IMY 220
Practical 4
React 2

Due: Friday 6 September @ 8:30

The submission instructions are available on ClickUP. Any deviation from these instructions will result in a 10% deduction from your mark.

Instructions

- The aim of this practical is to create and serve a React application using Webpack and Express.
- For this practical, you are not allowed to write any loops. You will have to use the correct array functions to get the functionality to work. Foreach functions are not allowed. If you do not use array functions, you will receive fewer marks than what you would get if you used array functions.
- You are not allowed to use any project builder such as create-react-app or Vite to build your React application. You will need to create all the files required and serve it yourself.
- Include your student details in all files worked on.
- You need to follow the standards and practises laid out in the lectures for folder structure. If you do a different folder structure than the lectures, you will loose marks.

Section #1

For this practical, you will create a React application and write all the server and Webpack logic yourself.

1. Create a NodeJS project.
2. Set up your Express server as required.
3. Create any required Webpack and Babel files.
4. Create the public folder and include any files that it requires.
5. Create the src folder and include any files that it requires.

Section #2

Once you have setup and configured your React application, you will need to do the following:

1. This application only requires one page, so no routing is required.
2. You will however need to create two components alongside the index.js and App.js starting files.

3. The first component should be called **HelloWorld** and should display your student details, which include your name, surname and student number.
4. The second component should be called **RandomMovies** and should display the following:

Random Movie List

- **The Great Adventure**: A heartwarming story of friendship and bravery as a group of kids embarks on an unexpected journey through a mysterious forest.
- **Future City**: A sci-fi thriller set in a dystopian future where a hacker must battle a corrupt corporation to save humanity.
- **Laugh Out Loud**: A hilarious comedy following three best friends who accidentally enter a reality TV show with unexpected consequences.
- **Love and Space**: A romantic drama about two astronauts who find love while on a dangerous mission to Mars.
- **The Secret of the Ocean**: An animated adventure that follows a young girl and her talking dolphin on a quest to discover the lost city of Atlantis.

The movies should be stored in an object array, containing the name and description. You should go through the array, displaying a new **<li>** element every time. The array should be included in the **App.js** file and passed to RandomMovies as a prop.
5. Render out these two components inside of the **App.js** file.

Submission Files

- All files except for the **node_modules** folder.

Submission Instructions

- ZIP all submission files (using a tool like 7Zip or WinRar) into a ZIP file called *uXXXXXXXX-P4.zip*, where uXXXXXXXX is your student number.
- Submit your ZIP file before 8:30 to avoid any late submissions.