### Intro to TDD

(Test Driven Development)

#### What is TDD?

- Test Driven Development
- A cyclical process:
  - write a test
  - watch test fail (why?)
  - write smallest amount of code to make test pass
  - refactor

## From this morning, you should have a basic understanding of...

- classes
- objects
- methods and arguments
- string interpolation

# By the end of today, you'll be able to...

- install a Ruby gem
- create and run a minitest test suite
- write assertions using minitest
- read error messages
- fix error messages
- read test failures
- fix failing assertions
- explain and demonstrate the TDD workflow

#### Why write tests for your code?

- Fast feedback about whether your code works
- Encourages "clean" code
- Makes code easier to refactor
- Your job

## Today's Process

- Test something all together (1pm)
  - ask lots of questions!
- Test something in pairs (2pm)
  - from tutorial
  - will mimic what we do all together (only one new part)
- If you finish, test something on own (3pm)
  - either repeat tutorial on own or create own test suite for own object

Today's Pairs
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 Jessica Goulding

Cara Dennis Kavita Sachdeva

Jim Sutton Aaron Paul Wortham

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## What we're going to test

- We'll be implementing a Student class using TDD.
   Here's what we want to test:
  - Students should have names
  - Students should have laptops. The laptop is usually an Apple, but it can be any brand
  - Students can bring various flavors of cookies to their instructors

#### Basic File Structure for Testing

Project Folder

test.rb

class.rb

### Let's go!

From Terminal, type:

gem install minitest

(don't let me forget to show pairing list!)