What is Unit Testing?

- Unit testing is a software testing method that isolates the smallest unit of code.
- It follows a 3 point structure:
  - Set-up test
  - Call test method
  - Assert
- Testing has morphed into a simpler process over the years. There are many tools available, but for functional flexibility, a combination of tools are commonly used.

The libraries and frameworks used for unit testing across libraries.

- <u>Jest</u> - JavaScript testing framework created by Facebook (has strong support for React)
- <u>Pytest</u> - testing framework for Python
- <u>Karma</u> - browser based code testing

Examples of Technical Interview Questions

- What is a good Unit Test?
- How would you describe testable code?
- What are some unit testing libraries you've used?

Vocabulary

Words you may hear in the job or work environment

- Mock
- Stub
- Spy
- Jest

- Jasmine
- Karma
- Enzyme
- Rspec

- Rake
- pytest

Live Coding Demo

- Creating a sample test with Jest
- Structuring tests for a React App
- Writing a test for an Express App

Exercise

- Add testing to a back end project.
- Add testing to a frontend project:
  https://docs.google.com/document/d/1RGeIJBMWEBVPpRQddVcxx9YzAvKtmcS1ZUIiTdIyoDM/edit?usp=sharing

Home Work

https://docs.google.com/document/d/1rGdZyeO_IEHpn_rJt7L6MlkzfOj_pjguNpnj7dks3gw/edit?usp=sharing

Suggested Reading

- https://reqtest.com/testing-blog/a-guide-to-excellent-acceptance-testing/
- https://www.geeksforgeeks.org/acceptance-testing-software-testing/
- https://cucumber.io/docs/installation/