# Protractor/WebDriver/JS Setup Instructions

**PLEASE DO BEFORE SESSION** 



## Node.js

You need to have Node.js installed on your local machine.

Minimum version v6.x

```
node -v # to find which versions you have
```

 If you don't have that, download the current version: <u>https://nodejs.org/en/download</u>



## protractor

Once node is installed, let's get protractor, by typing the following at your computer's command line:

npm install --global protractor

webdriver-manager update

The necessary packages will download from <a href="https://www.npmjs.com">https://www.npmjs.com</a>.



#### eslint

We are going to be <u>linting</u> our JavaScript code. This will flag suspicious syntax, help us adhere to best practices, and catch errors early.

npm install --global eslint

**ESLint** is a pluggable linting utility for JavaScript.

The necessary packages will download from <a href="https://www.npmjs.com">https://www.npmjs.com</a>.



## IDE (Integrated Development Environment)

Install a local IDE. In this class we will use:

WebStorm - Recommended. A 30 day trial is available at:

https://www.jetbrains.com/webstorm/download/

IF YOUR EVALUATION HAS EXPIRED, WE CAN EXTEND IT! Email: training@zen.digital

- Please use the latest version of WebStorm
- Another good IDE is Visual Studio Code Free at https://code.visualstudio.com



### Install Java

Check if Java 1.8 or higher is installed:

java -version

If not, either Install Java from:

https://java.com/en/download/



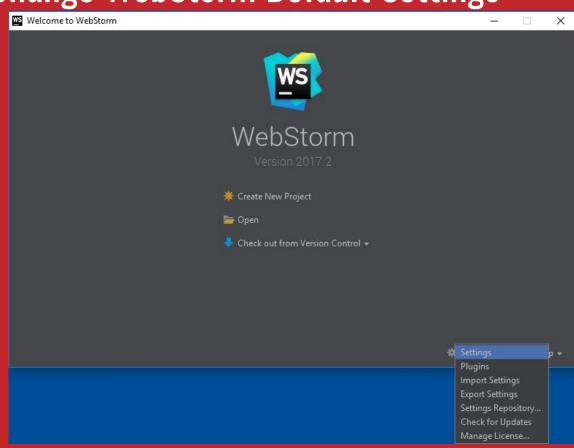
#### **Chrome Browser**

Please have and use the Chrome browser:

