

Project Brief – Multi-Purpose Client Dashboard

Client: NexaSphere Solutions (*fictional SaaS consultancy*)

Developer: Francois le Roux

Project: Customizable Multi-Purpose Dashboard

Purpose: Provide NexaSphere's clients with a central hub to manage productivity tools, personal insights, and data widgets in a sleek, modern interface.

Project Objectives

NexaSphere Solutions has requested the development of a **web-based dashboard application** to offer their clients a **customizable, user-friendly, and secure control center**. The dashboard must allow users to:

1. **Personalise their workspace** by adding, removing, and rearranging widgets.
 2. **Access basic functionality as guests**, while encouraging account creation for advanced features.
 3. **Switch between themes** (light/dark/custom palettes) to tailor their experience.
 4. **Access real-time data** (e.g., weather, quotes, finance) using free APIs.
-

Deliverables

1. Landing / Welcome Page

- Introduces the product with a clean, modern design.
- Options to **Sign Up / Login** or **Continue as Guest**.

2. Authentication System

- Guest access with limited features.
- Registered users gain access to all widgets and persistent storage.
- Authentication via **Firebase Auth** or mock localStorage implementation.

3. Dashboard (Core Application)

- Modular **widget-based layout** (React components).
- **Drag-and-drop grid system** (powered by `react-grid-layout`).
- **Data persistence** (localStorage for guests, Firestore for registered users).
- Responsive design for desktop and mobile.

4. Widget Gallery / Store

- Users can browse available widgets and add them to their dashboard.
 - Guest users see some widgets locked with a prompt to sign up.
 - Registered users can access full functionality.
-

Planned Widgets

- **Basic Widgets (Available to All Users):**
 - Clock & Date
 - Motivational Quotes (API/static list)
 - To-Do List
 - Notes Pad
 - **Advanced Widgets (Registered Users Only):**
 - Weather (OpenWeatherMap API)
 - Habit Tracker
 - Calendar / Events
 - Optional: Pomodoro Timer, Crypto Prices (Coingecko API), News Feed
-

Design & User Experience

- Built with **React + TailwindCSS + shadcn/ui** for a modern, professional aesthetic.
 - **Framer Motion** for smooth transitions and widget animations.
 - **Theming System:** Light/Dark modes and optional color palettes.
 - **Responsive Layout:** Optimized for desktops, tablets, and mobile devices.
-

Technical Stack

- **Frontend:** React, TailwindCSS, shadcn/ui
 - **Drag-and-Drop System:**
 - **Authentication & Database:** Firebase (free tier)
 - **Data Sources:** OpenWeatherMap, Unsplash, Quotes API, Coingecko (all free tiers)
-

Business Value for NexaSphere

- Provides a **multi-purpose, modular dashboard** adaptable to different client needs.
 - **Freemium model simulation:** Guest users get value, but are incentivized to register.
 - **Customization & Theming** enhance user satisfaction and engagement.
 - **Extensible architecture** allows future widget development as client needs evolve.
-

Deliverables Timeline

- **Week 1:** Project setup, Landing & Auth screens
 - **Week 2:** Core dashboard + drag-and-drop layout
 - **Week 3:** Implementation of basic widgets + theme switcher
 - **Week 4:** Advanced widgets + guest vs registered access
 - **Week 5:** Polishing, testing, and deployment
-

Final Deliverable

A **fully functional, multi-purpose web dashboard** that NexaSphere can roll out to its clients, offering both a **professional design** and **scalable feature set** to demonstrate their commitment to modern digital solutions.