

Mock Assessment

Developing an application using ReactJS

Instructions to use the project file provided:

- Download the project **InfyRentals** in to your system and unzip it
- **data** folder contains the **data.json file** with complete data.
- Use the **bootstrap4** classes wherever necessary
- **DO NOT** alter the function name or the argument list of the function that is provided to you
- **DO NOT** add any new functions apart from the one given in the file where you write the solution

Note:

1. Navigate to the **infyrentals** folder and execute **npm install** command

Problem Description:

Infy Rentals: Infosys wants to create a Bike rental app. The following functionalities are required to be implemented.

1. Book a bike based on selected bike
2. Show booking Details

In InfyRentals folder:

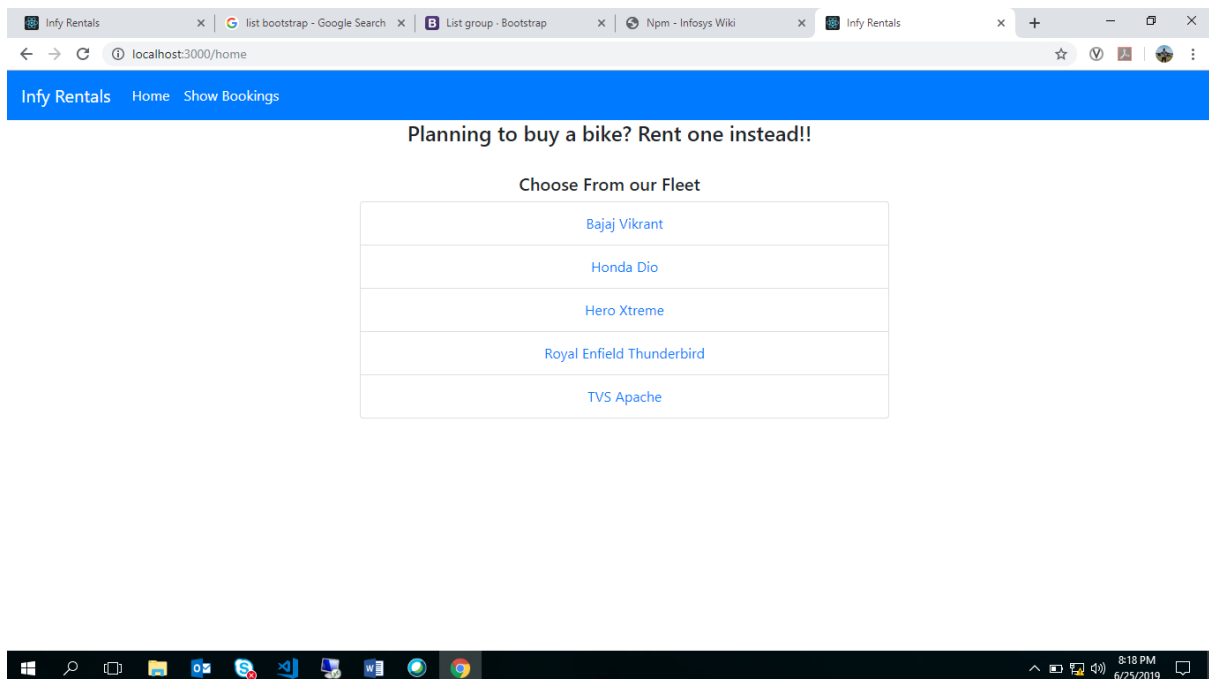
File Name	Description
src/App.js	Partially Implemented
src/components/BookRide.js	
src/components/Home.js	
Src/components/ShowBookings.js	
Scr/Navbar.js	
Public/data/data.json	Fully Implemented
Public/index.html	Fully Implemented

