Quick Review

- Why write tests?
- Types of test (unit, integration, e2e)
- Assertions, Stubs, Mocks, & Spies
- Javascript Testing Frameworks
- Jest & Snapshot Testing
- Poopie things about Jest
- Bomb ass live coding demo

Leafly

Diving Deeper Into Jest w/ Testing Utilities

- Enzyme
  a. Developed by AirBnb
  b. "Enzyme is a JavaScript Testing utility for React that makes it easier to assert, manipulate, and traverse your React Components' output."
  c. Developed to mimic JQuery API

- React Testing Library
  a. Developed By Kent C Dodds
  b. "Simple and complete React DOM testing utilities that encourage good testing practices."
  c. Developed using React-DOM and was designed to mimic user actions

Enzyme

Mount

- Full DOM rendering including child components.

- Ideal for use cases where you have components that may interact with DOM API, or use React lifecycle methods in order to fully test the component

- Allows access to both props directly passed into the root component (including default props) and props passed into child components

Shallow

- Renders only the single component, not including its children. It protects against changes or bugs in a child component altering the behaviour or output of the component under test

- Shallow components do have access to lifecycle methods by default

- Cannot access props passed into the root component (therefore also not default props).

Render

- Renders to static HTML, including children

- Does not have access to React lifecycle methods

- Less costly than mount but provides less functionality

Enzyme Demo

react-testing-library

Render Can Do

- Renders component using ReactDOM (non-static HTML)
  - Does not require an adapter
- Query by text search or element attributes
- Fire events

Users Can Do

Render Can't Do

- Shallow rendering
- Access component instance, including:
  - State
  - Props
  - Class Methods
- Query by component properties (like component name)

Users Can't Do

The more your tests resemble the way your software is used, the more confidence they can give you.

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react-testing-library Demo

Some References

- Enzyme
  https://airbnb.io/enzyme/
- react-testing-library
  https://testing-library.com/docs/react-testing-library/intro

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