# Documentation for UI-Search Content - assessment - by Rebal M

This documentation provides step-by-step instructions for setting up, deploying, and configuring the UI-Search Content application. It includes all commands, configurations, and dependencies required to run the application.

## **Overview**

This React-based web application enables users to search, filter, and manage contact details. The key features include:

- Search filters for contact fields such as name, email, phone, address, etc.
- A paginated results table.
- Ability to select and display details of a specific contact.

## **Features**

- 1. **Search Filters**: Users can search for contacts using parameters like name, email, or address, etc.
- 2. **Results Table**: Displays contact results with pagination and selection functionality.
- 3. Selected Contact: Displays detailed information about the selected contact.
- 4. **Pagination**: Allows navigating through the results with "Next" and "Previous" buttons.

# **Prerequisites**

Before setting up the application, ensure that the following tools are installed:

- 1. **Node.js** (v16 or higher) and **npm** (comes with Node.js)
- 2. React Developer Tools (optional but recommended for debugging)
- 3. I personally used VS code for my editor.

# **Setup Instructions**

## 1. Clone the Repository

First, clone the project repository to your local machine using Git:

#### bash

```
git clone <repository-url>
cd <repository-folder>
```

#### 2. Install Dependencies

Run the following command to install all necessary dependencies specified in the package.json file:

bash/cmd line (with in terminal): npm install

# 3. Install React-Bootstrap (this project I made use of Boostrap for easier integration with CSS for styling)

This application uses **React-Bootstrap** for styling. So, please download Bootstrap components, install it using the following commands:

bash

```
npm install react-bootstrap bootstrap
```

Add the following line to the index.js or App.js file to include the Bootstrap CSS

# 4. Start the Development Server (to Run the code for this Project)

Run the following command to start the application:

bash

```
npm start
```

This will launch the application in your default browser at <a href="http://localhost:3000">http://localhost:3000</a>.

PLEASE MAKE SURE THAT USE ARE NOT USING HOST 3000 for any other projects or file before beginning.

# **File Structure**

Here's a brief overview of the project file structure:

```
root/
                           # Public assets (e.g.,favicon,index.html)
 — public/
    --- mockData.json
                           # Source files
 - src/
  —— components/ # Reusable React components
       — ResultsTable.js # Displays paginated search results
      —— SearchFilters.js # Search input fields for filtering
contacts
      └── SelectedContact.js # Displays the selected contact details
                         # Main application component
   - App.js
   --- index.js
                          # Application entry point
   L— App.css
                          # Custom CSS styles
--- package.json
                          # Project metadata and dependencies
L— README.md
                           # Project documentation
```

#### **Start Development Server:**

bash

npm start

#### **Install Dependencies:**

bash

npm install

#### Install React-Bootstrap:

bash

npm install react-bootstrap bootstrap

#### **Build for Production:**

bash

npm run build

# **TESTING/ Explanation of application:**

let's discuss why React was used for this assessment, react is a javascript tool that allows for building dynamic and interactive user interfaces which are perfect for the given front-end requirements:

So, for the following application in React, I made use of:

- SearchBar for inputs.
- ResultsTable for displaying results.
- SelectedContact for showing selected details.
- Use useState for managing search criteria and results.
- Use useEffect to re-filter results when search criteria change.
- 1. **Add Contacts Data**: Update the Sample contacts data in the public folder of the mockData.ison file in the project application. There are about 5 data samples for use.
- 2. The current set pagination limit is 3, but can be changed depending on requirements.
  - Change Pagination Limit: To modify the number of items per page in ResultsTable.js: Search for the line: const itemsPerPage = <desired-number>;

The code was not built into a production-ready build as it was not required for the assessment, but I included the steps just in case, to build the Application: Run the following command in the terminal always make sure user in the project folder PATH:: bash/cmd line:

```
npm run build
```

1. **Serve the Build**: Use any static server to serve the build folder. For example:

# Using serve: bash /cmd line: npm install -g serve serve -s build

# **Troubleshooting - Just in case**

# 1. Port Already in Use

If the default port 3000 is already in use, you can run the app on a different port:

#### bash

PORT=3001 npm start

# 2. Dependency Issues

If you encounter issues while installing dependencies, try clearing the node\_modules folder and reinstalling:

#### bash

```
rm -rf node_modules package-lock.json
npm install
```