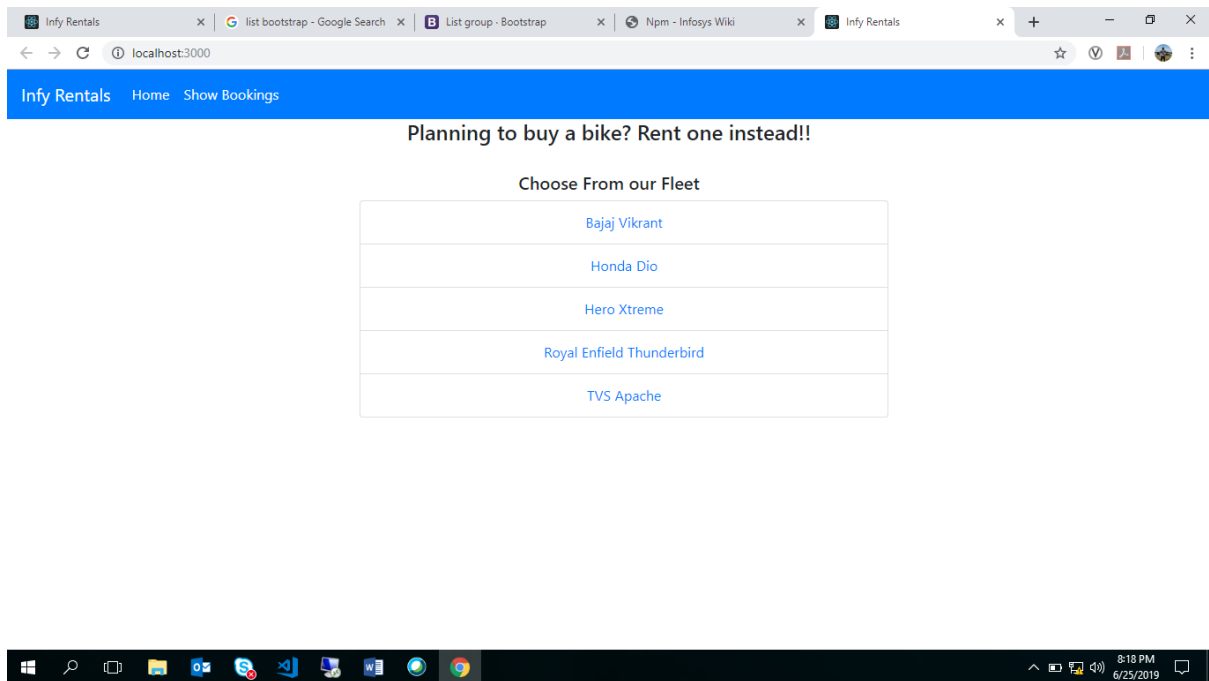
Src/App.js (To be modified)

- Render **Home** component for path **localhost:3000/**
- Render **Home** and **ShowBookings** components.
(Route to links **localhost:3000/home** and **localhost:3000/showBookings** respectively)
- Render **BookRide** component along with **fleetCode** as a parameter(Route to links as **localhost:3000/bookRide/V1001**) where **V1001** is a route parameter and the route parameter name is **fleetCode**.

Src/components/Home.js(To be modified):

- Do not modify anything in constructor.
- The root path should automatically navigate and show the **Home** Component as below
- The navigational bar has two links which will redirect to appropriate components, as a Single Page Application without refresh.
- Use appropriate component to generate a list of bike names.
- These bike names, should appear as links, which will help the user to navigate to **BookRide** component, with fleetCode as route parameter and, should navigate to **localhost:3000/bookRide/fleetCode** wherein **fleetCode** being the **vld** given in the **fleet state**.
- Create **render()** method to return and render the **jsx**.





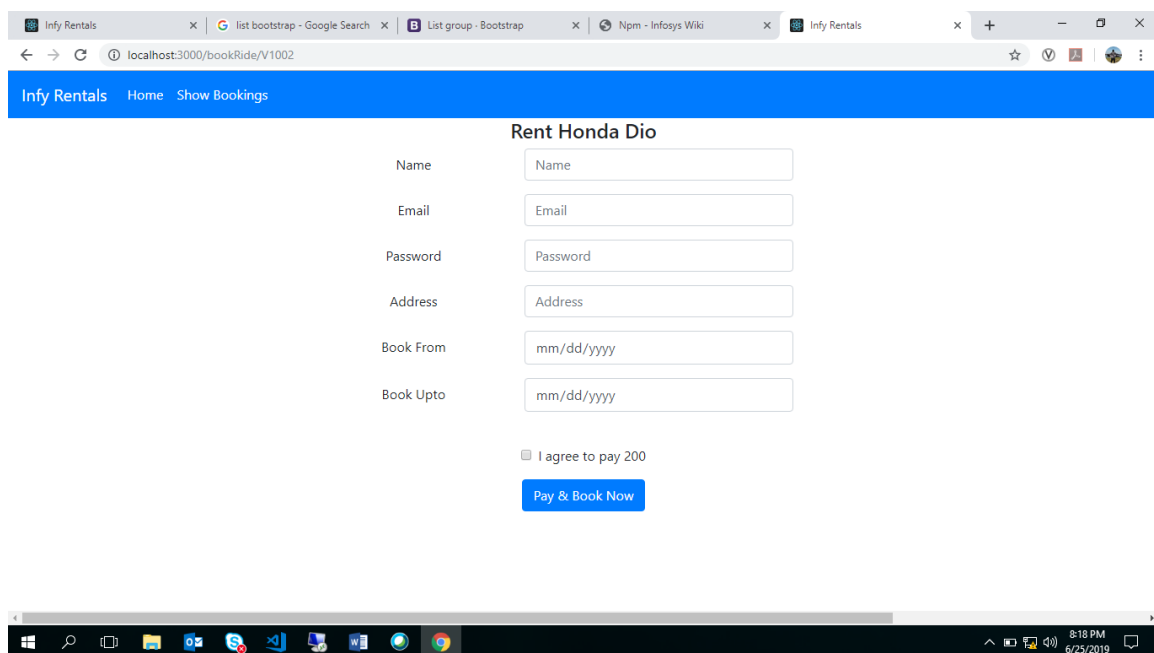
Src/components/Navbar.js(To be modified)

