

Readme

1. Introduction

This is a small application using React(Hooks) to display a nested menu by json data from fake endpoint and login page.

Technical stack

React.js(Hooks):

TypeScript

styled-components

react-router-dom

JSON Placeholder(Fake API)

enzyme jest react-testing-library

2. File Structure

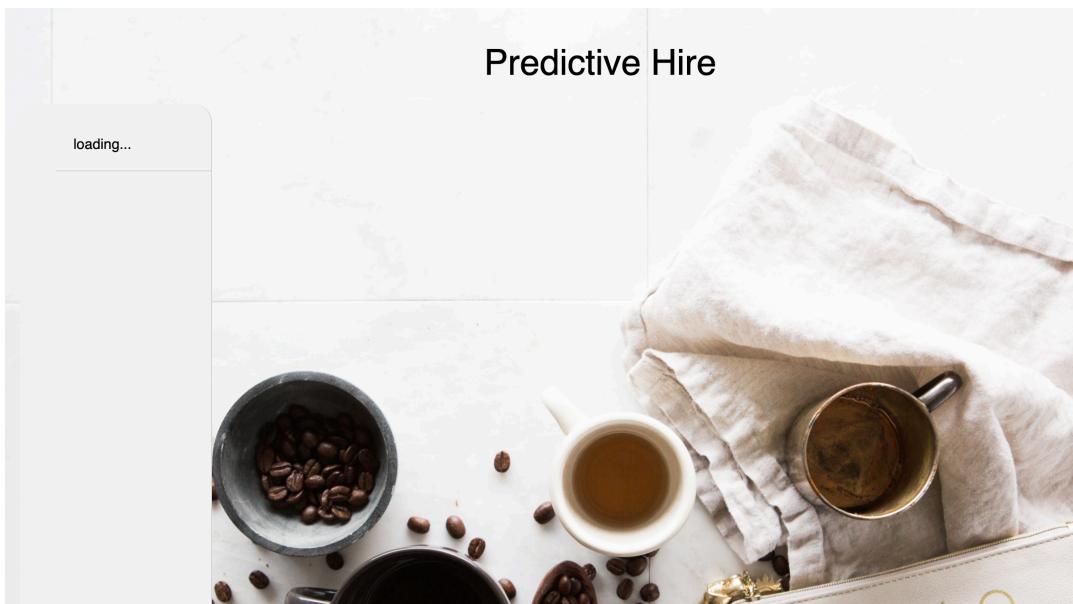
In package src:

| | |
|--------------|---|
| .. | |
| API | API: All the API call in this folder |
| GlobalStyle | GlobalStyle: styled-components which could be used globally |
| components | Components: three components in the page, title, sidebar and login form |
| images | Images: store the images |
| App.test.tsx | App: render three components which mentioned above |
| App.tsx | |
| index.tsx | |

