



Angular Lab 4



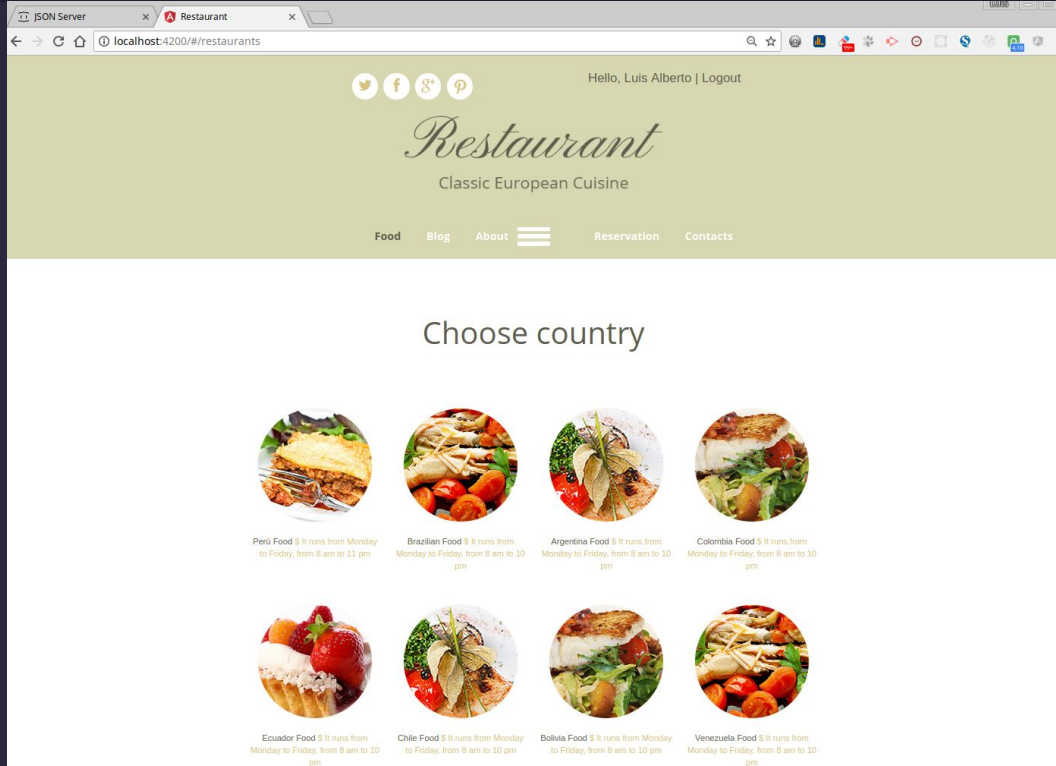
Componente



- Un set de elemente vizuale
- Definesc view-urile
- Folosite pentru reutilizabilitate & modularitate
- Au decoratorul @Component

```
@Component({
  selector:    'app-hero-list',
  templateUrl: './hero-list.component.html',
  providers:   [ HeroService ]
})
export class HeroListComponent implements OnInit {
  /* . . . */
}
```

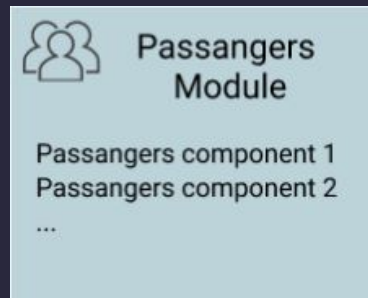
Exercitiu



Module



- Mecanism de grupare a componentelor pentru crearea unei functionalitati
- Componentele sunt grupate dupa criteriile pe care le au in comun pentru functionalitatea pe care o descriu
- O aplicatie Angular poate fi vazuta ca un puzzle in care fiecare modul reprezinta o piesa
- Au decoratorul @NgModule



