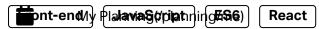
Ox03. React component



weight: 1

Projects(/projects/current)

➡ Project over - took place from Jul 30, 2024 6:00 AM to Aug 2, 2024 6:00 AM

An auto (A) i Rive wild brest alung her has keef / deport line tions / to review)



Resources (/user_containers/current)

Bead or watch: Tools(/dashboards/my_tools)

- React components (/rltoken/eHblf6Gksn6yyB63AxL95Q)
- React Developer Tools (/rltoken/ISa2LQiraDIOLg6hSp6GqA)
- Entigene snalemannellokeshkaards/violeosbbwskkwolg)
 - Enzyme Mount (/rltoken/-cuX84kln3EWCuJNx-P74A)
 - Enzyme Unmount (/ritoken/yQlfthRXFmRQHkNSDzMTag)
 - React Pure components (/rltoken/JYDb2WZMLwBxM9qHjTVdpA)
 - Repetiteligher இறக்கு Omponents (/rltoken/AQ3a58-uRtO20Ysam9M6vw)
 - Jest mock function (/rltoken/W0QL 4bEjld02Hr2-qQYrw)

Learning Objectives

At the end of this project, you are expected to be able to explain to anyone (/rltoken/w6DKIR6TVg7RkMN-ym12Kw), without the help of Google:

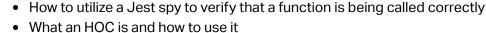


- The yife of itely users last coorfidenent
- How to test a component









P/) How to optimize performance and control which components to render

Requirements

• All your files will be interpreted/compiled on Ubuntu 18.04 LTS using node 12.x.x and npm



6. X. X My Planning(/planning/me)

- Allowed editors: vi, vim, emacs, Visual Studio Code
- All your files should end with a new line



• A PREADUES (Not dilected the project, is mandatory

QA Reviews I can make(/corrections/to review)

Tasks_valuation quizzes(/dashboards/my_current_evaluation_quizzes)

0. Commence with class components

mandatory

tart this project with dish from the the last task of the 0x03. React Props project:

Convert the App function into a React Class:



- Modifyctipets(/locatioepxist)hin App.js to convert the App function into a React class
 - · Make sure that the tests are still passing

Sequirements: ence rooms(/dashboards/video_rooms)

• At this point, reloading the App should display the exact same page as the last task



The console in your browser should not show any error or warning Servers(/servers)

Repo:

Sandboxes(/user_containers/current)

- GitHub repository: alx-react
- Directory: 0x03-React_component



File Playdashbaards any tools App / App. js





mandatory

And life evere to (attash bisemid.com/app)

In the App Class:



- Add a props named logOut with the props type being function
- The default value for this property, should be an empty function
- Add apreyent listener when the component is mounted to listen to when the user is pressing down the keyboard keys

• When the user is pressing down the control and the h keys simultaneously, display the alert Logging you out and call the function logOut

Add the tests

In t

In the test file for the App Class:

Home(/)

 Create a test to verify that when the keys control and h are pressed the logout function, passed as a prop, is called and the alert function is called with the string Logging you out My Planning(/planning/me)

Requirements:



- Make sure to remove the event listener when the component is unmounted
- In the test file, make sure to restore the alert function you mocked
- At this point, reloading the App should display the exact same page as the last task

/

 The console in your browser should not show any error or warning QA Reviews I can make(/corrections/to_review)

Repo:

Evaluation quizzes(/dashboards/my_current_evaluation_quizzes)

- GitHub repository: alx-react
- Directory: 0x03 React_component
- File: task_1/dashboard/src/App/App.js, task_1/dashboard/src/App/App.test.js
 Curriculums(/dashboards/my_curriculums)

Check submission



Concepts(/concepts)

2. Handling Events

mandatory

Conference rooms(/dashboards/video_rooms)
Create a new handing event

In the Notifications component:

Servers(/servers)

- Convert the function into a React Class
- Make sure that the tests are still passing
- Createlboxes (huse kase eatain ferred cionine within the Notifications class. It accepts one argument: id(number)
- يو
- When the function is called, it logs to the console the message "Notification \$id has been marked
 as read (/dashboards/my_tools)
- Pass the function markAsRead to the NotificationItem component as a property
- the Novideocan demodent/Classocoards/videos)
 - Modify the li element to call the new function markAsRead on click. It should send the id of the notification
- Define the new property type and the default property for the new properties Peers(/users/peers)

