

Lab 5

Introduction

In this lab we will be experimenting with some React core concepts like elements, components, and JSX.

Objective

The objective is to build a React class and functional components with and without JSX.

Requirements/Process

- Use the supplied html files as the start of the lab.
- The supplied starter files have React, ReactDOM, and Babel CDN links
- Make sure you are looking at your browser's dev tools console for errors if you are having issues.

Part 1

- Use supplied file lab5.1.html for this part.
- Do not use any JSX for Part 1.
- Create a functional React component called headline, as shown in class.
- The headline component when rendered on the page should be an h1 tag with the following text inside:
 - ITMD-4/565 Lab 5 Part 1 – your name here
- The headline element should have a property called name that you use in the text of the element instead of putting your name in the element directly.
- No JSX, you must create the React elements manually as shown in class.
- Using ReactDOM render the headline element to the page in the div with id of app.

Part 2

- Use supplied file lab5.2.html for this part.
- You can use JSX for Part 2. Use functional components for Part 2.
- You will be creating four functional React components for this part. These components will form a product listing.
- Here are the component names: ProductImage, ProductName, ProductDesc, Product
- The Product component will be a wrapper around the other components. You should return a div element with the three other components nested inside. The order should be image, name, desc.
- The image src, product name, and product desc should be passed in as props to the components when they are used in the Product component. They are defined as constants for you in the supplied starter file. Image should be an image tag, name

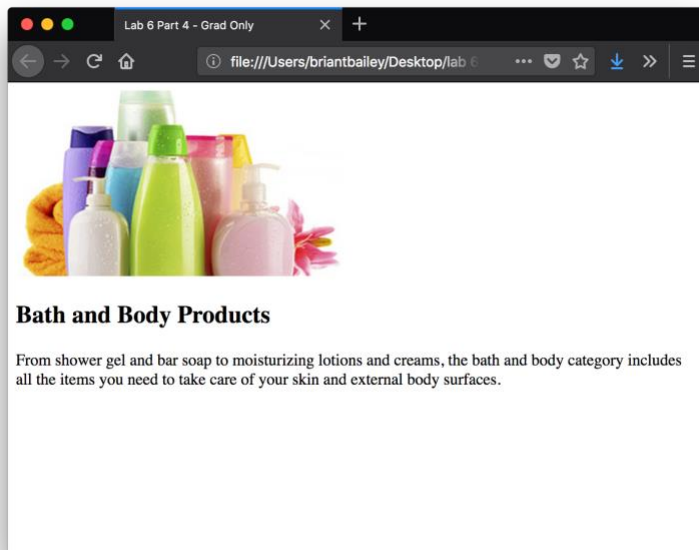
should be an h2, desc should be wrapped in a p. Don't use the defined constants directly in your components. They must be passed as props when the components are used.

- Using ReactDOM render the Product element to the page in the div with id of app.

Part 3

- Use supplied file lab5.3.html for this part.
- You can use JSX for Part 3. Use a class-based component for Part 3.
- Create a single class based React component called Product.
- The Product component will take in a single prop called product and it is expecting the data in the form of an object. This will be an object representing JSON data for one product. The product data object is defined for you in the supplied file as a const named productDetail. This object/const must be passed as a single prop to the Product component when you use the component.
- Pass the data object for the single product to the Product component and then inside the component use that props object for the img src, product name, and product desc. Do not pass separate props, pass in the one object and use it. Do not use the data values from the const directly in the component, it must be passed as a prop.
- When rendered this should look identical to Part 2, use the same html elements as described in Part 2.
- Using ReactDOM render the Product element to the page in the div with id of app.

It should look like this in both part 2 and 3.



Graduate Additional Requirements

If you are involved in **any section of 565** you need to complete the additional requirements listed here.

You must do an additional part 4. In part 4 you will do the exact same thing you did in part 3 but without using any JSX. Do all the createElement function calls yourself.

README File

No additional readme files other than the ones described in the lab directions.

Due Date / Late Policy

This assignment is due before class on **Sunday November 17, 2019 11:59 PM Chicago Time**. See syllabus for full late policy. **No Extensions**.

Submission Guidelines

You must upload your submission, to the blackboard assignment by the due date. The submission must be in the following format and structure. If you do not submit your assignment exactly as specified, you will receive an immediate 5% deduction.

Submission Format Specification:

Zip your files and upload to the blackboard assignment.

YourUsername_lab5.zip