**Protractor** is a javascript library and it’s an open source library.

It has built on above selenium, so internally it uses Selenium only. Mainly used for **Angular JS** application.

**Selenium**

**Protractor Library**

**Start with Protractor:** -

1. Download **NPM** (node.js) package
2. **Protractor installation** with the help of **NPM on cmd** by command **npm install –g protractor**
3. Download **WebdriverManager** it is used to run test cases against angular js application by protractor on specific browser. On **cmd** use command as **webdriver-manager update**
4. **JDK** should be present
5. Start **webdriver-manager** from cmd by using command **webdriver-manager start**
6. Check **webdriver-manager** is up and running on chrome by using url as **localhost:4444/**
7. Download **Visual Studio Code** from scripting
8. Create a folder in any directory and using **cmd** initiate npm by command **npm init**
9. Add dependencies of **Protractor and Jasmine** in **package.json** file as below: -

{

  "name": "test",

  "version": "1.0.0",

  "description": "test protracor code",

  "main": "index.js",

  "dependencies": {

    "protractor":"^5.4.2",

    "jasmine":"^3.1.0"

  },

  "scripts": {

    "test": "echo \"Error: no test specified\" && exit 1"

  },

  "author": "Akshay Shete",

  "license": "ISC"

1. Enter command **npm install** in console of Visual Studio Code to download npm packages
2. Add 2 files, i) **configuration files (conf.js)** ii) **specification file (spec.js)**
3. Write script in **spec.js** file as below: -

describe("Enter name feature",function(){

it('should enter name as Akshay', function(){

    browser.get('https://angularjs.org/');

    element(by.model('yourName')).sendKeys('Akshay');

    let text = element(by.xpath('/html/body/div[2]/div[1]/div[2]/div[2]/div/h1'));

    //console.log(text.getText());

    expect(text.getText()).toEqual('Hello Akshay!');

});

});

1. Make configuration of **spec.js** file in **conf.js** to run it as below: -

exports.config = {

    seleniumAddress : 'http://localhost:4444/wd/hub/',

    specs : ['spec.js']

};

1. Run **conf.js** by using command **protractor conf.js**
2. Make sure Selenium Standalone Driver should be up and running