**TS compiles to CommonJS/ES5 – using tsc**

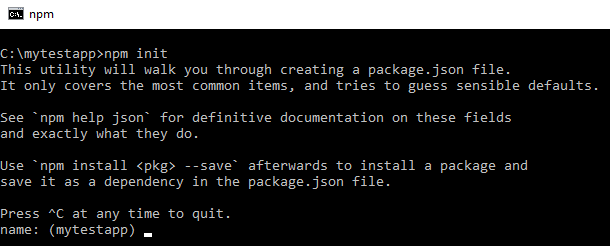
**CommonJS/ES5 to JS – using webpack**

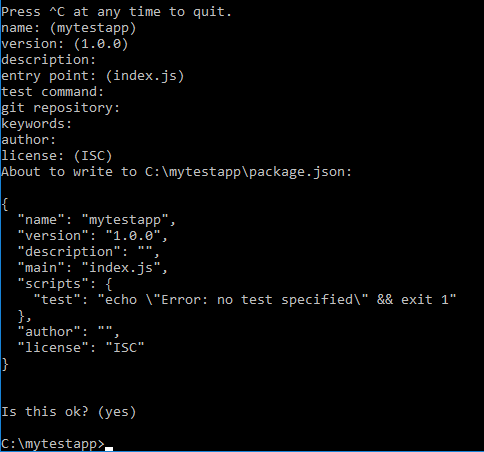
**tsc and webpack - Both to be compiled individually/separately**

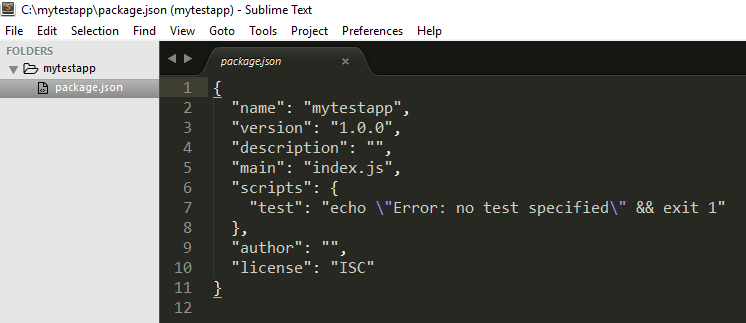
**jQuery is added using typings in TypeScript**

**jquery is bundled as part of webpack**

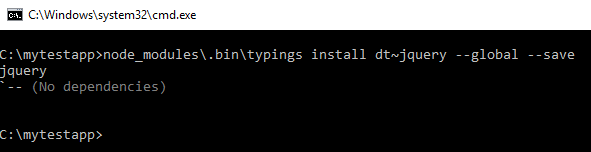
* Create new folder “mytestapp”



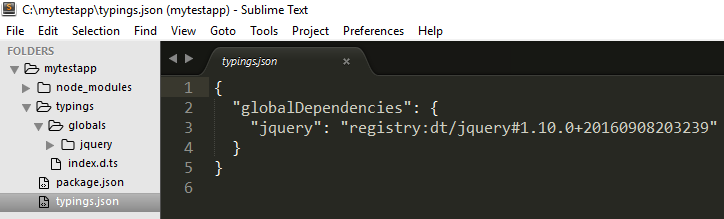




* >npm install --save-dev typescript
* >npm install --save jquery
* >npm install --save-dev typings
* >node\_modules\.bin\typings install dt~jquery --global --save



Creates typings/globals/index.d.ts and typings.json



* Create new folder “ts-src”
* Add “ts-src\Message.ts” as follows:

import \* as $ from 'jquery'

export default class Message {

show(){

$("#ShowBtn").html('Demo');

alert("Hello world!");

}

}

* Add “ts-src\app.ts” as follows:

import msg from './Message'

import \* as $ from 'jquery'

$(function(){

$("#ShowBtn").on("click", function(){

var o = new msg();

o.show();

});

});

* Add “tsconfig.json” to app root as follows:

{

"compilerOptions": {

//"module": "commonjs",

//"target": "es5",

"sourceMap": true,

"outDir": "es5-src"

},

"files":[

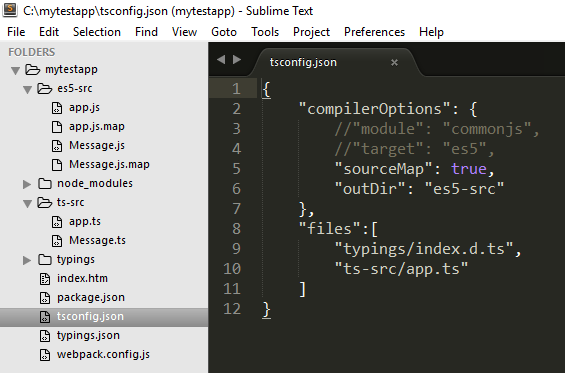
"typings/index.d.ts",

"ts-src/app.ts"

]

}

* >node\_modules\.bin\tsc (compiles typescript files to es5 and places them into es5-src folder)



* >npm install --save-dev webpack
* >npm install --save-dev source-map-loader
* Add “webpack.config.js” to app root as follows:

var path = require('path');

var webpack = require('webpack');

module.exports = {

devtool: 'source-map',

entry: ['./es5-src/app.js'],

output: {

path: './build',

filename: 'app.js'

},

module:{

preLoaders: [

{

test: /\.js$/,

loader: 'source-map-loader'

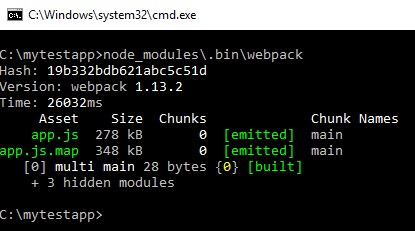
}

]

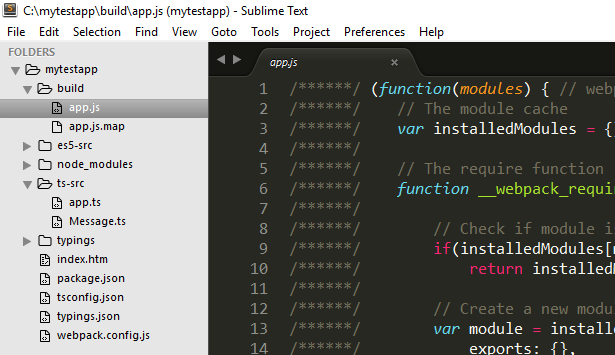
}

};

* >node\_modules\.bin\webpack



The above should create “app.js” in “build” folder



* Create “index.htm” in app root as follows:

<!DOCTYPE html>

<html>

<head>

<title></title>

<script type="text/javascript" src="build/app.js"></script>

</head>

<body>

<button id="ShowBtn">Show</button>

</body>

</html>

* Test the html page