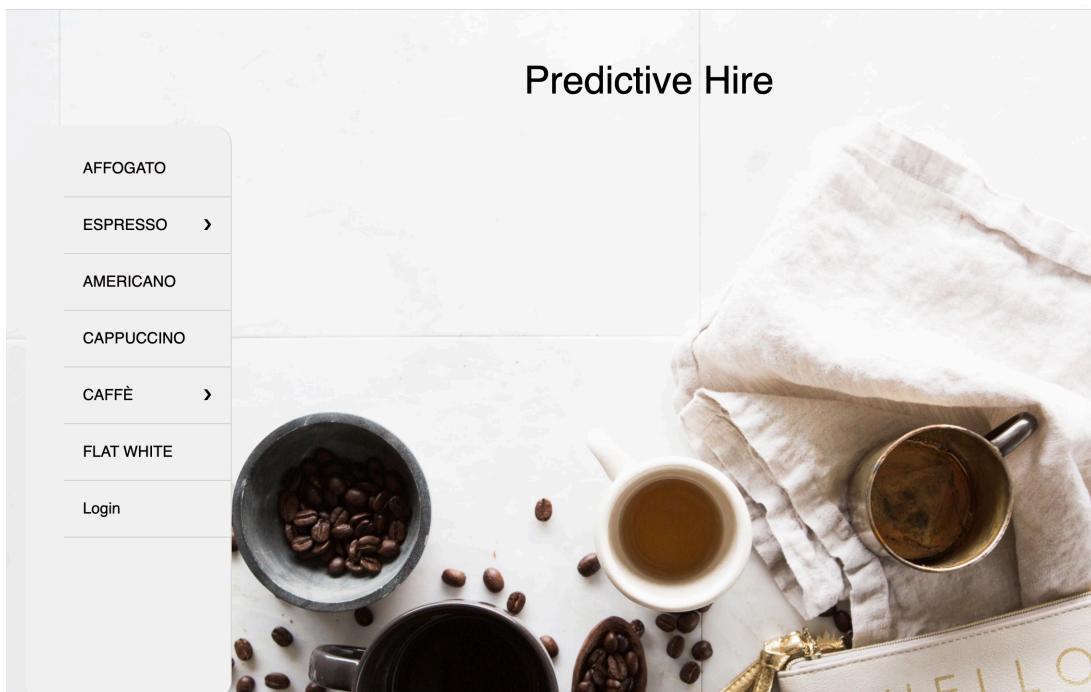
3. How to use

1. Clone or download the zip file in the github page.
2. Open the terminal and run **npm i** first, and it would automatically download all the node moudules.
3. Run **npm start**

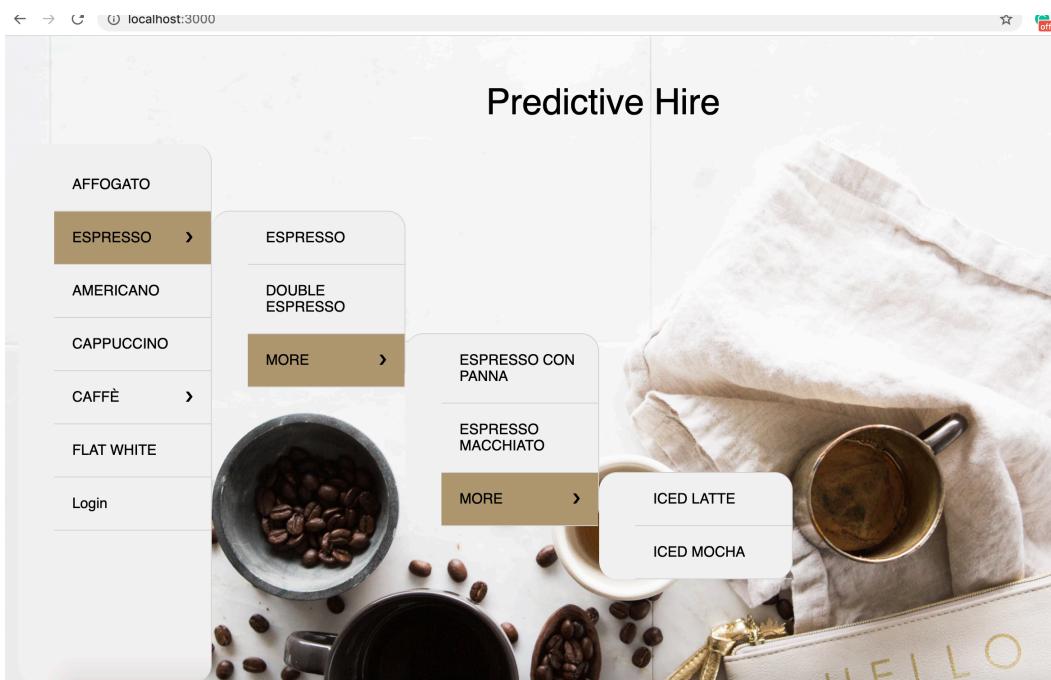
After run the above command, you would see the loading menu frist



