliverable (3-4 min)

- 1. Dashboard Demo (2 min)
 - Show the complete dashboard
 - o Demonstrate all interactions
 - Show mobile responsiveness
- 2. Technical Overview (1-2 min)
 - Explain library choices
 - Show key code snippets
 - o Highlight interesting features

Evaluation

What We're Looking For:

- 1. **Visual Design** (40%) Does it look modern and professional?
- 2. **Animations** (25%) Smooth, polished interactions?
- 3. **Charts/Graphs** (20%) Two working visualizations?
- 4. Code Quality (15%) Clean, organized code?