- 1. Create an angular project. Understand the project structure and configuration files in the angular project. Bootstrap the angular application created.
- 2. Create a component with some sample data. Bind the data to the template. Run the Angular application.
- 3. Create a ProductComponent which has an array of Product objects. Bind the product array to the template as follows.

Product Code	Product Description	UnitPrice	Quantity	Category	Manufacturer
P01	PEN	50	100	Stationary	Nataraj Stationaries
P02	PENCIL	10	100	Stationary	Nataraj Stationaries
P03	ERASER	5	100	Stationary	Nataraj Stationaries
P04	PEPSI	35	100	Bevarages	Pepsi Co.
P05	COKE	35	100	Beverages	Coca Cola Co.
P10	7Up	35	100	Beverages	Pepsi Co.

4. Design the following angular template. When you choose a category from the template, filter the product catalog table to show only those category of products.

# [Use the above component class.]

## **Product Catalog**

Choose Category : Stationary ▼

ProductId	ProductName	UnitPrice	Quantity	Category	Manufacturer
P01	PEN	50	100	Stationary	Nataraj Stationaries
P02	PENCIL	10	100	Stationary	Nataraj Stationaries
P03	ERASER	5	100	Stationary	Nataraj Stationaries

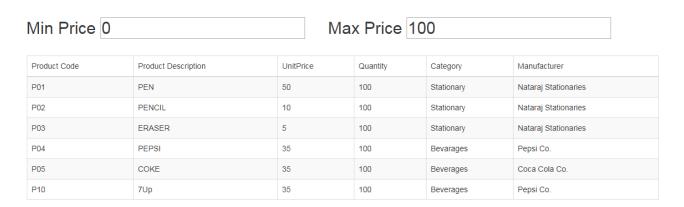
5. Create an EmployeeComponent which has an array of Employee objects. Bind the employee array to the template as follows. Use built-in pipes to format the display.

### **Employees List**

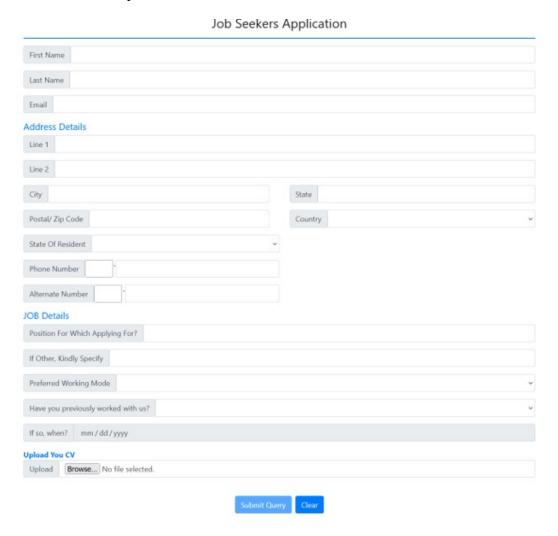
Employeeld	Employee Name	Salary	JoinDate	Department	Designation	Grading
E001	Ravi Kumar	₹45,000.00	23-11-1998	TRAINING	trainer	5.00
E002	Ramesh Kumar	₹45,000.00	28-06-2019	TRAINING	trainer	4.00
E003	Ajay Varma	₹35,000.00	23-11-2008	TESTING	tester	3.00
E004	Kiran Reddy	₹35,000.00	28-06-2019	TESTING	tester	5.00
E005	Gopi Krishna	₹55,000.00	23-11-2017	PROJECTS	programmer	4.00

6. Design the following angular template. Create a custom pipe to filter the products based on minPrice and maxPrice. Use the ProductComponent created in question-2.

#### Filtered Products



7. Create Template Driven Form to the template as follows and Implement validation and create custom Directive to perform email Domain validation



8. Create Reactive form for the template mentioned in the above question. Implement required validations and custom validator functions . Implement Dynamic control to add extra address/contact Nos dynamically.

9. Below are the fake Online REST API for Testing and Prototyping of sample applications which are using REST call to display listing and CRUD features.[Internet access required]

Method	Туре	Full route	Description
GET	JSON	http://dummy.restapiexample.com/api/v1/employees	Get all employee data
GET	JSON	http://dummy.restapiexample.com/api/v1/employee/1	Get a single employee data
POST	JSON	http://dummy.restapiexample.com/api/v1/create	Create new record in database
PUT	JSON	http://dummy.restapiexample.com/api/v1/update/21	Update an employee record
DELETE	JSON	http://dummy.restapiexample.com/api/v1/update/2	Delete an employee record

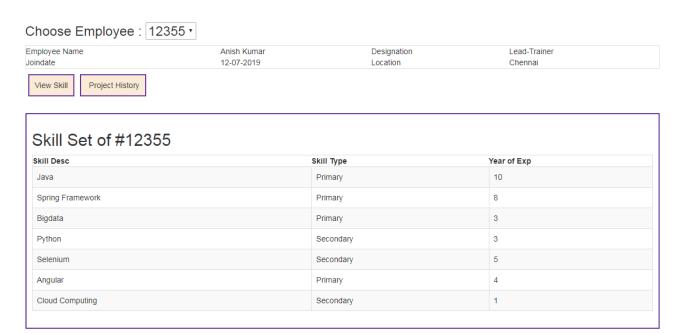
- a). Create a component for employee input form.[id, employee\_name, employee\_salary, employee\_age, profile\_image]
- b). Validate the employee form and save the employee record using custom service and REST API.
- c). Design a search screen, with employee\_id as the search field. Use the fake REST API for fetching employee records.
- d). End users can edit or delete employee records upon successful search. Use the respective fake online REST API provided above.
- e) List all employees in a table format.
- 10. Design a Parent and child component as per the below requirement. Use sample hard coded data.

Parent component -> Displays the sales representative (code & name) as above. Child component -> When you choose a sales representative in parent component, child component should display all the orders under his account.

Choose Sales Re	presentative			
S01 Allwin Fernades	S02 Mario Samuel	<ul><li>S03</li><li>Venil Elavarasan</li></ul>	<ul><li>S04</li><li>Gopi Elavarasan</li></ul>	
Sales Orders				
Order ID	Order Date	SalesRep	SalesRep Id	
OR002	07/10/2018	S02	S02	
OR006	07/10/2018	\$02	S02	
OR007	07/11/2018	S02		
OR008	07/11/2018	S02		
OR011	07/11/2018	S02		

- 11. Design the following screen to dynamically load Skill component and Project History component.[Use dummy data in an array]
- a) User choose employee id, and his details will be printed as below.
- b) Upon clicking ViewSkill dynamically load Skill component.
- c) Upon clicking Project History dynamically load Project History component.

# Dynamic Component Loading - Demo



12. Implement routing path and routing guards.