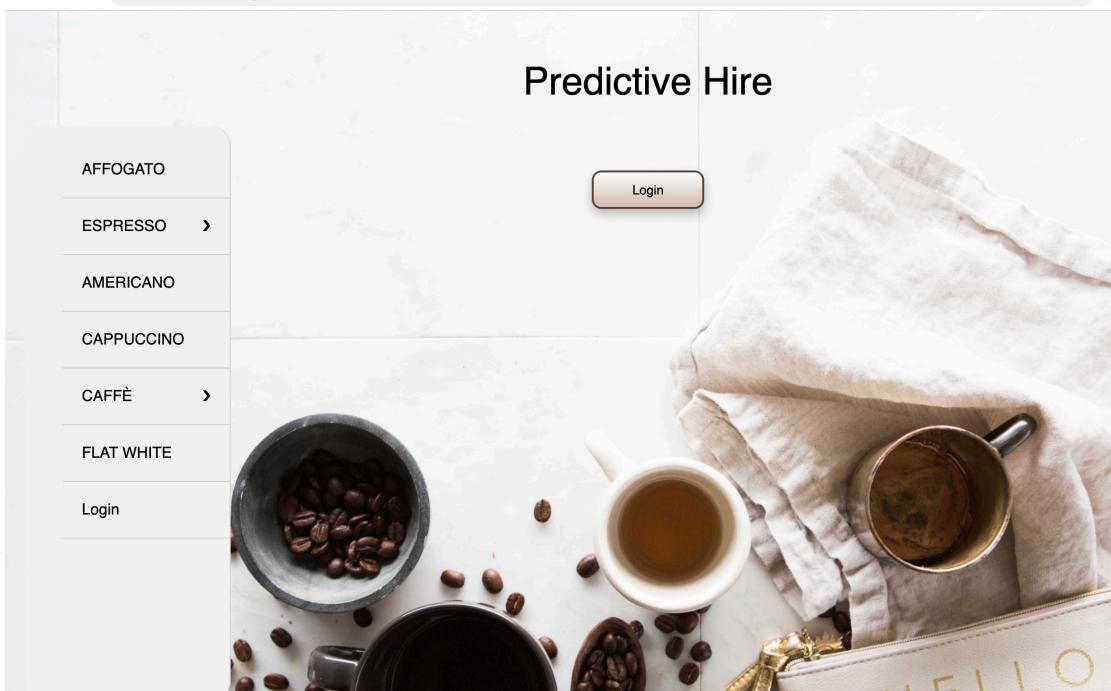
After fetching data complete, the side menu would be displayed



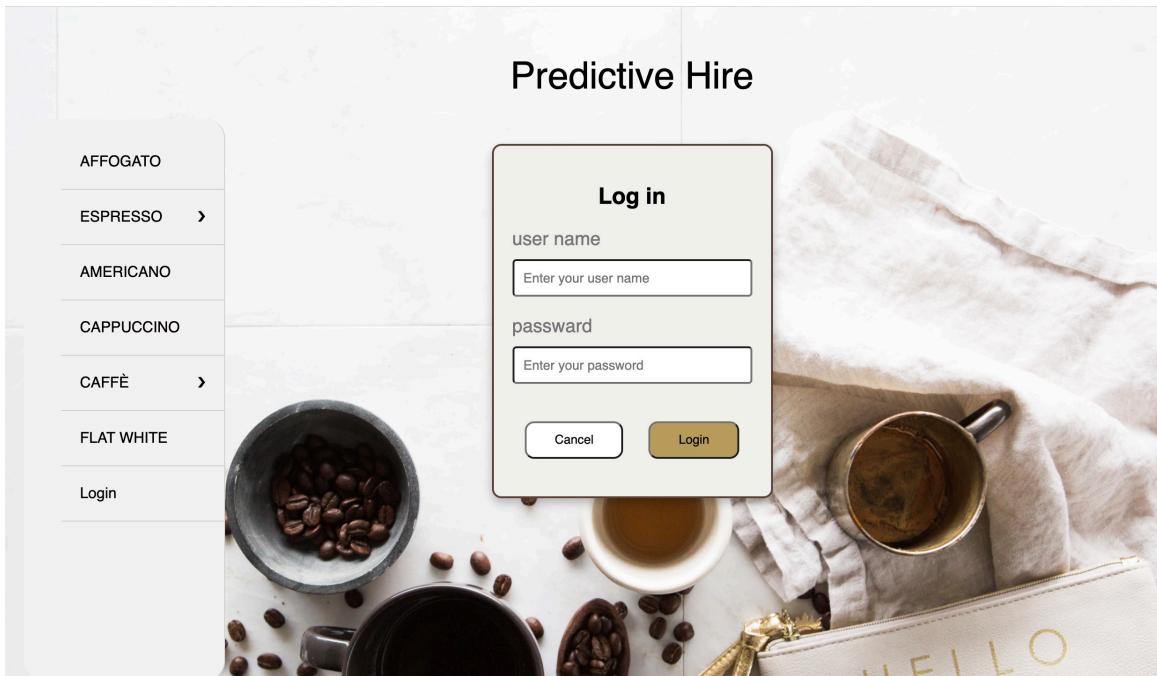
Hover the mouse for the side menu the submenu could be seen



