How do we get instances of Angular components into our unit tests?

Essential ngMock Functions

module
Used to load our module(s)

inject
Used to get instances of components from modules

Creating the Angular Code

```
angular.module('omdbModule', [])
```

Creating the Angular Code

```javascript
angular.module('omdbModule', [])

    .factory('omdbApi', function omdbApiFactory() {

        return {

            search: function() {

                // logic to get data

                return movieData;

            }

        }
```

Loading Modules in an Application

```html
<!doctype html>

<html ng-app="omdbModule">

  <body>

    ...

    <script src="angular.js"></script>

  </body>

</html>
```

Testing the Angular Code

```javascript
describe('omdb service', function() {


  it('should return movie data for search query', function() {


    expect(omdbApiFactory.search('star wars')).toEqual(movieData);



  });



});
```

Testing the Angular Code

```javascript
describe('omdb service', function() {


  it('should return movie data for search query', function() {

    var omdbApiFactory = ???;

    expect(omdbApiFactory.search('star wars')).toEqual(movieData);



  });



});
```

Essential ngMock Functions

module

Used to load our module(s)

3 *module* Function Argument Types

string | function | object

Registering Modules in Unit Tests

String Alias

```
angular.mock.module('omdbModule');
```

Registering Modules in Unit Tests

Anonymous Function

```
angular.mock.module(function($provide) {

  $provide.factory('omdbApi', function() {

    return {

      search: function(query) {

        return movieData;

      }

    }

  }

});
```

Registering Modules in Unit Tests

Anonymous Object Literal

```javascript
angular.mock.module({

  'omdbApi': {

    search: function(query) {

      return movieData;

    }

  }

});
```

Function vs. Object Argument

```javascript
angular.mock.module(function($provide, $http) {

  $provide.factory('omdbApi', function() {

    return {

      search: function(query) {

        return movieData;

      }

    }

  }

});
```

Registering Multiple Modules

```
var alias = 'omdb';
```

Registering Multiple Modules

```
var alias = 'omdb';

var anonFunc = function() { … }
```

Registering Multiple Modules

```javascript
var alias = 'omdb';

var anonFunc = function() { … }

var anonObj = {};
```

Registering Multiple Modules

```
var alias = 'omdb';

var anonFunc = function() { … }

var anonObj = {};


angular.mock.module(alias, anonFunc, anonObj);
```

Essential ngMock Functions

inject

Used to get instances of components from modules
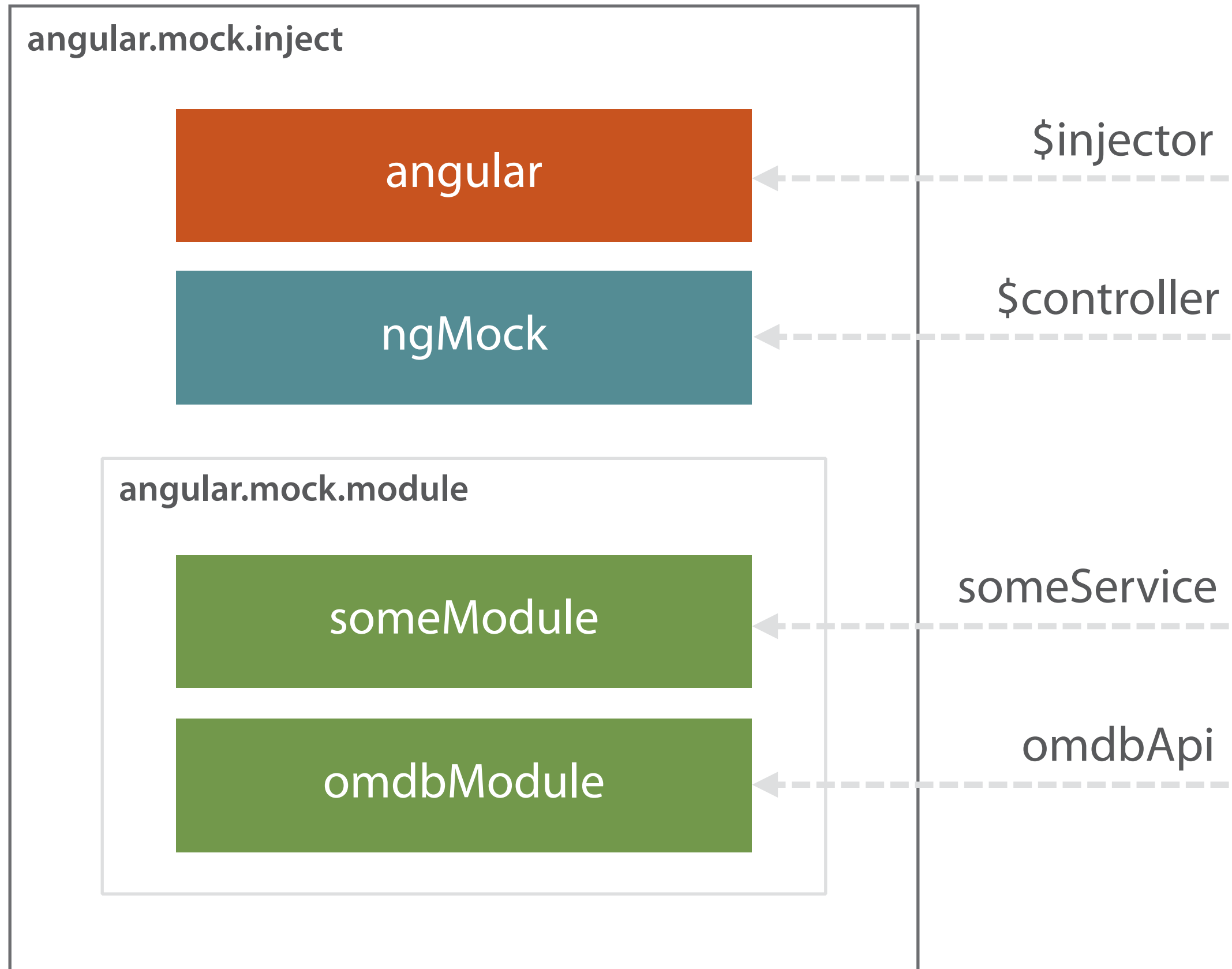
angular.mock.module

someModule

omdbModule

ngMock Public Functions

module
Used to load our module(s)

inject
Used to get instances of components from modules

dump
Serializes common objects for debugging