**eBlocks Software Internship Technical Challenge**

**REQUIREMENTS:**

* GitHub repository with source code. (COMPLETE)
* Tech stack: JavaScript (selected framework React), JSON - backend (database), CSS (COMPLETE)
* Showcase the application (online) (PENDING)
* Review the application (PENDING)
* Time to work on application: 17 August - 20 August 2023 (COMPLETE)
* Example to look at for reference: http://phonebooks.z1.web.core.windows.net/ (COMPLETE)
* Formatting of the numbers must be: 081-365-9535 (COMPLETE)

**DATABASE LAYOUT:**

*phone\_books table:*

* id
* phone\_book\_name - primary key

*phone\_book\_details table:*

* id
* phone\_book\_name - foreign key
* full\_name
* phone\_numbers - unique

**HOW THE SQL WILL WORK:**

**Search function:**

* Search for phone\_book\_name AND (full\_name OR phone\_numbers)

**Add entry:**

* phone\_book\_name
* full\_name
* phone\_numbers

**Add phone\_books:**

* phone\_book\_name

**RESOURCES USED:**

1.) https://blog.hubspot.com/website/javascript-frameworks#:~:text=Popular%20JavaScript%20Frameworks%201%201.%20Node.js%202%202.,3.%20Vue.js%204%204.%20Angular%205%205.%20Ember.js

2.) https://www.w3schools.com/react/react\_getstarted.asp

3.) https://www.howtogeek.com/659411/how-to-change-directories-in-command-prompt-on-windows-10/

4.) https://bobbyhadz.com/blog/npm-err-code-enoent-syscall-open

5.) https://create-react-app.dev/docs/getting-started/

6.) https://stackoverflow.com/questions/70009943/how-to-run-npx-node-js-command-on-windows

7.) https://nodejs.org/en

8.) https://docs.npmjs.com/downloading-and-installing-node-js-and-npm

9.) https://developer.mozilla.org/en-US/docs/Learn/Tools\_and\_testing/Client-side\_JavaScript\_frameworks/React\_getting\_started

10.) https://react.dev/learn/installation

11.) https://stackoverflow.com/questions/71746472/node-js-installation-stuck-in-power-shell

12.) https://stackoverflow.com/questions/67171333/error-when-installing-necessary-packages-on-node-js

13.)https://www.reddit.com/r/node/comments/9x5ksp/nodejs\_installation\_on\_windows\_stuck\_what\_do\_i\_do/

14.) https://www.reddit.com/r/chocolatey/comments/mv87qb/windows\_powershell\_stopped\_during\_installhow\_do\_i/

15.) https://youtu.be/SLfhMt5OUPI?si=Hdo3tOK1w1y3YEqF

16.) https://youtu.be/SqcY0GlETPk?si=G5iEWeu2LF1N9je1

17.) https://www.geeksforgeeks.org/json-server-setup-and-introduction/

18.) https://dev.to/derick1530/introduction-to-json-server-beginner-part-i-4l2g

19.) https://www.npmjs.com/package/json-server

20.) https://create-react-app.dev/docs/making-a-progressive-web-app/

**REACT NOTES:**

* **npm start** - starts the development server.
* **npx create-react-app app-name** - creates the react-app-folder.
* **node\_modules folder**: 3rd party libraries such as React are installed.
* **public folder**: public assets of the website exist such as images, video files etc.
* **src**: source folder which contains the source code of the application. We start off with a component called App.js
* **index.js**: a basic template that is bundled with the project folder the first time it is created. It has an id of root which is the container for the application. Then there is a script element below that references /src/main.js which is the entry point of the application.
* **package.json**: this folder contains information about the project. Such as the name, its version, script, the list of dependencies, and development dependencies (which are not being deployed with the application in the future.)

**CREATING A REACT COMPONENT:**

* Create a new file in the src folder and name it for example page\_1.js
* Create a function based react component (it is recommended for new projects.)
* Class components can be used alternatively.
* Save the file and go to App.js
* Remove the contents of the App.js file
* Import the new react component at the top and call it in the App function. Save the file.

**DOWNLOADING JSON SERVER:**

* json-server is an npm(Node Package Manager) module, used for creating a mock REST API effortlessly. Data is transferred in JSON(JavaScript Object Notation) format between client and server.
* **npm install -g json-server** : used to install json server

**USING JSON SERVER:**

* Create a file called **db.json** and add the table and its details.
* Save the file.
* Open command prompt as administrator and locate the project folder, mine was: **C:\xampp\htdocs\eBlocks\_Internship\phone-book-app\src**
* Type the following: **json-server db.json**
* Then open a webpage on: http://localhost:3000
* **Ctrl + C** is used to stop the json server.