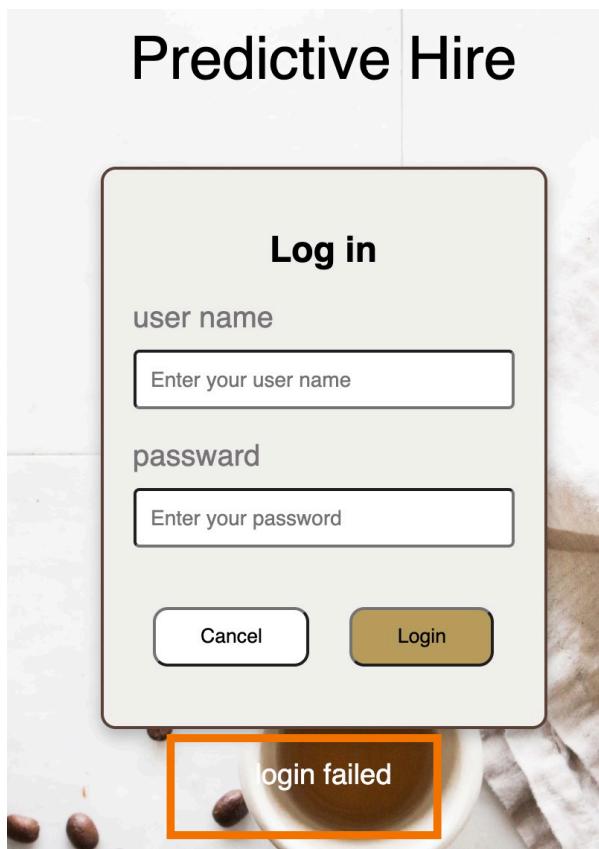
Click the Login button, and would navigate to Login page



Click the Login button and login card would display



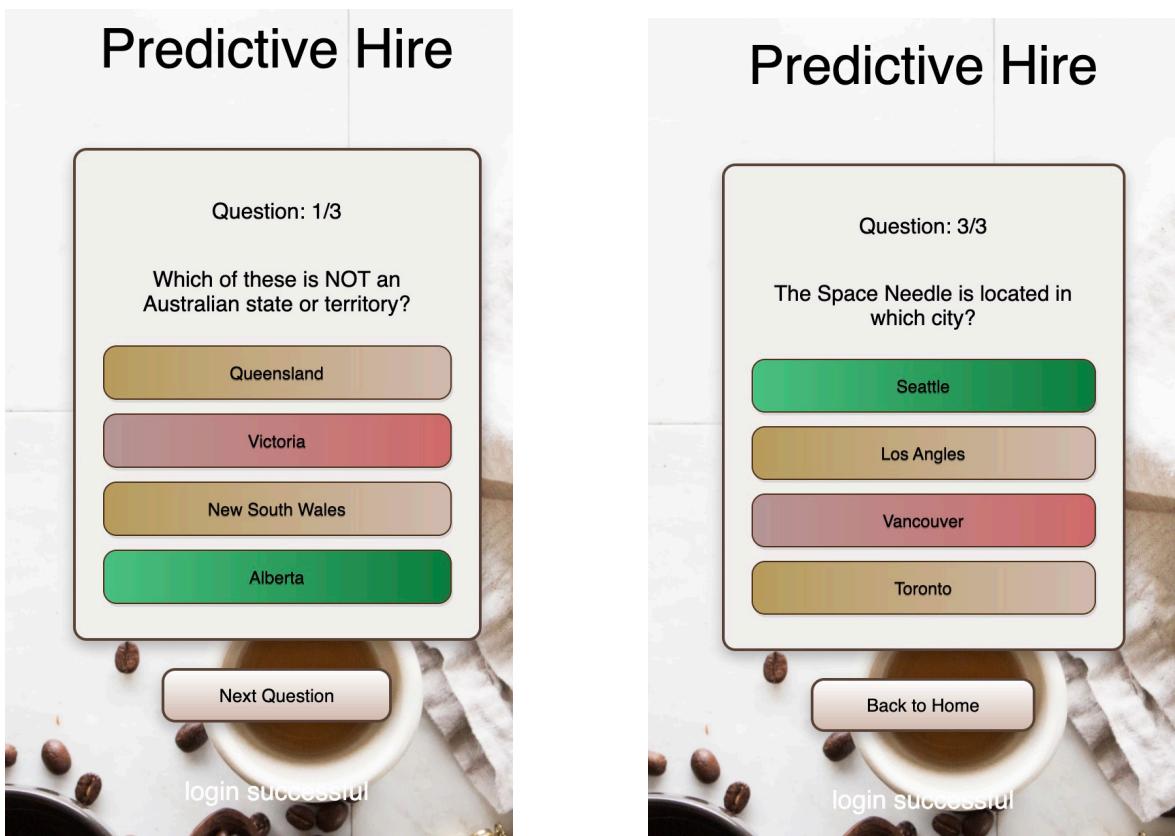
If click cancel, it would go back to the last Login button page, if click Login button with wrong username or password. You could see the words “Login failed” shown at the button of the card.