Module



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

@NgModule({
  imports:      [ BrowserModule ],
  providers:    [ Logger ],
  declarations: [ AppComponent ],
  exports:      [ AppComponent ],
  bootstrap:    [ AppComponent ]
})
export class AppModule { }
```

Routing



- Single Page Application - putem modifica ce vede userul in aplicatie ascunzand portiuni din aplicatie/componente, nu e nevoie sa cerem serverului o pagina noua
- Angular Router - vede url-ul browserului ca o instructiune de a schimba view-ul

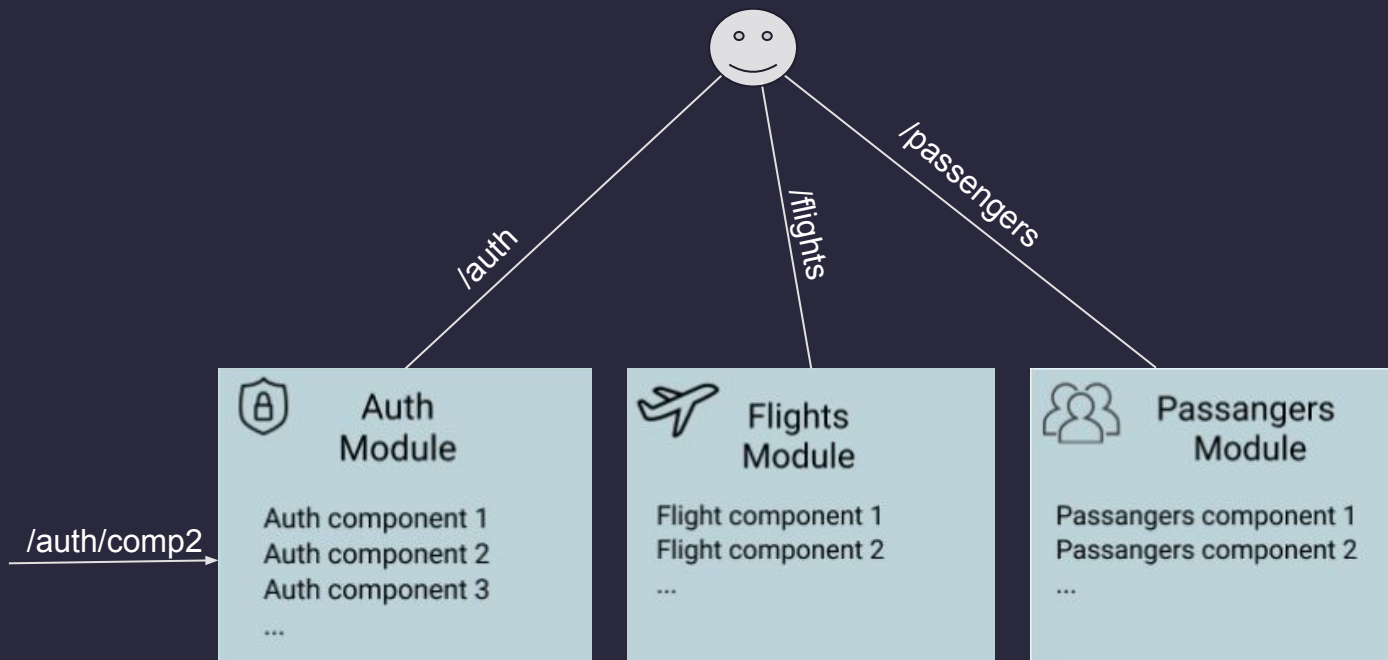
Routing



```
const routes: Routes = [  
  { path: 'first-component', component: FirstComponent },  
  { path: 'second-component', component: SecondComponent },  
];
```

```
// configures NgModule imports and exports  
@NgModule({  
  imports: [RouterModule.forRoot(routes)],  
  exports: [RouterModule]  
})  
export class AppRoutingModule { }
```

Routing



Lazy Loading



- Procedeu prin care incarcam modulele doar atunci cand e nevoie de ele

```
const routes: Routes = [  
  {  
    path: 'items',  
    loadChildren: () => import('./items/items.module').then(m => m.ItemsModule)  
  }  
];
```

Data Binding



TYPE	SYNTAX	CATEGORY
Interpolation Property Attribute Class Style	<pre>{{expression}}</pre> <pre>[target]="expression"</pre>	One-way from data source to view target
Event	<pre>(target)="statement"</pre>	One-way from view target to data source
Two-way	<pre>[(target)]="expression"</pre>	Two-way

Data Binding



The binding punctuation of `[]`, `()`, `[]()`, and the prefix specify the direction of data flow.

- Use `[]` to bind from source to view
- Use `()` to bind from view to source
- Use `[]()` to bind in a two-way sequence of view to source to view

NgClass, NgStyle, NgModel



- Asculta si modifica comportamentul elementelor de HTML, atributelor, componentelor si proprietatilor

COMMON DIRECTIVES	DETAILS
<code>NgClass</code>	Adds and removes a set of CSS classes.
<code>NgStyle</code>	Adds and removes a set of HTML styles.
<code>NgModel</code>	Adds two-way data binding to an HTML form element.

ngIf & ngFor



```
<div *ngIf="hero" class="name">{{hero.name}}</div>
```

```
<div
  *ngFor="let hero of heroes; let i=index; let odd=odd; trackBy: trackById"
  [class.odd]="odd">
  ({{i}}) {{hero.name}}
</div>
```