Add the tests

the Not if ications test file: Discord(https://discord.com/app)

- Create a test, that will mockup the console.log function
- Check that when calling the function markAsRead on an instance of the component, the spy is being called with the right message

In the NotificationItem test file:

My Profile(/users/my_profile)

Create a test, that will pass a spy as the markAsRead property

Check that when simulating a click on the component, the spy is called with the right ID argument

Requirements:

Make sure to bind the function-markAsRead-in your constructor to avoid unecessary re-rendering



- In the test file, make sure to restore the console function you mocked
- At this boint, reloading the App should display the exact same page as the last task. Use the React Chrome Extension to make sure the Notifications component displays correctly



The console in your browser should not show any error or warning My Planning(/planning/me)

Repo:

Projects(/projects/current)

- GitHub repository: alx-react
- Directory: 0x03-React_component



File: A Review of Gammake Gerrections to the tight of the series of the task_2/dashboard/src/Notifications/NotificationItem.test.js,

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task_2/dashboard/src/Notifications/Notifications.js, Evaluation quizzes(/dashboards/my_current_evaluation_quizzes) task_2/dashboard/src/Notifications/Notifications.test.js

A Reusable commondatal & eposoralization lums)

mandatory



Containment Concepts(/concepts)

Create a new component named BodySection. The component does not know its children. It should output the following:



Conference rooms(/dashboards/video_rooms)

- A div with the class bodySection
- Within the div, a h2 element containing a title passed as a prop
- Unaterverse (/62 ryaeschildren of BodySection

Tips:

Rendering the following _containers/current)



<BodySection title="test"> tools(/dashboards/my_tools)

</BodySection>



Video on demand(/dashboards/videos)

<div className="bodySection"> <h2>test</h2>



tResetrs(/p/sers/peers)

</div>



Discord(https://discord.com/app)

Repo:



- GitHub repository: alx-react
- Directory: 0x03-React_component
- File: task_3/dashboard/src/BodySection/BodySection.js My Profile(/users/my_profile)

Specialization

mandatory

in task_3/dashboard/src/BodySection/BodySectionWithMarginBottom.js, create a new mponelornal BodySectionWithMarginBottom. The component does not know its children. It should output the following:

- ä
- A div with the classified ysection with Margin
- Within the div, a BodySection element with the same props passed to bodySectionWithMargin

task_3/dashboard/src/BodySection/BodySectionWithMarginBottom.css

- Set the style for the class bodySectionWithMargin with a margin bottom of 40px
- Import the styling into the BodySectionWithMarginBottom component QA Reviews I can make(/corrections/to_review)

Requirements:

- ? Maka sure to define the Bridge Afgr both a forevaluation quizzes)
 - Do not repeat each props manually and use the spread operator

Repo:

Curriculums(/dashboards/my_curriculums)

- GitHub repository: alx-react
- Directory: 0x03-React_component



Conference rooms(/dashboards/video_rooms)

Servers(/servers)

5. Use the new components

mandatory

Sandboxes(/user_containers/current)

in task_3/dashboard/src/App/App.js, modify the App component:



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- Wind the sent of the sent o
- Wrap the Login component with the newly created BodySectionWithMarginBottom component. The little Should be Login continue
- Using the BodySection component, add a new block with the title News from the School. The component should contain a paragraph with some random text

Peers(/users/peers)

Repo:



- Github reposits Maiscord Each Japp)
- Directory: 0x03-React component
- File: task_3/dashboard/src/App/App.js

Q

My Profile(/users/my_profile)

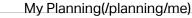
mandatory

in task_3/dashboard/src/BodySection/BodySection.test.js:



 Add one test checking that shallowing the component should render correctly the children and Home(/) one h2 element

E.g. with the following code:



<BodySection title="test title">

test children node

/BodySojects/(projects/current)

You should check that:

QA Reviews I can make(/corrections/to_review)

- There is one h2 element and it includes the text test title
- There is one p element and it includes the text test children node

Evaluation quizzes(/dashboards/my_current_evaluation_quizzes)
in task_3/dashboard/src/BodySection/BodySectionWithMarginBottom.test.js:

 Add one test checking that shallowing the component should render correctly a BodySection component and that the props are passed correctly to the child component Curriculums(/dashboards/my curriculums)

Requirements:

B

- Make sure that the CSS is correctly applied to your component
- The Constant In Constant was a should not show any error or warning

Pepo: Conference rooms(/dashboards/video_rooms)

GitHub repository: alx-react

Disertorys (/Sepsense) act_component

File: task_3/dashboard/src/BodySection/BodySection.test.js,

 $task_3/dashboard/src/BodySection/BodySectionWithMarginBottom.test.js\\ Sandboxes(/user_containers/current)$

ℋ. Create Withlebggangs HOCools)

mandatory

e would like to add a way to log to the console every time a component has been mounted and every video on demand(/dashboards/videos) time it is about to unmount.

