## **Short Answer:**

Answer the following questions with complete sentences in your own words. You are encouraged to conduct your own research online or through other methods before answering the questions. If you research online, please consult multiple sources before you write down your answers. You are expected to be able to explain your answers in detail

- 1. What is DOM? (Hint: what does it refer to and what can we do with it)
- 2. What is ngModule?
- 3. What is Component in Angular 2+?
- 4. What is Directive in Angular 2+?
- 5. What are different types of directive that Angular 2+ support?
- 6. What is the difference between Component and Directive?
- 7. What is data binding in Angular 2+ and what are types data binding supported by Angular 2?

## **Coding Questions:**

Write code in Java to solve following problems. Please write your own answers. You are highly encouraged to present more than one way to answer the questions. Please follow best practice when you write the code so that it would be easily readable, maintainable, and efficient. Clearly state your assumptions if you have any. You may discuss with others on the questions, but please write your own code.

## Submit screen shot in a doc or PDC for all assignment.

- 1. Basic Exercise
  - 1) Create two new Components (manually or with CLI): WarningAlert and SuccessAlert;
  - 2) Output them beneath each other in the AppComponent;
  - 3) Output a warning or success message in the Components;
  - 4) Style the Components appropriately (maybe some red/green text?)

Feel free to use external or internal templates and styles! Feel free to cteate more compnents and use different types of selectors!

- 2. Data Binding
  - 1) Add an input field which updates a property ('username') via Two-Way-Binding;
  - 2) Output the username property via String Interpolation (in a paragraph below the input);
  - 3) Add a button which may only be clicked if the username is NOT an empty string;
  - 4) Upon clicking the button, the username should be reset to an empty string.
- 3. Directive
  - 1) Add A button which says "Display Detail"
  - 2) Add a paragraph with any content as your choice (e.g. "secretPassword = tuna")
  - 3) Toggle the display of that paragraph with button click created in the first step
- 4) Log all button click in an array and output that array below the secret paragraph (Maybe log a timestamp or simple a increasing counter)
- 5) Starting at the 5th log item, give all future logs a blue background color (Via ngStyle) and a white text color (ngClass)

Note: the button click will not toggle the log, but the secrete paragraph.