Login with username: shuai and password: shuai

Words “Login successful” and question card would show.

Click the button to choose the answer, right answer would be shown green and wrong you choose would be display red. After question3. Click the back to Home to go back.



4. API end point

Using JSON Placeholder to create the API I need, which would be checked on <https://my-json-server.typicode.com/jingshuai-cloud/mockjson>

There are three parts of the data, users, questions and menus:

```
[  
  {  
    "userName": "jingshuai",  
    "password": "jingshuai"  
  },  
  {  
    "userName": "shuai",  
    "password": "shuai"  
  },  
  {  
    "userName": "aileen",  
    "password": "aileen"  
  }]
```

```

[
  {
    "question": "Which of these is NOT an Australian state or territory?",
    "answers": [
      "Queensland",
      "Victoria",
      "New South Wales",
      "Alberta"
    ],
    "correct_answer": "Alberta",
    "incorrect_answers": [
      "New South Wales",
      "Victoria",
      "Queensland"
    ]
  },
  {
    "question": "The numbering system with a radix of 16 is more commonly referred to as ",
    "answers": [
      "Octal",
      "Hexidecimal",
      "Binary",
      "Duodecimal"
    ],
    "correct_answer": "Hexidecimal",
    "incorrect_answers": [
      "Binary",
      "Duodecimal",
      "Octal"
    ]
  },
  {
    "question": "The Space Needle is located in which city?",
    "answers": [
      "Seattle",
      "Los Angles",
      "Vancouver",
      "Toronto"
    ],
    "correct_answer": "Seattle",
    "incorrect_answers": [
      "Los Angles",
      "Toronto",
      "Vancouver"
    ]
  }
]

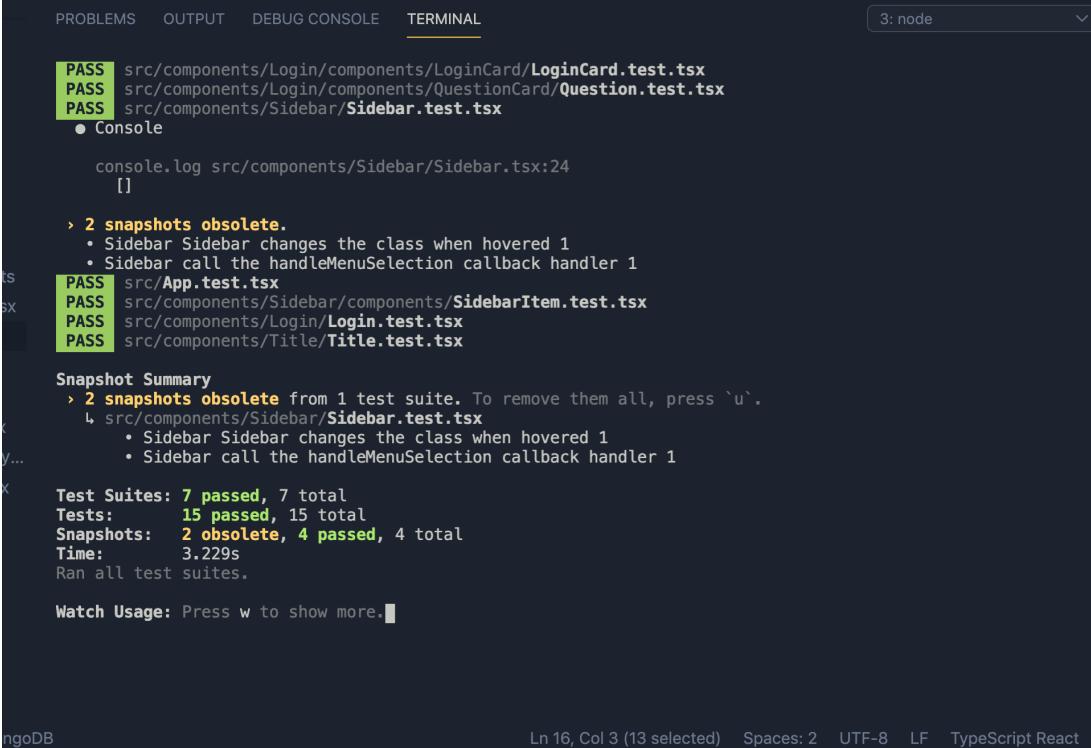
```

```

[
  {
    "coffee": "AFFOGATO",
    "path": "/layer1",
    "subMenu": []
  },
  {
    "coffee": "ESPRESSO",
    "path": "/",
    "subMenu": [
      {
        "coffee": "ESPRESSO",
        "path": "/layer2",
        "subMenu": []
      },
      {
        "coffee": "DOUBLE ESPRESSO",
