QUnit Setup

QUnit is a unit testing framework for JavaScript programming language. QUnit has been important in the field of test-driven development, and is used by jQuery, jQuery UI, and jQuery Mobile projects.

There are two ways to use QUnit.

* **Local Installation** − You can download QUnit library on your local machine and include it in your HTML code.
* **CDN Based Version** − You can include QUnit library into your HTML code directly from Content Delivery Network (CDN).

Local Installation

* Go to the <https://code.jquery.com/qunit/> to download the latest version available.
* Place the downloaded **qunit-git.js** and **qunit-git.css** file in a directory of your website, e.g. /jquery.

### **Example**

You can include **qunit-git.js** and **qunit-git.css** files in your HTML file as follows −

[Live Demo](http://tpcg.io/ckytGw)

<html>

<head>

<meta charset = "utf-8">

<title>QUnit basic example</title>

<link rel = "stylesheet" href = "/jquery/qunit-git.css">

<script src = "/jquery/qunit-git.js"></script>

</head>

<body>

<div id = "qunit"></div>

<div id = "qunit-fixture"></div>

<script>

QUnit.test( "My First Test", function( assert ) {

var value = "1";

assert.equal( value, "1", "Value should be 1" );

});

</script>

</body>

</html>

Import qunit.js

qunit.js of Qunit library represents the test runner and test framework.

<script src = "https://code.jquery.com/qunit/qunit-1.22.0.js"></script>

Import qunit.css

qunit.css of Qunit library styles the test suite page to display the test results.

<link rel = "stylesheet" href = "https://code.jquery.com/qunit/qunit-1.22.0.css">

Add Fixture

Add two div elements with **id = "qunit"** and **"qunit-fixture"**. These div elements are required and provide the fixture for tests.

<div id = "qunit"></div>

<div id = "qunit-fixture"></div>

Create a Function to Test

function square(x) {

return x \* x;

}

Create a Test Case

Make a call to the QUnit.test function, with two arguments.

* **Name** − The name of the test to display the test results.
* **Function** − Function testing code, having one or more assertions.

QUnit.test( "TestSquare", function( assert ) {

var result = square(2);

assert.equal( result, "4", "square(2) should be 4." );

});

Run the Test

Now let us see the complete code in action.

[Live Demo](http://tpcg.io/duD3Ca)

<html>

<head>

<meta charset = "utf-8">

<title>QUnit basic example</title>

<link rel = "stylesheet" href = "https://code.jquery.com/qunit/qunit-1.22.0.css">

<script src = "https://code.jquery.com/qunit/qunit-1.22.0.js"></script>

</head>

<body>

<div id = "qunit"></div>

<div id = "qunit-fixture"></div>

<script>

function square(x) {

return x \* x;

}

QUnit.test( "TestSquare", function( assert ) {

var result = square(2);

assert.equal( result, "4", "square(2) should be 4." );

});

</script>

</body>

</html>

Load the page in the browser. The test runner calls **QUnit.test()**when the page gets loaded and adds the test to a queue. Execution of test case is deferred and controlled by the test runner.

Verify the Output