To not repeat the same code everywhere, create a HOC component in task_4/dashboard/src/HOC/WithLogging.js:



Peers(/users/peers)
 The component should log to the console Component NAME_OF_THE_WRAPPED_COMPONENT is mounted on componentDidMount()

(2)

- The component placed to the console Component NAME_OF_THE_WRAPPED_COMPONENT is going to unmount on componentWillUnmount()
- Modify the displayName of the HOC to always display
 WithLogging(NAME_OF_THE_WRAPPED_COMPONENT) in the React Chrome Extension or for debugging
- NAME_OF_THE_WRAPPED_COMPONENT should be the name of the wrapped component or class. If My Profile(/users/my_profile) the wrapped element has no name it should default to Component



(/)
• GitHub repository: alx-react

• Directory: 0x03-React_component



File One (24/dashboard/src/HOC/WithLogging.js



My Planning(/planning/me)

8. Write a test for the HOC

mandatory



Projects(/projects/current)
n task 4/dashboard/src/HOC/WithLogging.test.js, write some tests for the HOC component:



- The first test should make sure console.log was called on mount and on unmount with coad Reviews heartheaved corrections to sreview time
- The second test should make sure console.log was called on mount and on unmount with the name of the component when the wrapped element is the Login component. Component Login Evaluation quizzes(dashboards/my current evaluation quizzes) is mounted and Component Login is going to unmount should be sent to the console

Tips:



Writing a unit test for HOC can be difficult. Create a variable with the HOC wrapping a function Curriculums/dashboards/my_curriculums) rendering the React component or html. e.g. withLogging(() =>)

<u>R</u>equirements:



Concepts(/concepts)

Make sure that the messages Component Login is mounted and Component Login is going to unmount are sent when loading the app



- In the fesenire, rankes (de 10) eards evide consume function you mocked
- The console in your browser should not show any error or warning



Servers(/servers)

Repo:

- Gitandusexesitaser alontanaets/current)
- Directory: 0x03-React_component





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Video on demand(/dashboards/videos)

9. Declare a pure component

mandatory



Peers(/users/peers)
task 5/dashboard/src/Notifications/NotificationItem.js:



Modify the component to make it "pure". Which means that it will only update when its props and st Discord(Inters://discord.com/app)



Repo:

- GitHub repository: alx-react
- Dilvery terroyfil@(xouse red arcyt_paronfile)nent

• File: task_5/dashboard/src/Notifications/NotificationItem.js



(/)

10. Make your own pure component

mandatory



Home(/)

In task_5/dashboard/src/Notifications/Notifications.js:



- Madify the file (Asia hands were at the new property list Notifications has a longer list of elements than the previously
- You must implement the function shouldComponentUpdate to add this performance optimization Projects(/projects/current)

Repo:



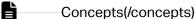
- QA Reviews I can make(/corrections/to_review)
- GitHub repository: alx-react
- Directory: 0x03-React_component
- Filevaluation/quaixaes(dddsbboands/infiyceuirænt/kevalufaiticantiquizzès)



Curriculums(/dashboards/my_curriculums)

11. Add a test





In task_5/dashboard/src/Notifications/Notifications.test.js, add two checks:



- The first renee is a said does if you and swide op conting) the proper of the component with the same list, the component doesn't rerender
- The second check should verify that when updating the props of the component with a longer list, the প্রেপার্নি প্রতিভিত্ত rerender

Tips:



- Sandboxes(/user_containers/current)
 Since the NotificationItem component is a function component, you can't directly use
 React.PureComponent
- Using the React Chrome Extension to make sure the Notifications component does not rerender will not work because the extension bypass shouldComponentUpdate. Use the test to verify your code instead
- YoViden asedem and vides have depoided shange the props of the component

Requirements:

 The console in your browser should not show any error or warning Peers(/users/peers)

Repo:



- GitHub repository: atx-react
- Directory: 0x03-React_component
- File: task_5/dashboard/src/Notifications/Notifications.test.js







My Profile(/users/my_profile)