



BDD/TDD

DRIVING DEVELOPMENT THRU TESTING

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BDD OVERVIEW

Behavior Driven Development

Application Documentation

- User Oriented
- Horizontal
- Application Centric

BDD

JAVASCRIPT TOOLS

CucumberJS

Yadda

TDD

OVERVIEW

Test Driven Development

Code Documentation

- Developer Oriented
- Vertical
- Code Centric

TDD

JAVASCRIPT TOOLS

Mocha

Buster.js

Jasmine

Karma

QUnit

Sinon

TDD

JAVASCRIPT TOOLS

Browser Driver

- **Selenium/WebDriverJS**
- **JsTestDriver (requires Java)**

Headless Browser

- **PhantomJS**
- **Zombie**

BDD WITH CUCUMBERJS

Cucumber Originated in Ruby Community

Implements Gherkin

Runs on Node

HTML and PDF formatter

<https://github.com/cucumber/cucumber-js>

BDD

GHERKIN EXAMPLE

Feature: Give a presentation
In order to give a presentation
As a presenter
I want to display a slide deck

Scenario: Start slide deck

Given the deck is opened in PowerPoint

When I click Play from Start

Then transition to first slide

TDD

MOCHA

Describe...it syntax

Supports synchronous and asynchronous testing

Run in browser or command line

Runs on Node

<https://github.com/visionmedia/mocha>

TDD ZOMBIE

No browser required

Runs on Node

Client-side JavaScript

<http://zombie.labnotes.org>

OUR APP

Manage exercise list

Display all exercises

Create exercise

Read exercise

Update exercise

Delete exercise

STACK

Server

- MongoDB – assumed to be running on default port
- Node server – running on port 8080
 - Server.js file is provided utilizing Express

Client

- jQuery – used for AJAX
- Mocha – used for testing

MISC

- Until last branch scripts assume cucumber.js is installed globally – local path is `npm_modules/.bin/cucumber.js`
- URL for tests in browser – <http://localhost:8080/tests/testExerciseService.html>
- URL for app - <http://localhost:8080>