**COMP 3133 – Full Stack Development II**

**Lab 08 – Angular Data Binding & Directives**

**Topics:**

* Angular Data Binding & Directives
* Building Custom Pipes & Directives

**Developer Note:**When working on your exercises, please use the same Angular project from previous labs. This way you way you won’t have to re-generate a new Angular application every lab.

Only submit the files components, typescript files that you have created and not the entire application.

**Exercise #1 – Directives and Data Binding**

\* If you have not previously completed part one of Angular Tutorial, complete it first.  
<https://angular.dev/tutorials/learn-angular>

1. Complete Part Two of Angular Tour of Hero’s Tutorial on Structural Directives and Data Binding.

<https://angular.io/tutorial/toh-pt2>

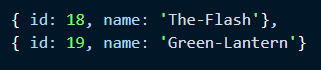
**Exercise #2 – Creating a Custom Pipe with Angular CLI**

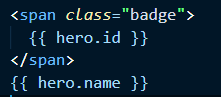
**Reference:** [***https://www.digitalocean.com/community/tutorials/angular-custom-pipes-angular***](https://www.digitalocean.com/community/tutorials/angular-custom-pipes-angular)

1. Use the following ***Angular CLI*** command to generate a ***Custom Pipe*** named ***remove-spaces***



1. Review the generated boiler plate code and navigate to the ***app.module.ts*** file and review the updated ***import*** statements and **@NgModule declarations** for the generated ***remove-spaces Pipe***.
2. Update the ***mock.heros.ts*** file from Exercise #1. Add the following list items to the array of Heros



1. Write the code in the Custom Pipe to replace any occurrence of a dash ‘-‘ with an empty spaces.
2. Once completed apply it the hero name in the file ***heros.component.html*** to filter out the dashes in names  
   

**Exercise #3 – Creating a Custom Directive with Angular CLI**

**Reference:** [**https://angular.dev/guide/directives**](https://angular.dev/guide/directives)

[**https://medium.com/@krishsurya1249/angular-13-directives-and-custom-directives-86a226cbc26e**](https://medium.com/@krishsurya1249/angular-13-directives-and-custom-directives-86a226cbc26e)

[***https://adrianmejia.com/creating-custom-angularjs-directives-for-beginners/***](https://adrianmejia.com/creating-custom-angularjs-directives-for-beginners/)

1. Use the following ***Angular CLI*** command to generate a ***Custom Directive*** named ***inputFormat***
2. Create a ***textbox input*** element in the HTML markup that has the ***input-format*** Directive as an attribute.  
   
3. In the generated ***input-format.directive.ts*** file implement the HostListener interface and ElementRef class  
     
   
4. Implement the ***HostListener*** interface and add logic such that when the User clicks away from the textbox (OnBlur event) the textbox text will be converted to UpperCase text.  
     
     
   

**Homework: Nested Components**

* Complete Part Three of Angular Tour of Hero’s Tutorial on Nested Child Components.

<https://angular.io/tutorial/toh-pt3>

**Submission**

* + **Screenshot(s)** of appropriate output. You may add all the screenshots in word document and upload it**. *[Do not put screenshots in project/zip file]****.*
  + Create **a zip file** of your entire project folder and submit.
  + Your **GitHub** project link.