**Discussion 1.1 – Angular Modules**

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# What is a Module in Angular?

In Angular, a module is a mechanism to group components, directives, pipes and services that are related, in such a way that can be combined with other modules to create an application. An Angular application can be thought of as a puzzle where each piece (or each module) is needed to be able to see the full picture.

Another analogy to understand Angular modules is classes. In a class, we can define public or private methods. The public methods are the API that other parts of our code can use to interact with it while the private methods are implementation details that are hidden. In the same way, a module can export or hide components, directives, pipes and services. The exported elements are meant to be used by other modules, while the ones that are not exported (hidden) are just used inside the module itself and cannot be directly accessed by other modules of our application.

## A Basic Use of Modules

To be able to define modules we have to use the decorator NgModule.

|  |
| --- |
| import { NgModule } from '@angular/core';  @NgModule({  imports: [ ... ],  declarations: [ ... ],  bootstrap: [ ... ]  })  export class AppModule { } |

In the example above, we have turned the class AppModule into an Angular module just by using the NgModule decorator. The NgModule decorator requires at least three properties: imports, declarations and bootstrap.

The property imports expects an array of modules. Here's where we define the pieces of our puzzle (our application). The property declarations expects an array of components, directives and pipes that are part of the module. The bootstrap property is where we define the root component of our module. Even though this property is also an array, 99% of the time we are going to define only one component.

Sources:

* Rangle.io Angular Training

<https://angular-training-guide.rangle.io/modules/introduction>