

Thought note for back-end module assignment 2:

I am glad to share that I have completed my back-end module assignment 2. After completing the assignment, I got a better understanding of **React and its different components, props, hooks, states and useEffect**. I have also learned how to interact between **React and Node.js**.

Folder description:

I have created 2 separate folders named: **Back-end** and **Front-end** and included the **to-do-app** folder in Front-end which is created using `create-react-app` command.

1. **Back-end:** This folder contains all the necessary files for the server to run, which will be used to store and retrieve the data from the local storage. For storage purpose I have used **node-persist** package. Files included in this folder are:

- **package.json:** This JSON file is created using `npm init` command. This file contains “dependencies” like: “**express**”, “**cors**”, “**body-parser**”, and “**node-persist**”.
- **index.js:** This is the main file which contains the code for server to post and get data from **.node-persist** folder.
- **.node-persist:** This folder is created by the **node-persist** package to store and retrieve the data.
- **package-lock.json:** This file is created automatically when I install other packages.

2. **Front-end:** This folder contains another folder named “to-do-app” which is created using `create-react-app` command. This folder contains the front-end for the application.

To-do-app itself contains a whole file structure but I have cleared most of the files to give it a clean look. Main code for front-end is written in **App.js** file under “**src**” folder. I have also included CSS in **App.css** file to beautify the application. The links for **bootstrap** and **font-awesome** are included in **index.html** file under “**public**” folder.

Working:

The main application run on <http://localhost:3000/> . It is the main route from where the user can use the application. For the application to run properly a server is also needed to store and retrieve the data from local storage. This server runs on <http://localhost:5000/> . Below are the commands needed to run the server and application from terminal:

For server:

1. `cd Back-end`
2. `node index.js` or `nodemon index.js`

For application:

1. `cd Front-end`
2. `cd to-do-app`
3. `npm i react`
4. `npm start`

As the server and application are running on different ports, I have used **cors** to integrate both.

Extras:

I have included some extra features for better user experience and to make my application more appealing.

1. I have added a delete button in front of every listed task to remove it from the list as well as from the .node-persist folder. To achieve this I have used **key values** to delete the task from the list.

2. I have used **nodemon** so that I don't have to restart the server again and again if I make some changes in the code. Hence, it gives a better developer experience.

Conclusion:

I have tried my level best to make the application as described in the problem statement PDF. I have also added some extra features and changed the appearance of the application in order to make it look better.

Thank you,
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