

Index.html

```
<!doctype html>
<html lang="en">

<head>

  <meta charset="utf-8">

  <title>Simply Learn Test Project</title>

  <base href="/">

  <meta name="viewport" content="width=device-width, initial-scale=1">

  <link rel="icon" type="image/x-icon" href="favicon.ico">

  <link

href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"

rel="stylesheet" integrity="sha384-
1BmE4kWBq78iYhF1dvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"

crossorigin="anonymous">

</head>
<body>
  <app-root></app-root>

  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js
" integrity="sha384-
ka7Sk0Gln4gmtz2MlQnikT1wXgYs0g+OMhuP+IlRH9sENB00LRn5q+8nbTov4+1p"
crossorigin="anonymous"></script>
</body>
</html>
```

Main.ts

```
import { enableProdMode } from '@angular/core';
import { platformBrowserDynamic } from '@angular/platform-browser-dynamic';

import { AppModule } from './app/app.module';
import { environment } from './environments/environment';

if (environment.production) {
  enableProdMode();
}

platformBrowserDynamic().bootstrapModule(AppModule)
  .catch(err => console.error(err));
```

Test.ts

```
import 'zone.js/testing';
import { getTestBed } from '@angular/core/testing';
import {
  BrowserDynamicTestingModule,
  platformBrowserDynamicTesting
} from '@angular/platform-browser-dynamic/testing';

declare const require: {
  context(path: string, deep?: boolean, filter?: RegExp): {
    <T>(id: string): T;
    keys(): string[];
  };
};

// First, initialize the Angular testing environment.
getTestBed().initTestEnvironment(
  BrowserDynamicTestingModule,
  platformBrowserDynamicTesting(),
);
```

```
// Then we find all the tests.
const context = require.context('./', true, /\.spec\.ts$/);
// And load the modules.
context.keys().map(context);
```

angular.json

```
{
  "$schema": "./node_modules/@angular/cli/lib/config/schema.json",
  "version": 1,
  "newProjectRoot": "projects",
  "projects": {
    "simply_learn_test_project": {
      "projectType": "application",
      "schematics": {
        "@schematics/angular:application": {
          "strict": true
        }
      },
      "root": "",
      "sourceRoot": "src",
      "prefix": "app",
      "architect": {
        "build": {
          "builder": "@angular-devkit/build-angular:browser",
          "options": {
            "outputPath": "dist/simply_learn_test_project",
            "index": "src/index.html",
            "main": "src/main.ts",
            "polyfills": "src/polyfills.ts",
            "tsConfig": "tsconfig.app.json",
            "assets": [
              "src/favicon.ico",
              "src/assets"
            ],
            "styles": [
              "src/styles.css"
            ]
          }
        }
      }
    }
  }
}
```

```
    "scripts": []
  },
  "configurations": {
    "production": {
      "budgets": [
        {
          "type": "initial",
          "maximumWarning": "500kb",
          "maximumError": "1mb"
        },
        {
          "type": "anyComponentStyle",
          "maximumWarning": "2kb",
          "maximumError": "4kb"
        }
      ],
      "fileReplacements": [
        {
          "replace": "src/environments/environment.ts",
          "with": "src/environments/environment.prod.ts"
        }
      ],
      "outputHashing": "all"
    },
    "development": {
      "buildOptimizer": false,
      "optimization": false,
      "vendorChunk": true,
      "extractLicenses": false,
      "sourceMap": true,
      "namedChunks": true
    }
  },
  "defaultConfiguration": "production"
},
"serve": {
  "builder": "@angular-devkit/build-angular:dev-server",
  "configurations": {
    "production": {
      "browserTarget": "simple_learn_test_project:build:production"
    },
    "development": {
      "browserTarget": "simple_learn_test_project:build:development"
    }
  }
},
```

```
    "defaultConfiguration": "development"
  },
  "extract-i18n": {
    "builder": "@angular-devkit/build-angular:extract-i18n",
    "options": {
      "browserTarget": "simply_learn_test_project:build"
    }
  },
  "test": {
    "builder": "@angular-devkit/build-angular:karma",
    "options": {
      "main": "src/test.ts",
      "polyfills": "src/polyfills.ts",
      "tsConfig": "tsconfig.spec.json",
      "karmaConfig": "karma.conf.js",
      "assets": [
        "src/favicon.ico",
        "src/assets"
      ],
      "styles": [
        "src/styles.css"
      ],
      "scripts": []
    }
  }
},
"defaultProject": "simply_learn_test_project"
}
```

