



## Launchpad Frontend Code Challenge

In this code challenge we are looking for your coding skills, familiarity with **JavaScript**, **React** and **Redux**, utilizing best practices, clean coding, reusability, version control, teamwork and problem solving.

This challenge consists of multiple steps, and it is based on React. We'd like you to follow through each step, solve the problem and more importantly use version control (GIT) while you are progressing. You can have multiple branches and commits, but what we expect is, when you reach the solid answer to a question, the latest commit that represents the answer to the question should be **tagged**. The tag name can be defined however you like, just be sure it contains the step name. For example: *question1*, *question\_1*, *V1.0*, *v1.0*, *step1* or *step\_1*.

Finally, the complete code challenge should be on a versioning control platform ( Github, Gitlab, Etc.) as a public repository. Provide the link to the repository, and we will evaluate the code challenge as soon as possible.

### Questions

1. Start a new React application with **create-react-app**. You will need to build the following 3 pages with React:
  - a. "Home" page
  - b. "Universities" page
  - c. "Postal lookup" page

Use your imagination and CSS skills on how the page should look.

Follow the given patterns to name the project: **<<yourname>>\_launchpad-react-code-challenge**

All pages should come from different branch on Git repository and be merged on master.

2. Start the project with Redux as all RESTful API data must be from a central redux store. You can use Thunk or Saga as a middleware.

You will need to display a navigation bar which links to the "Universities" page and the "Postal lookup" page. On the home page use the following APIs to perform CRUD operations. All posts must be displayed on the home page with options to add, edit and delete.

GET: [https://jsonplaceholder.typicode.com/posts?\\_start=0&\\_limit=20](https://jsonplaceholder.typicode.com/posts?_start=0&_limit=20)

To add a post add a button that pops up a modal on click and add the post data to it (modal should be on a separate file). The data will not be added as the APIs are fake, but you will get a 200 response if submission successful.

POST: <https://jsonplaceholder.typicode.com/posts>,

```
body: {  
  title: string,  
  body: string,  
  userId: int,  
}
```

It should have a search bar to search by Id so make sure id's are visible on the posts when you display all posts.

GET by ID : <https://jsonplaceholder.typicode.com/posts/:id>

#### **Edit Post Api:**

PUT: <https://jsonplaceholder.typicode.com/posts/:id> ,

```
body: {  
  id: 1,  
  title: string,  
  body: string,  
  userId: int,  
}
```

#### **Delete Post API:**

DELETE: <https://jsonplaceholder.typicode.com/posts/:id>

### 3. "Universities" page

<http://universities.hipolabs.com/search?country=Canada>

Use the above API to display data coming from the API. The country can be changed from a drop down and the data should change by the country name. The country name dropdown would contain the country list from this API: <https://api.first.org/data/v1/countries>

Use your imagination and CSS skills on how the page should look.

### 4. "Postal lookup" page

Use the following API to lookup area details by zip code:

<https://api.zippopotam.us/us/{code}>