INTRODUCTION

- Jasmine is an automated testing framework for JavaScript.
- Testing ensures that everything goes down exactly how you planned. It's like you're God...but it's probably a little more boring because it's code.
- Terms to know …..1.SUITE 2.SPEC 3.SRC

HOW TO GET JASMINE?

- Download the latest jasmine standalone version.
- Unzip it
- Empty out the /spec and /src directories….because you don't need them

SUITE

- A test suite begins with call to the global jasmine function "DESCRIBE".

- It has two parameters a "STRING" and a "FUNCTION"…….

- string is name or title for a spec suite(what is tested)

- The function is a block of code that implements the suite.

SPEC

➡ Specs are defined by calling the global jasmine function "It".

➡ The string is the title of the spec and function is the spec or test.

➡ A Spec……

```
describe("hello world",function(){

  it("says hello",function(){

    expect(hello().toEqual("hello world");

    });

  });
```

MATCHERS

• There are basically 4 matchers(though there are more)

• .toEqual()

• .toContain()

• .toBeNull()

• .toBeTruthy()

.ToEqual()

➡ It compares both the actual value and expected value

➡ expect(hello().toEqual("hello world");

    it compares result of "hello()" function to that of "hello world".

.toContain()

➡ It checks if a particular thing is present in the given function.

➡ expect(hello().toContain("hello");

.toBeNull()

➡ It checks if the function returns null value!!.

➡ expect(hello().toBeNull();

.toBeTruthy()

➡ It is just opposite of checking null.. If a function returns something(anything)...then it is called as being truthy.

➡ expect(hello().toBeTruthy("hi");

CALCULATOR (source)

```javascript
var a=10;

var b=5;

var calculator= {

        add :function(){

                return a+b;

        },

        subtract:function(){

                return a-b;

        },

        multiply:function(){

                return a*b;

        },

        divide:function(){

                return a/b;

        }

        };
```

Calculator (spec)

```
describe("calculator",function(){

it("adds two number",function(){

expect(calculator.add()).toEqual(15);

});

it("subtracts two numbers",function(){

expect(calculator.subtract()).toEqual(5);

});

it("multiply two numbers",function(){

expect(calculator.multiply()).toEqual(50);

});it("divides two numbers",function(){

expect(calculator.divide()).toEqual(2);

});
```

Spec sample for all matchers

```
it("shows toEqual matcher",function(){

expect(calculator.subtract()).toEqual(5);

});

it("shows notEqual matcher",function(){

expect(calculator.subtract()).not.toEqual(50);

});

it("shows toBeTruthy matcher",function(){

expect(calculator.subtract()).toBeTruthy();

});

it("shows toBeNull matcher",function(){

expect(calculator.subtract()).not.toBeNull();

});

it("shows toContain matcher",function(){

expect(hello()).toContain("world");

});

});
```

This is how spec-runner looks like

\<head\>

\<!-- **include source files here...** --\>

\<script src="../jasmine-standalone-2.3.4/src/**calculator.js**"\>\</script\>

\<script src="../jasmine-standalone-2.3.4/src/**hello.js**"\>\</script\>

 \<!-- **include spec files here**... --\>

\<script src="../jasmine-standalone2.3.4/spec/**calculatorspec.js**"\>\</script\>

\<script src="../jasmine-standalone-2.3.4/spec/**hellospec.js**"\>\</script\>

\</head\>