        "path": "/layer2",
        "subMenu": []
      },
      {
        "coffee": "MORE",
        "path": "/",
        "subMenu": [
          {
            "coffee": "ESPRESSO CON PANNA",
            "path": "/layer3",
            "subMenu": []
          },
          {
            "coffee": "ESPRESSO MACCHIATO",
            "path": "/layer3",
            "subMenu": []
          },
          {
            "coffee": "MORE",
            "path": "/",
            "subMenu": []
          }
        ]
      }
    ]
  }
]
```

5. Test

Unit test are created by using enzyme, jest and react-testing-library.
Run **npm test** to see the test result.



The screenshot shows a terminal window within a code editor interface. The terminal tab is selected at the top. The output shows Jest test results:

```
PASS  src/components/Login/components/LoginCard/LoginCard.test.tsx
PASS  src/components/Login/components/QuestionCard/Question.test.tsx
PASS  src/components/Sidebar/Sidebar.test.tsx
  ● Console

    console.log src/components/Sidebar/Sidebar.tsx:24
      []

    > 2 snapshots obsolete.
      • Sidebar Sidebar changes the class when hovered 1
      • Sidebar call the handleMenuSelection callback handler 1

PASS  src/App.test.tsx
PASS  src/components/Sidebar/components/SidebarItem.test.tsx
PASS  src/components/Login/Login.test.tsx
PASS  src/components/Title/Title.test.tsx

Snapshot Summary
  > 2 snapshots obsolete from 1 test suite. To remove them all, press `u`.
    ↴ src/components/Sidebar/Sidebar.test.tsx
      • Sidebar Sidebar changes the class when hovered 1
      • Sidebar call the handleMenuSelection callback handler 1

Test Suites: 7 passed, 7 total
Tests:       15 passed, 15 total
Snapshots:   2 obsolete, 4 passed, 4 total
Time:        3.229s
Ran all test suites.

Watch Usage: Press w to show more.
```

At the bottom of the terminal window, status information is displayed: "MongoDB", "Ln 16, Col 3 (13 selected)", "Spaces: 2", "UTF-8", "LF", "TypeScript React".