# **Unit Testing**

```
Unit Testing
   AAA process
   A - Arrange
   A - Act
   A - Assert
how to do unit testing?
   Unit Testing F.W
  javascript script programming
       1. jasmine
       2. mocha
       3. Jest (our focus)
       4. Ava
 yarn add --dev jest
```

Unit Testing 1

## sum.js

```
function sum(a, b) {
  return a + b;
}
module.exports = sum;
```

### sum.spec.js

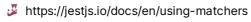
```
const sum = require('./sum');
test('adds 1 + 2 to equal 3', () => {
  expect(sum(1, 2)).toBe(3);
});
```

### package.json

```
{
   "scripts": {
    "test": "jest"
   }
}
```

#### Using Matchers · Jest

Jest uses "matchers" to let you test values in different ways. This document will introduce some commonly used matchers. For the full list, see the expect API doc. The simplest way to





Unit Testing 2

# Testing Asynchronous Code

```
test('the data is peanut butter', done => {
  function callback(data) {
    try {
      expect(data).toBe('peanut butter');
      done();
    } catch (error) {
      done(error);
    }
}

fetchData(callback);
});
```

#### Mock Functions · Jest

Mock functions allow you to test the links between code by erasing the actual implementation of a function, capturing calls to the function (and the parameters passed in those





Unit Testing 3