Requirements Document

REQ-1: PORT=5000  
DB\_URL=mongodb://localhost:27017/vehicle\_health  
API\_KEY=123456

REQ-2: cmake\_minimum\_required(VERSION 3.10)  
project(AutomotiveDigitalCockpit)  
  
set(CMAKE\_CXX\_STANDARD 17)  
  
include\_directories(include)  
  
add\_executable(cockpit main.cpp src/api.cpp src/telemetry\_handler.cpp...

REQ-3: FROM gcc:latest  
WORKDIR /app  
COPY . .  
RUN apt-get update && apt-get install -y cmake  
RUN cmake . && make  
CMD ["./cockpit"]

REQ-4: ifndef API\_HPP  
define API\_HPP

REQ-5: include <iostream>  
include "include/api.hpp"

REQ-6: include <iostream>

REQ-7: --- 1. Dependencies ---

REQ-8: include <iostream>  
include "api.hpp"

REQ-9: include <iostream>  
include <fstream>  
include <string>

REQ-10: Logs

REQ-11: React + Vite

REQ-12: Define the base URL of your backend API.  
It's a good practice to have this in one place.

REQ-13: import js from '@eslint/js'  
import globals from 'globals'  
import reactHooks from 'eslint-plugin-react-hooks'  
import reactRefresh from 'eslint-plugin-react-refresh'  
import { defineConfig,...

REQ-14: import React, { useState, useEffect } from 'react';  
import { getUsers, createUser } from '../api';  
import {getUsers} from 'src/api.js'  
  
const UserList = () => {  
 const [users, setUsers] =...

REQ-15: Example React component fetching data from backend API

REQ-16: import { io } from 'socket.io-client';  
  
// The URL of your backend server  
const SOCKET\_URL = 'http://localhost:3000';  
  
// Create the socket connection  
export const socket = io(SOCKET\_URL);  
  
// You...

REQ-17: import { defineConfig } from 'vite'  
import react from '@vitejs/plugin-react'  
  
// https://vite.dev/config/  
export default defineConfig({  
 plugins: [react()],  
})

REQ-18: Automotive Digital Cockpit - Project Report  
Generated: 2025-08-14T00:25:38  
  
Overview  
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This report was generated automatically by scanning the codebase at: /home/l-100791/ADC  
It summarizes...