

DMIT2008 Assignment 2: React Components Introduction and Styling

Introduction

This assignment will test your knowledge of what we've learned so far in React. Using React we've learned about components (how to create our own), props, lists and how to use external packages' components like Material UI. We've also learned how to do some styling and how to customize some of external libraries. This assignment will also test your skills on reading and using documentation of Open Source projects.

This assignment will cover the section "Introduction to React and Next.js" and will use any other knowledge up to section "JavaScript Component Libraries and Styling".

Overview of functionality

- The project starter looks like the image below once you install all of the dependencies and run the next.js project.s

Assignment 2 - React Components

- The completed project should look like the following:

Assignment 2 - React Components and Styling

Here's a list of awesome resources that you can use.

[Next.js Blog](#)

[Awesome React Components to take a look at](#)

[Building iOS and Android Apps with React](#)

[React Conference Talks on Youtube](#)

- The completed project with the bonus should look like the following:

Assignment 2

Assignment 2 - React Components and Styling

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Required Tasks

- Install and Customize Material UI Install the MUI package in your project.
 - Add the “roboto” font either in the head (with a link via a cdn) or install it with npm and import it into the entry point of our application (pages/_app.js). Note: You only need to do one or the other.
 - Create a theme file (in utils/theme/config.js) and create a MUI theme with the following keys and values in the object:
 - palette
 - primary
 - main: #004e8a
 - secondary
 - main: #1e5c0a
 - Import and the theme in your entry point (pages/_app.js) and configure the project to use your theme (as shown in class examples)
 - Use Material UI Components and Read
 - Within the “main” tag of the JSX use the “Container” component (docs here: <https://mui.com/material-ui/api/container/>) that wraps all of the components you’ll create in the following steps.
 - Change the “h2” element in the JSX to use the “Typography” component (docs here: <https://mui.com/material-ui/api/typography/>).
 - When use the “Typography” component give it the following props:
 - variant: h2
 - component: h2
 - color: Primary
 - align: Center
 - Create another “Typography” component
 - With the following props:
 - color: secondary
 - align: center
 - Containing the following string:
 - Here's a list of awesome resources that you can use
 - Create a component named “JSArticles” that will list the sites to look at.
 - Create a components folder with component named “JSArticles”
 - Import the NEXT_JS_COOL_SITES from the “nextjsSiteList.js” file properly
 - Within the component return the following JSX
 - List (using the MUI component, docs here: <https://mui.com/material-ui/api/List>)
 - Within the List loop through the NEXT_JS_COOL_SITES using “map”.
 - Use the ListItem (using the MUI component docs here: <https://mui.com/material-ui/api/list-item/>)
 - In the List Item (from the last point) create a link (anchor tag) with the link from the site data.

- Within the link from the (from the last point) use a MUI “Typography” component to display the name from the site data.
 - Use this Component in the
- Bonus Create an AppBar
 - Create a component named “NavBar.js” that uses the prop “title” in the JSX.
 - You might think to yourself “why is this so vague” it’s a bonus, so that you go figure it out on your own. Don’t ask your instructor about it, go find the answer.

Marking key

Tasks	Grade	Marks	Total
External Package Material UI integration <ul style="list-style-type: none"> • Packages are installed correctly. • Font is imported either via cdn or entry point. • MUI Theme is created in the correct location and imported correctly into the entry point file. • ThemeProvider is used correctly so the project uses custom styling. 		1 1 3 1	
Material UI Component Usage <ul style="list-style-type: none"> • MUI Components imported properly into the “pages/index.js” file. • MUI Container and Typography Components are used properly in the JSX. 		1 5	
Custom Component Usage <ul style="list-style-type: none"> • “components” folder created properly, and contains the component files. • Component defined and exported properly. • MUI Components imported properly into the “pages/index.js” file. • JSX uses MUI components properly, loops over list items appropriately using a key prop and the data properly in the correct components. • JSArticles Component import into “pages/index.js” properly. • JSArticles Component used properly in JSX. 		1 1 1 5 1 1	
Custom Component Bonus <ul style="list-style-type: none"> • NavBar Component created correctly, and uses a title prop to display title for assignment. 		[3]	
Formatting and Style <ul style="list-style-type: none"> • Code Formatting and Style • Node_modules folder and next cache are included (if you included them it’s negative marks on your assignment) 		-3 -3	

Marking Rubric

Marks	5 Marks Criteria
5	Task was completed with the highest of proficiency adhering to best practices and followed subject matter guidelines all tasks were completed to a professional standard.
4	Task was completed well some minor mistakes. Well above average work shows good understanding of the task and high degree of competence
3	Satisfactory work some features missing or incorrectly implemented. Show a moderate level of understanding in the task with room for improvement.
2	Below average work. Task was poorly complete. Show understanding of the task and the requirements to implement but implementation was poorly executed.
1	Some of the task was completed. Showed a lack of understanding in the subject matter and very poorly executed
0	Not completed.

Marks	3 Marks Criteria
3	Proficient shows a high degree of competence in completing task.
2	Capable above average degree of competence in completing task
1	Satisfactory shows a satisfactory degree of competence in completing task.
0	Shows a limited degree of competence in completing task.

Marks	1 Marks Criteria
1	Task Completed satisfactorily
0	Task was not executed.

