ResistanceTracker - PLANNING 4

TECHNICAL

Date: 30/07/2025

Overview

* Lay out the technical and architectural specifications for the project infrastructure.
* Establish deployment workflow and specifications for different ‘environments’ ie;- development, staging, production.

Development System

Development will be done on my usual set up of linux subsystem on windows. With code living on the linux, and using windows applications for editing as well as web browser.

Using node.js for backend so npm (node package manage) needs to be installed, which it already is.

Project Architecture

Within overall project directory will be a .git directory, a directory for frontend, and a dir for backend, and probably a readme file and/or similar important documentation. This is similar to how the prototype ‘traininglogger’ was set up:

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AI-generated content may be incorrect.

Frontend will contain the html, css styles and js logic files, though these will be separated into logical subdirectories as the project develops.A screenshot of a computer

AI-generated content may be incorrect.

I would expect there to be a dir for each main ‘system’ containing html and logic files for it. And a dir for styles if styles ends up being broken down into numerous files otherwise it will just live in the main dir. Also a dir for ‘media’ such as images etc

Backend will contains the node\_modules, database file, package json config files, as well as actual server logic .js file. The javascript logics will be segregated into logical subdirectories according to function.

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AI-generated content may be incorrect.

There is some installation required to get the backend ready:

Backend Setup

Using command < npm init -y > after creating the backend dir – this initialises node.js

Then use < npm install express > to install express, which is the server framework which will be using

Install sqlite/sqlite3 to install database < npm install sqlite sqlite3 >

Include < "type": "module" > in package.json, as this module style is required for working with sqlite.

Will refer back to the prototype ‘traininglogger’ for actually setting up the server logic file. There will be a main server file from which other files are referenced for logic.

Environments

Development will take place in ResistanceTracker dir/repo. Once minimally viable product is ready, I’ll want to start using it so a ‘production’ environment will be required. Some kind of script will be necessary to copy the required files ie;- code, but not database file, git dir etc.

This installation script can be used to set up different instances of the system so it can be possible to have numerous environments if desired for staging etc.

Next Step

Now this architecture has been outlined the next step is to roadplan the initial development work in order to reach a minimum viable product.