**Testing With Jasmine**

**Testing is writing code to test your own code!**

**Benefits of testing:**

* Different cases
* Different edge cases
* Manually testing software is tedious and error prone
  + In a small program we an manually check all pieces of functionality before pushing our code
  + As programs get larger, it becomes impossible to catch everything that might break
* Act of writing tests is a good way to clarify the expectations of a function
  + We have to specify what the legal input/output should be
* Reading tests is a great way to understand a new code base
* Testing is a ore skill for professional developers

**Testing Tools**

**Jasmine:**

* Each language has multiple testing libraries (e.g) python, JS, Ruby)
* Jasmine is a popular javascript testing framework
* Jest (another popular JavaScript Testing library) is commonly used with Node and React and provides multiple layers on top of jasmine
* Once you learn how to test in one frame =work, you can apply the same knowledge to others

Unit Testing

Chartjs.org

Insights.stackoverflow.com/survey/2019

Similar to jasmine:

Mochajs.org is very similar to

jestjs.io

cypress.io

cucumberjs.io

protractortest.org

chaijs.com

avajs

nightwatchjs.org

nightmarejs.org