- The UI is already provided
- Use proper React-Router component to navigate to the link as below:
 - Clicking on **Home** should navigate to **localhost:3000/home**
 - Clicking on **InfyRentals** should navigate to **localhost:3000/**
 - Clicking on **ShowBookings** should navigate to **localhost:3000/showBookings**
- See the Navigation Bar in the images given.

Src/components/BookRide.js(To be modified)

BookRide Component:

This must be coded in BookRide.js



Infy Rentals Home Show Bookings

Rent Honda Dio

Name	<input type="text"/>
Email	<input type="text"/>
Password	<input type="password"/>
Address	<input type="text"/>
Book From	<input type="text" value="mm/dd/yyyy"/>
Book Upto	<input type="text" value="mm/dd/yyyy"/>

☒ I agree to pay 200

[Pay & Book Now](#)

All fields are mandatory

Infy Rentals Home Show Bookings

Rent Honda Dio

Name	<input type="text" value="Nadeem"/>
Email	<input type="text" value="mohammad.nadeem@infosys.com"/>
Password	<input type="password" value="*****"/>
Address	<input type="text" value="Bangalore"/>
Book From	<input type="text" value="06/24/2019"/>
Book Upto	<input type="text" value="06/25/2019"/>

☐ I agree to pay 200

[Pay & Book Now](#)

You need to agree before completing transaction

Infy Rentals Home Show Bookings

Rent Honda Dio

Name	<input type="text"/>
Email	<input type="text"/>
Password	<input type="password"/>
Address	<input type="text"/>
Book From	<input type="text"/>
Book Upto	<input type="text"/>

☐ I agree to pay 200

[Pay & Book Now](#)

