

Web Scripting 3

Assignment: 02 – Build a Quote of the Day Application in React

Course Value: 10%

Due Date: To be finished before 4pm today ***

*** If you don't complete it on time, no worries, we will go over the solution at the start of the next class. To maximize your learning and understanding of React I do encourage you to try your best to complete the assignment before the deadline.

Assignment Description:

Create a quote of the day application using React.

Teamwork:

You are permitted to work in groups of up to 3 students. This is optional, you are free to work on this assignment solo if you prefer.

Instructions:

1. Create a new React application using Create React App
 - a. See this page for instructions on how to create a React app using Create React App
 - i. <https://reactjs.org/docs/create-a-new-react-app.html#create-react-app>
2. Move the "quotes.js" file from the "day-02" folder into your React project's "src" folder
 - a. The "quotes.js" file contains all the quotes used in the application
3. Create an application that meets the application specifications listed below
4. Once steps one through three have been completed, show your instructor your completed code
 - a. If you finish the assignment before the class ends for the day, you can see show your code to your instructor in the Zoom classroom
 - b. If you finish after the end of the day's class, you can show your instructor during the next class's lab session

Application Specifications

- Your application must meet all the specifications listed below in order to be considered complete
- The application should use separate component files for the following components
 - o App.js -> Main entry component
 - All the following components should be imported into this component
 - o Header.js -> HTML Header element component
 - o Quote.js -> This is the component which handles outputting and changing the quote
 - o Footer.js -> HTML Footer element component

App Component

- This is the main component for the application
- Import the Header, Quote and Footer components into this component
- Create an "applInfo" JavaScript object with the following key value pairs
 - o title -> "Quote of the Day" (string)
 - o author -> [Your name] (string)
 - o copyright -> [the current year] (number)
- How you structure the HTML of this component is up to you

Header Component

- This component should output a HEADER element
- The component should have a "defaultProps" object set to the following value:
 - o title -> "React App" (string)
- The component should take in a "title" prop that is output inside of an H1 tag inside the HEADER element

Quote Component

- This component handles outputting a random quote when a button is clicked on
- Import the "quotes.js" file into this component
- On page load the component should output the following HTML
 - o A PARAGRAPH element with the text "Click the button to get a quote."
 - o A BUTTON element with the text "Get Quote"
 - o You are free additional DIV or other HTML elements that you feel are necessary for semantic or styling reasons
- When the BUTTON element is clicked on the following should happen
 - o The initial PARAGRAPH element should be removed
 - o Select a random quote from the "quotes" array
 - o The application should not select the same quote twice in a row
 - o The quote should output the following:
 - A BLOCKQUOTE element to wrap the quote element
 - Inside the above BLOCKQUOTE element should be the following HTML elements
 - o A PARAGRAPH element to wrap the actual quote
 - o A FOOTER element to wrap the author of the quote
 - o Once a quote has been selected the BUTTON element's text should change to "Get Another Quote"

Footer Component

- This component should output a FOOTER element
- The component should have a “defaultProps” object set to the following value:
 - o copyright -> the current year
 - This should be a dynamic value
 - If the year is 2021 it should output 2021
 - This value should not be hard coded
 - If I load this app in 2022 then the year would automatically be set to 2022
 - You can accomplish this with native JavaScript
- The component should take in a “copyright” prop which is output inside of a PARAGRAPH element that is inside the FOOTER element
 - o The “copyright” prop has a copyright year passed into it
- The component should take in an “author” prop which is output inside of a PARAGRAPH element that is inside the FOOTER element
 - o The “author” prop has the application author’s name passed into it
- The final output of the footer should look something like the following:
 - o © 2021 Michael Whyte

Other Hints:

- Inside the “day-02” folder is a demo video of a complete version of this assignment. This video will give you an idea of how this application should run.
 - o Look in the day-02 folder for the “a-02-demo.mov” file
- Don’t worry about matching the style of your application to the styles in the demo video. Feel free to add your own unique styles to this application
 - o **Note:** You will probably need to change some of the default styles that the Create React App program creates

Marking Criteria:

This project will be marked out of 10 and will be marked based on the following criteria:

- | | |
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| 1) All Technical Specifications Met | 10 marks |
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Total: 10 marks