**Testing**

**Types of Tests**

* Unit tests
  + Tests one unit of code in isolation
* Integration tests
  + How multiple units work together
* Functional Tests
  + Test a particular function of software (testing behavior of app)
* Acceptance /End-to-end (E2E) Tests
  + Use actual browser and server (Cypress, Selenium)

TDD vs BDD

BDD is very explicitly defined

* Involved collaboration between lots of roles
  + Developers, QA, business partners, ect
* Defined process for different groups to interact

Functional tests don’t involve the server

Writing Tests with the Three “A”s:

* Arrange – Set up test data, test conditions and test environment
* Act – Run logic that should be tested (e.g. execute function)
* Assert – Compare execution results with expected results

For the assert we have **screen** object that respond with:

* Get functions – throw an error if element is not found
* Find functions – return promise
* Query functions -

Resources:

<https://www.w3.org/TR/wai-aria/#role_definitions>

<https://github.com/testing-library/jest-dom>

<https://testing-library.com/docs/react-testing-library/cheatsheet/>