https://www.google.com/chrome/browser/desktop/

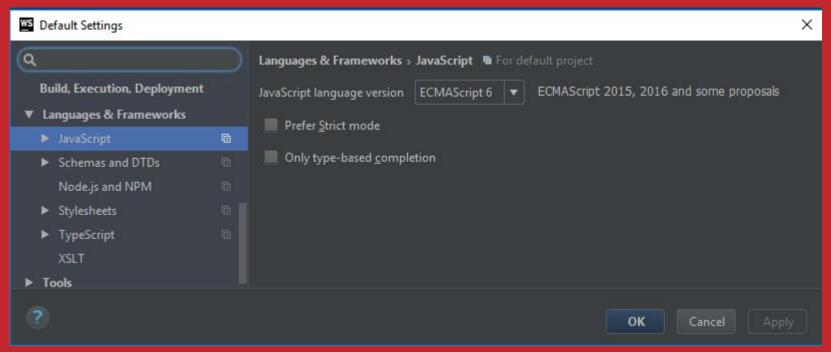


## Change WebStorm Default Settings



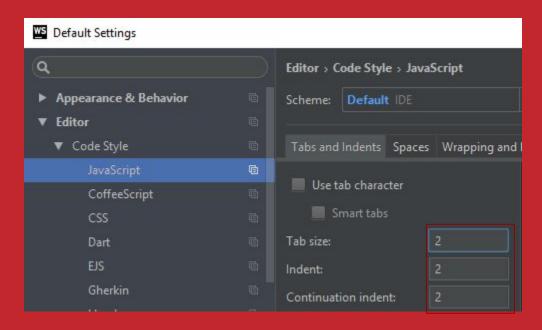


## Set JavaScript version to ECMAScript 6



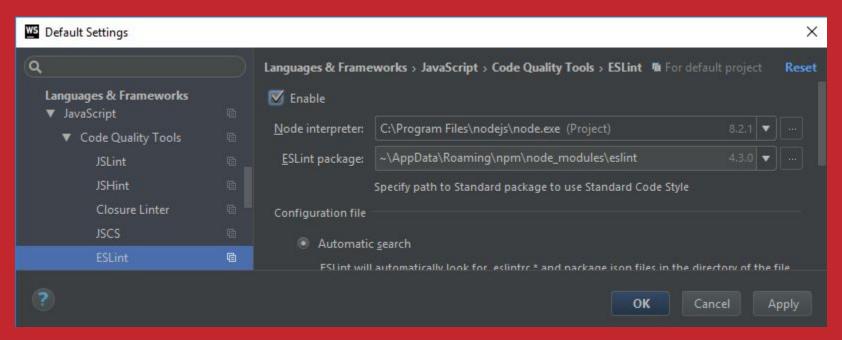


## Set Editor > Code Style > JavaScript ... indent to 2





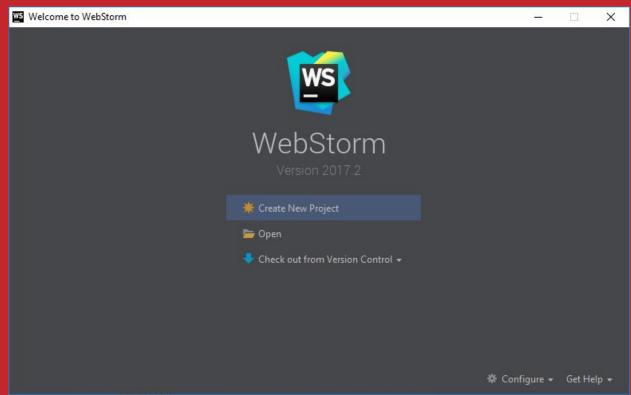
#### **Enable ESLint**



Click "OK"

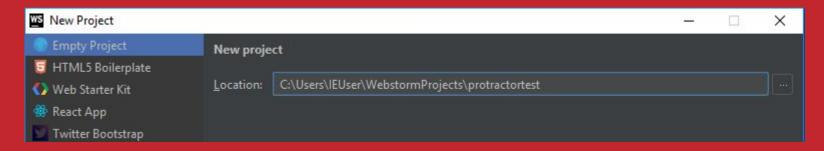


## Create New Project





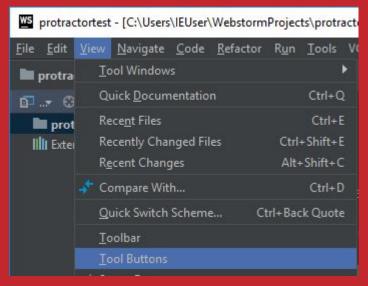
## Create project named "protractortest"



Click "Create"



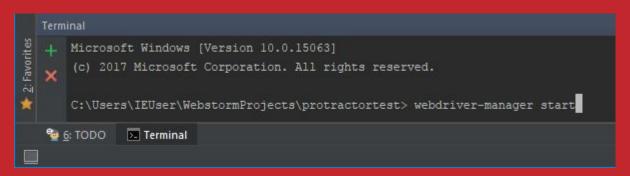
### **Enable Tool Buttons & Toolbar**



<--Toolbar too!!!



## Open Terminal in WebStorm



#### Run:

webdriver-manager start

If Windows Firewall blocks it, "Allow access"



## File > New > File ... todo.spec.js

```
describe('angularjs homepage todo list', function() {
  it('should add a todo', function() {
    browser.get('https://angularjs.org');
    element(by.model('todoList.todoText')).sendKeys('write first protractor test');
    element(by.css('[value="add"]')).click();
    var todoList = element.all(by.repeater('todo in todoList.todos'));
    expect(todoList.count()).toEqual(3);
    expect(todoList.get(2).getText()).toEqual('write first protractor test');
    // You wrote your first test, cross it off the list
    todoList.get(2).element(by.css('input')).click();
    var completedAmount = element.all(by.css('.done-true'));
   expect(completedAmount.count()).toEqual(2);
```



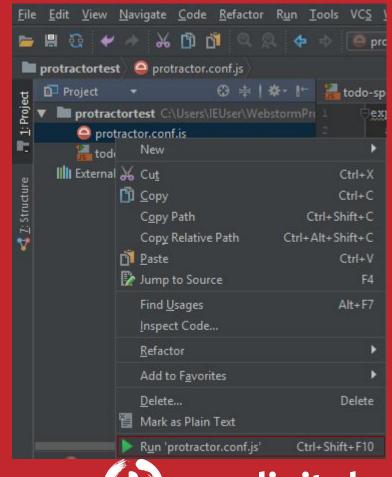
## File > New > File ... protractor.conf.js

```
exports.config = {
   seleniumAddress: 'http://localhost:4444/wd/hub',
   specs: ['todo.spec.js']
};
```

Right click the new file and select

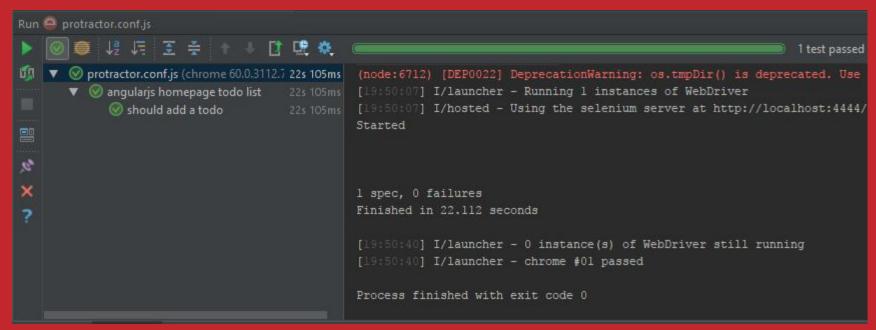
"Run protractor.conf.js"

- A Chrome browser should launch
- You will see the AngularJS website
- A new todo will be created
- The test should pass





## WebStorm Has a GUI for Protractor Output!





### .eslintrc will be discussed in class!

```
"env": {
  "protractor": true,
  "jasmine": true,
  "browser": true,
  "es6": true,
  "node": true
"extends": "eslint:recommended"
```

