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A logo with a letter and a letter

Description automatically generated with medium confidence

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**Industrial Consulting Project (QHO635) Template for the Client: QAHE in partnership with Solent University**

**Tasks complete are in green.**

**Some parts need a bit more fine tuning**

**(will provide clean-up version tomorrow)**

**Requirements:**

* Create and API for Server-Side (preferably [Nodejs](https://nodejs.org/en), [TypeScript](https://www.typescriptlang.org/),).
* Create website using (preferably [Nodejs](https://nodejs.org/en), and [React](https://react.dev/) or [Next.js](https://nextjs.org/)).
* Separate out Server-Side and Client-Side processes.
* User React for Client-Side.
* Create Configuration file in XML for download.
  + This will automatically download when phone connect to the internet.
  + XML has specific layout using P-Values. (Layout and P-values will be provided to you)
* [MySQL](https://www.mysql.com/) will be used as Database.
  + You will be given the base tables and you are free to create new tables if required by the system.
  + You need to provide the related information in ReadMe.md file regarding any new table created and why it is created.
* Code base must include the comments relate to the task a function performing.
* Must provide capability of CRUD for each task.
* Must provide capability of creating/inserting multiple phone mac addresses. Phone macs can be comma separated with model type.
* Quick Search Must provide search capability using last 4 characters of mac Address or last 4 digits of phone number.
* Provide capability of CRUD related to following:
  + Sip server entry
  + Phone model entry
  + Phone mac address entry
  + Configuration creation process
  + User creation and Role assignment such as Admin, Manager, Employee etc.
* Authenticated users can perform CRUD operations.
* Provide Login and registration system.
* Generate a live page where any new updated or create configuration can be flag marked.
* Display all flag marked configuration in separate section.
* Provide an action button to stop download for configuration file.
* Add any additional functionality you think of, for better performance.

Tech used in frontend

* React js
* Tailwind css
* vite

Tech used in backend

* Node js
* Sequelize (ORM)
* MySQL (database)

Frontend UI

* Homepage has login and signup buttons
* Two links on homepage to Admin and Configuration dashboard
* I have worked on the Admin section.
* In this section I added all CRUD operation to interact with the database
* Login/signup api created but I will add frontend functionality tomorrow
* I have not worked on the Configuration Dashboard because I need to figure out which fields represent which p-values in the configuration xml file. If someone could figure this out, then I should be able to help with the coding

API (Backend)

* The server side has all or most if the api endpoints needed for all the necessary CRUD operations.
* Database is configured to use my MySQL

How to Use/Run App

Frontend

* Cd to frontend directory: sip\_frontend
* Enter npm run dev
* Press enter

Backend

* Cd to backend directory: sip\_backend
* Enter npm run dev
* Press enter