localhost:3000/bookRide/V1002

Infy Rentals Home Show Bookings

localhost:3000 says
Start date cannot be before today

OK

Email mohammad.nadeem@infosys.com

Password

Address Bangalore

Book From 06/24/2019

Book Upto 06/25/2019

☒ I agree to pay 200

Pay & Book Now

localhost:3000/bookRide/V1002

Infy Rentals Home Show Bookings

localhost:3000 says
End should be after start date

OK

Email mohammad.nadeem@infosys.com

Password

Address Bangalore

Book From 06/25/2019

Book Upto 06/23/2019

☒ I agree to pay -400

Pay & Book Now

localhost:3000/bookRide/V1002

Infy Rentals Home Show Bookings

localhost:3000 says
End should be after start date

OK

Email mohammad.nadeem@infosys.com

Password

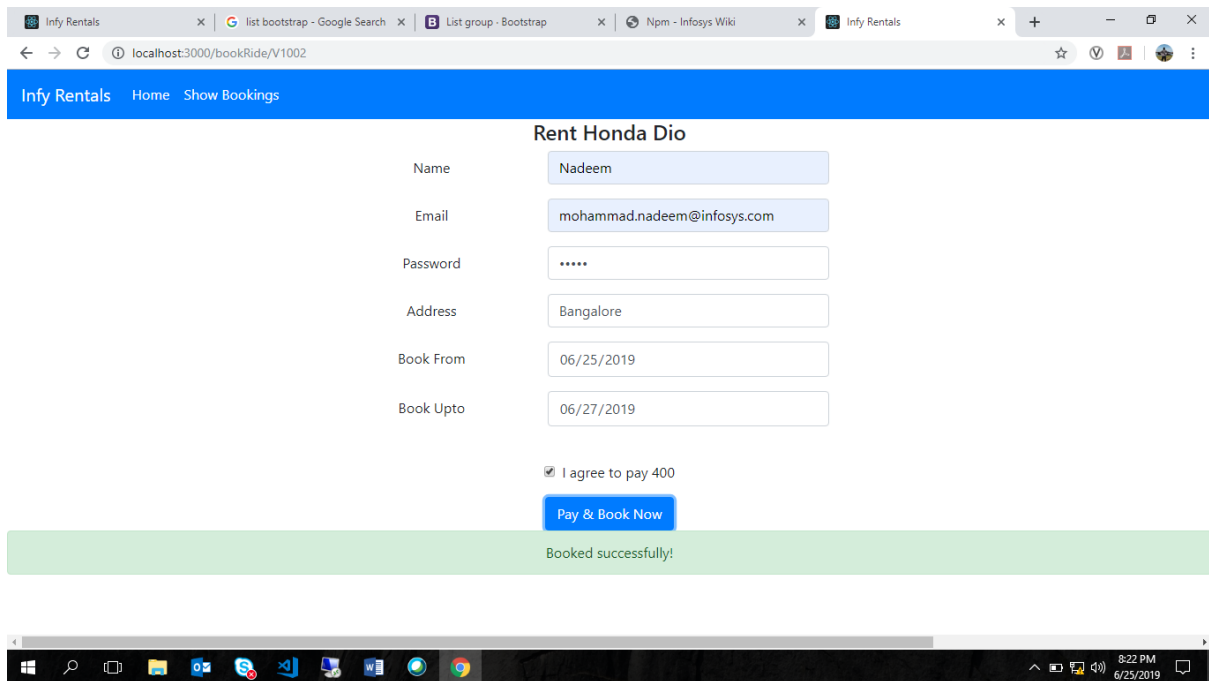
Address Bangalore

Book From 06/25/2019

Book Upto 06/23/2019

☒ I agree to pay -400

Pay & Book Now



BookRide Component:

- Do not change the **fleet** state.
- Add the following states, and initialize with appropriate values:
name, email, password, address, startDate, endDate, isChecked,
message(for booking successful message), **cMessage**(for having message for checkbox)
- Have all the fields in the form, and add required validations to all.

Methods:

- Create a method **handleChange()** :
 - It should **set** the **form values** to **respective states**.
 - It should reset the **message** and **cMessage**
- Create a method **handleCheck()**:
 - It should set **isChecked** state.(Use **e.target.checked** to set the state)
 - It should reset the **cMessage**
- Create a method **handleSubmit()**:
 - It should prevent the default action of the form.
 - It should validate the dates, i.e. **startDate** cannot be less than **current date** and **endDate** cannot be before the **startDate**. Generate an **alert** box, in case of invalid date selections.
 - If any of the form fields are empty, populate the **message** as **"All fields are mandatory"**.
 - If the **checkbox** is empty, populate **cMessage** with value **"You need to agree before completing the transaction"**.

- In case of valid form, populate the **message** as “**Booked successfully**” in case of successful submission of form.
- Create a method **render()** :
 - Find the **bike object** as per the **fleetCode route parameter** and store in a variable. You can use **find()** function of javascript.
 - Use the **rent** property of the **bike object** and calculate the rent as below:
 - $\text{totalRent} = \text{noOfDays} * \text{rent}$
 - Calculate **noOfDays** using **startDate** and **endDate** and proper **Date object’s properties**
 - **Return** appropriate **jsx** to create a form as shown in the image. Make sure to have all the fields.
 - Use **bootstrap4** classes, wherever necessary.
 - On click of button **button** , handle the form submit by referencing **handleSubmit**.
 - Under the **button** conditionally render the **messasge** and **cMessage**.
 - See the images for all the error messages, success messages and alert boxes

ShowBookings Component:

- Create a UI as shown below:

Booking ID	User ID	Fleet Name	Booked On	Status
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- States **data**, **searchedData** , and **queryString** to store the data from json file, the searched data, and the search query respectively.

- Make a backend call to the link <http://localhost:3000/data/data.json>, and store the response in **data** state.
- Create **handleChange()** method to store the input value in **queryString** state.
- Create a function **handleSearch()** to search for the object having same **userId** or **bookingId** as **queryString**
- Set the **searchedData** with the object that has same **userId** or **bookingId** as **queryString**
- Create a **IsitItems** to store the **table rows** with **table data**
You can use javascript map() to generate array of **table rows**, containing five **table data elements** .

See the image for your reference.

- Create a **render()** to render the **search form** as well as the **table** as shown
- On searching the value **U1001** the value should show up as shown in the image below:

The screenshot shows a web browser window with the URL `localhost:3000/showBookings`. The page has a blue header with the text "Infy Rentals" and navigation links "Home" and "Show Bookings". Below the header is a search form with a text input field containing "U1001" and a blue "Search" button. Below the search form is a table with the following data:

Booking ID	User ID	Fleet Name	Booked On	Status
B1002	U1001	Honda Dio	2018-04-05	Completed
B1011	U1001	Honda Dio	2018-09-23	Completed

***All the database are static. Do not change the already given code.**