End-to-End Testing

- Unit Testing is great for testing the units in isolation
 - Frequent repeated tests
 - Fast
 - Does not test the interaction among the units
 - Small test coverage scope
- Need integration and end-to-end tests
 - Covers large group of module interactions
 - Slow, so not repeated frequently

Testing Strategies

E2E Tests

Few, slow, tests everything including user interaction

Integration Tests

Testing interactions among modules

Unit Tests

Testing individual units in isolation, numerous tests, repeated frequently

Protractor

- Node program that enables running of end-to-end tests
 - Runs tests against your application running in a browser and interacting with it like a real user
- Uses WebDriver to control browsers to carry out the tests
 - Selenium browser automation framework
 - Can use Direct Connect to test with Chrome and Firefox
- Uses Jasmine for expressing the test syntax