IMY 220
Practical 3
React

Due: Friday 23 August @ 8:30

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

Instructions

- You will create a simple React application to display some questions as accordions the user can click on to get answers.
- 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 have been provided with a boilerplate code that you can use to complete this practical.
- **You are required to make use of Class components, not Functional components.**
- You should make use of Bootstrap Accordions to style the application (https://getbootstrap.com/docs/5.3/components/accordion/). You will need to remove some code to get it to work with this practical. Bootstrap is already included and set up in the boilerplate code. You can additional colours if you want.
- Update uXXXXXXXX with your student number.
- Ensure that your student details (student number, name, surname) are in all worked-on files as comments.

Section #1

All of your code will be inside the <script> tag of the index.html file. You do not need to worry about setting up any React project.

- Create a component called **App**. This will serve as your starting point for the practical.
- For now, the component can just include a h1 tag that contains the following: "Frequently Asked Questions".
- Once created, render out the App component to the "root" element <div id="root"></div>.

Section #2

- Create another component called **Accordion**.

- The component should take in two props, one called question and the other called answer.
- Display the question prop and once the user clicks on the question, it should display the answer.
- If the answer is visible and the user clicks on the question again, it should hide the answer.
- There should be an additional visual indicator (besides the answer itself) to show whether the answer is being shown or not. This can be anything as long as it is clear to the user when an answer is hidden or not.
- *Hint: You should make use of state (this.setState).*

Section #3

- Go through all the entries in the faqs variable, passing through the question and answer of each entry to the Accordion component you created.
- At the end, you should have a list of clickable components. You should be able to click on each component's question and be shown the corresponding answer.

Example

At the end of your practical, your HMTL page should look something like this.

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What is React?	∧
How do you create a React component?	∧
What is JSX?	∧
What are props in React?	∧
What is state in React?	∧
How do you update the state in React?	∧
What is the difference between props and state?	∧

And when you click on a question, the corresponding heading shows up.

Practical 3 - uXXXXXXXX

What is React?	∨
React is a JavaScript library for building user interfaces.	
How do you create a React component?	∧
What is JSX?	∨
JSX is a syntax extension for JavaScript that allows you to write HTML directly within React.	
What are props in React?	∧
What is state in React?	∧
How do you update the state in React?	∧
What is the difference between props and state?	∧

Submission Files

- index.html

Submission Instructions

- ZIP all submission files (using a tool like 7Zip or WinRar) into a ZIP file called *uXXXXXXXX-P3.zip*, where uXXXXXXXX is your student number.
- Submit your ZIP file before 8:30 to avoid any late submissions.