App.component.css

```
module.exports = function (config) {
  config.set({
    basePath: '',
    frameworks: ['jasmine', '@angular-devkit/build-angular'],
    plugins: [
      require('karma-jasmine'),
      require('karma-chrome-launcher'),
      require('karma-jasmine-html-reporter'),
      require('karma-coverage'),
      require('@angular-devkit/build-angular/plugins/karma')
    ],
    client: {
      jasmine: {
        // you can add configuration options for Jasmine here
        // the possible options are listed at
https://jasmine.github.io/api/edge/Configuration.html
        // for example, you can disable the random execution with `random: false`
        // or set a specific seed with `seed: 4321`
      },
      clearContext: false // leave Jasmine Spec Runner output visible in browser
    },
    jasmineHtmlReporter: {
      suppressAll: true // removes the duplicated traces
    },
    coverageReporter: {
      dir: require('path').join(__dirname,
        './coverage/simple_learn_test_project'),
      subdir: '.',
      reporters: [
        { type: 'html' },
        { type: 'text-summary' }
      ]
    },
    reporters: ['progress', 'kjhtml'],
    port: 9876,
    colors: true,
```

```
    logLevel: config.LOG_INFO,  
    autoWatch: true,  
    browsers: ['Chrome'],  
    singleRun: false,  
    restartOnFileChange: true  
  });  
};
```

App-routing.module.ts

```
import { NgModule } from '@angular/core';  
import { RouterModule, Routes } from '@angular/router';  
import { AboutComponent } from '../components/about/about.component';  
import { HomeComponent } from '../components/home/home.component';  
import { ResultComponent } from '../components/result/result.component';  
  
//declare all routes below  
const routes: Routes = [  
  {path:'',redirectTo:'home',pathMatch:'full'},  
  {path:'home',component:HomeComponent},  
  {path:'about',component:AboutComponent},  
  {path:'result',component:ResultComponent}  
];  
  
@NgModule({  
  imports: [RouterModule.forRoot(routes)],  
  exports: [RouterModule]  
})  
export class AppRoutingModule { }
```

app.component.spec.ts

```
import { TestBed } from '@angular/core/testing';
import { RouterTestingModule } from '@angular/router/testing';
import { AppComponent } from './app.component';

describe('AppComponent', () => {
  beforeEach(async () => {
    await TestBed.configureTestingModule({
      imports: [
        RouterTestingModule
      ],
      declarations: [
        AppComponent
      ],
    }).compileComponents();
  });

  it('should create the app', () => {
    const fixture = TestBed.createComponent(AppComponent);
    const app = fixture.componentInstance;
    expect(app).toBeTruthy();
  });

  it(`should have as title 'simply_learn_test_project'`, () => {
    const fixture = TestBed.createComponent(AppComponent);
    const app = fixture.componentInstance;
    expect(app.title).toEqual('simply_learn_test_project');
  });

  it('should render title', () => {
    const fixture = TestBed.createComponent(AppComponent);
    fixture.detectChanges();
    const compiled = fixture.nativeElement as HTMLElement;
    expect(compiled.querySelector('.content
span')?.textContent).toContain('simply_learn_test_project app is running!');
  });
});
```


app.component.ts

```
import { Component } from '@angular/core';

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'simply_learn_test_project';
}
```

app.module.ts

```
import { NgModule } from '@angular/core';
import { BrowserModule } from '@angular/platform-browser';

import { AppRoutingModule } from './app-routing.module';
import { AppComponent } from './app.component';
import { HeaderComponent } from './components/header/header.component';
import { HomeComponent } from './components/home/home.component';
import { AboutComponent } from './components/about/about.component';
import { HttpClientModule } from '@angular/common/http';
import { FormsModule } from '@angular/forms';
import { ResultComponent } from './components/result/result.component';

@NgModule({
  declarations: [
    AppComponent,
    HeaderComponent,
    HomeComponent,
    AboutComponent,
    ResultComponent
  ],
  imports: [
    BrowserModule,
    AppRoutingModule,
    HttpClientModule,
    FormsModule
  ],
  providers: [],
  bootstrap: [AppComponent]
})
export class AppModule {}
```

```
    ],  
    imports: [  
      BrowserModule,  
      AppRoutingModule,  
      HttpClientModule,  
      FormsModule  
    ],  
    providers: [],  
    bootstrap: [AppComponent]  
  })  
export class AppModule { }
```