

@angular/universal - SSR

5. @nguniversal/*

@angular/universal

- @angular/universal packages start with the name @nguiversal/*
- These are packages that use @angular/platform-server to create an easy to use SSR solution with popular backend technologies
 - Express
 - aspnet core
 - hapi

@nguniversal/express-engine

/academeez

- Let's examine the @angular/universal packages by using their express solution.
- There is an easy to use `ng add` command for those packages
- Using the `ng add` command with the `@nguniversal/express-engine` will add an express server to our project and also modify our angular app to work on Node as well as the browser
- Let's go over the files created

```
> npx ng add @nguniversal/express-engine
```

Angular SSR Architecture

(Optional) Browser Only

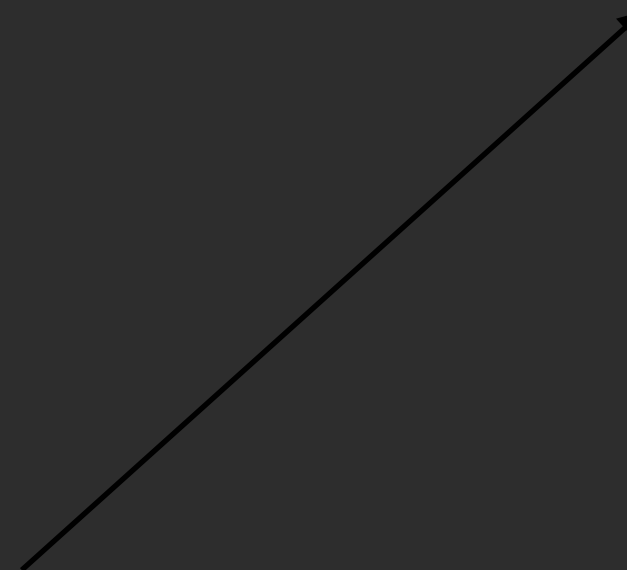
AppBrowserModule

Server only logic

AppServerModule

Isomorphic

AppModule



SSR Commands

- To open a development server with SSR do not use **ng serve**
 - ▶ use: **npm run dev:ssr**
- After development is finished you can build your (do not use **ng build**)
 - ▶ use: **npm run build:ssr**
- After you build your app you can launch your app by running with **node** your express server
 - use: **npm run serve:ssr**

Summary

- Using @angular/universal you have a simple **ng add** command and you will get SSR with your angular app
- The add command will give you
 - a backend server (in our example express)
 - A root module for the node part that will bootstrap the app module (used for items that can only work on the server)
- Your regular angular app but it can now run on both platforms.

Thank You

Next Lesson: 6. Prerender