Module quiz: Project functionality

1. What is the purpose of `useState` in the following code? **1 / 1 ponto**

```
import { useState, useEffect } from "react";
function Example() {
  const [count, setCount] = useState(0);
  useEffect(() => {
    document.title = `You clicked ${count} times`;
  });
  return (
    <div>
      {" "}
      <p>You clicked {count} times</p>{" "}
      <button onClick={() => setCount(count + 1)}>Click me</button>{" "}
    </div>
  );
}
```

- [x] `useState` is used to add state to a functional component.

  Correto
  That's correct. The `useState` hook is used to add state to a functional component, allowing it to maintain and update state over time.

- [ ] `useState` is used to define the component's render method.
- [x] `useState` is used to set the initial state of the component.

  Correto
  That's correct. The `useState` hook is used to set the initial state of the component, with a default value of 0.

- [ ] `useState` is used to add state and side effects to a functional component.

2. What is the benefit of `useState` over `useReducer`? **1 / 1 ponto**

- ( ) `useReducer` is more performant.
- (•) `useState` is more performant.

  Correto
  That's correct. The `useState` hook is more performant than `useReducer` because it does not require the overhead of creating a new dispatch function on every render.

3. Why do you use the `useEffect` hook in a react project? Choose all that apply. **1 / 1 ponto**

- [x] To trigger an effect when a prop changes.

  Correto
  That's correct. The `useEffect` hook can be triggered when a prop changes, allowing it to perform side effects based on the updated prop value.

- [ ] To update the component's state.
- [x] To perform side effects after a component renders.

  Correto
  That's correct. The `useEffect` hook is often used to perform side effects after a component renders, such as making an HTTP request or updating the document title.

- [x] To clean up effects before the component unmounts or re-renders.

  Correto
  That's correct. The `useEffect` can also be used to clean up effects before the component unmounts or re-renders, such as canceling an HTTP request or removing an event listener.

- [x] To trigger an effect when the component mounts or updates.

  Correto
  That's correct. The `useEffect` is triggered when the component mounts or updates, allowing it to perform side effects based on the current state or props of the component.

4. True or false. Uncontrolled components are components that do not maintain their own state. **1 / 1 ponto**

- ○ True
- ◉ False

Correto
That's correct. Uncontrolled components are components that do not maintain their own state and rely on an external source for their state, such as a form element or a parent component. In contrast, controlled components maintain their own state and control their own behavior and rendering.

5. Which of the following are common uses of JSON in a React project? Select all that apply. **1 / 1 ponto**

- ☑ To declare dependencies in `package.json`

Correto
That's correct. `package.json` is used in Node and React projects to declare dependencies and other information.

- ☑ To send data to a REST API

Correto
That's correct. JSON is often used to exchange data with a REST API over HTTP/S.

- ☑ To receive data from a REST API

Correto
That's correct. JSON is often used to exchange data with a REST API over HTTP/S.

6. What will be output if the following HTTP request fails? **1 / 1 ponto**

```
1  fetch('https://example.com/api/data')
2  .then(response => console.log("Success"))
```

- ○ Success
- ○ Fail
- ◉ Nothing will be output.

Correto
That's correct. There is no catch function defined for the resulting promise, therefore, nothing will be output.

7. What is the benefit of unit testing in React? Choose all that apply. **1 / 1 ponto**

- ☐ It guarantees that the application will have no bugs.
- ☐ It speeds up the development process.
- ☑ It helps catch regressions early in the development process.

Correto
That's correct. By catching regressions early in the development process, unit testing can help prevent issues from cascading and becoming more difficult to fix later on.

- ☑ It helps ensure that individual components work as expected.

Correto
That's correct. Unit testing helps ensure that individual components work as expected by testing their behavior and output under different conditions.

- ☑ It allows for easier debugging and maintenance.

Correto
That’s correct. By testing individual components in isolation, unit testing allows for easier debugging and maintenance because it can help identify issues more quickly and specifically.

8. What is this code in JavaScript: **1 / 1 ponto**

```
/Make Your Reservation/?
```

- (●) RegExp object literal
- ( ) A string literal
- ( ) An array literal

Correto
That’s correct. This code a RegExp object literal, because it is enclosed in / delimiters.

9. True or false. “Operable” is one of four core principles of accessibility upon which WCAG (Web Content Accessibility Guidelines) has been built. **1 / 1 ponto**

- (●) True
- ( ) False

Correto
That's correct. "Operable" is one of the four core principles of accessibility, along with "Perceivable," "Understandable," and "Robust." It refers to the requirement that users must be able to use the user interface and navigation in a way that is accessible to them. This includes providing keyboard accessibility for users who cannot use a mouse and ensuring that the user interface does not create barriers to accessing content or functionality.

10. Can you use arrow functions to update the state of a component? **0 / 1 ponto**

- ( ) Only in some cases
- ( ) No
- (●) Yes
- ( ) Only in certain type of state

Incorreto
Not quite. Please review the item **Recap: State in React** in Lesson 1, Module 3.