# **Javascript Testing**

For Those Who Do Not Like to Test Michael Oostdyk (Ō-stīk)



















# Michael Oostdyk (Ō-stīk)

- No Formal Computer Science Degree
- Started dev 10 years ago
- Primary backend framework CakePHP
- Primary frontend framework React
- Love saving people (and myself) time

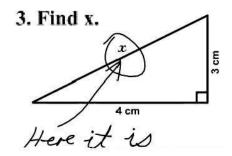


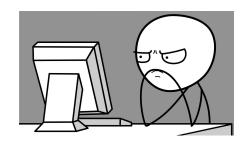
- without changing anything
- Or requiring technical debt



#### **Overview**

- {What/When} Test This, Test That. Test Here, Test There
- {How} Unit vs Integration vs UI Testing
- {Where} Unit/Integration Tests
- {Where} UI Tests
- Tidbits
- Resources





## **Test Test Test Fail Test Pass**

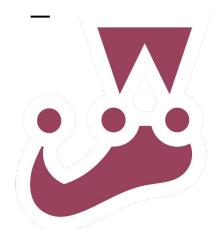
- (willingness) What do I want to know about my application?
- (hurdles) What will save me the most amount of time with the least amount of effort?
- (simplify) How hard/annoying/complicated is it to test manually?
- (future) How likely am I going to have to test this again?



All the unit tests are passing

### Unit vs Integration vs UI Testing

- Unit Tests Pretending the mirror is a girl and asking it out on a date and providing all the answers.
- Integration Tests Get your friend to be the girl and ask him out on a date.
- UI With an exact replica of yourself. Find a real girl.
  Walk up to the girl. Smile. Ask real girl out on the date.
  Dodge boyfriend's punch. Fail. Lay on floor.



## **Unit/Integration Tests**

- Jest Delightful JavaScript Testing
- Typescript support via ts-jest
- Test structure, assertions, mocks and more!
- Any framework or just pure javascript
- Snapshots are just one form of 'expectation'



#### **UI Tests**

- TestCafe end-to-end web testing
- More real world at the expense of speed
- No deps (selenium webdriver anyone? Phantom?)
- Framework agnostic
- Integrates with providers like Browserstack for cross browser tests
- Headless and non headless modes



#### tidbits

- Test Cafe Studio
- Debugger
- Devtools and source maps
- Sources -> snippets
- Screenshots



#### Resources

- An Overview of JavaScript Testing in 2018
  - https://medium.com/welldone-software/an-overview-of-javascript-testing-in-2018-f68950900bc3
- TestCafe
  - https://github.com/DevExpress/testcafe
- Jest
  - http://jestjs.io/docs/en/getting-started.html