**User Manual to Set Up Environment and Run SQL\_DataDetective Web App (FYP 2)**

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SQL\_DataDetective is a locally hosted web application. The web application can run on any device if they are under the same network as the hosting device. Only the hosting device needs to Set Up Environment for SQL\_DataDetective, while the other devices that want to access the web application can just access them through a HTTP link which may vary depending on the network IP address.

**Prerequisites**

Before you begin, ensure that you have the following installed on your machine:

1. [Node.js](https://nodejs.org/) - JavaScript runtime.

**1.0 Getting Started**

1. **Download the Source Code:**
   * Obtain the source code for SQL DataDetective here.
2. **Extract the Archive:**
   * If the source code is in an archive (zip/tar), extract it to a location of your choice. The folder would by default in **Downloads**. I would recommend extracting it inside **C/newfolder** for easier navigation within the command prompt.
   * You can rename “newfolder” however you want. In this manual, my folder is named “FYP” to avoid confusion.
3. **Navigate to the Project Directory:**
   * Open a command prompt.
   * Use the /cd command to navigate to the project directory, if project is extracted inside **C/newfolder**, type **/cd/newfolder**.
4. **Install Dependencies:**
   * Run the following command in command prompt to install project dependencies:



**Run the Application**

**1. Start the server**

* In the command prompt, run the following command, **node server.js** and press enter to start the server.



* If it doesn’t work, likely the name if the server.js is changed, you can also use **npm start** and press enter to run the server.



* You can terminate the runtime of the server with **CTRL + C.**

**2. Accessing the web application**

There are 2 methods to access the web application, one is via local hosting, other is through private IP Address which can be used on multiple devices if all are in the same network.

**Via Local Hosting**

* The web application is ready to go by visiting <http://localhost:3000/>. Which will lead your default browser.

**Via Private IP Address**

* If the server is currently running, terminate the server runtime by pressing **CTRL + C** in the command prompt (this can be done before or after editing the source code)
* In the command prompt, type **ipconfig** and press Enter.
* Look for the "**IPv4 Address**" under your active network connection. It usually looks like **192.168.x.x**.
* Copy the IPv4 address.
* Next, go to where the project is extracted.
* In the file, look for file named server.js, and open it.

A screenshot of a computer

Description automatically generated

* Within the file, go to code line number 51, paste the copied IPv4 Address.

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Paste the copied IPv4 Address here.

* Restart/Start the server based on **Step 1** under **Start the server.**
* The web application is ready to go by visiting **http://192.168.x.x:3000/**. Which will lead your default browser. Make sure the link has the same IP address.

**3. Explore SQL DataDetective:**

* You should now see the SQL DataDetective web application just like below.

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* Use the provided functionalities to interact with the SQLite database.

**4. Important Notes**

* Ensure that port 3000 is not in use on your machine.
* For security reasons, this guide assumes the application will be run in a trusted environment.
* If you encounter any issues, refer to the project documentation or contact the project owner, [72327@siswa.unimas.my](mailto:72327@siswa.unimas.my) or [mcarthurbalang@gmail.com](mailto:mcarthurbalang@gmail.com)