Let's Create an Employee List example

>ng new empexample --skip-tests

>cd empexample

Open application folder in VST Code

Open New Terminal window

Install Bootstrap

>npm i bootstrap

Now, Open the angular.json file of your project and include:

node_modules/bootstrap/dist/css/bootstrap.css in the projects->architect->build->styles array

node_modules/bootstrap/dist/js/bootstrap.js in the projects->architect->build->scripts array

```
"styles": [
            "node_modules/bootstrap/dist/css/bootstrap.css",
            "src/styles.css"
        ],
        "scripts": [
            "node_modules/bootstrap/dist/js/bootstrap.js"]
```

Let's create an Employee Model as we want to display employee records in a card structure.

Expand the "src" folder

Right click on the "App" folder, and select "New Folder" from the context menu

Name the folder "models". We will place all our models in this folder

Now add a new file in the "models" folder

Name it "employee.model.ts" and create a class:

```
export class Employee {
    id: number;
    name: string;
    gender: string;
    email?: string;
    phoneNumber?: number;
    contactPreference: string;
    dateOfBirth: Date;
    department: string;
    isActive: boolean;
    photoPath?: string;
}
```

You might encounter an error as shown below:

```
export class Employee {
    id: number;

    Property 'id' has no initializer and is not definitely assigned in the
    constructor. ts(2564)

    (property) Employee.id: number

    View Problem (Alt+F8)   Quick Fix... (Ctrl+.)

    dateOfBirth: Date;
    department: string;
    isActive: boolean;
    photoPath?: string;
}
```

This is because new TypeScript versions includes a strict class checking where all the properties should be initialized in the constructor.

To avoid error, Just go to tsconfig.json and set

```json
"compilerOptions": {
    "outDir": "./dist/out-tsc",
    "strict": true,
    "strictPropertyInitialization": false,

     …

     …
}
```

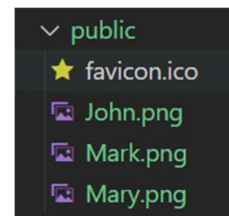Next, create a component to display the list of employees. Name it ListEmployeesComponent.

>ng g c employees/listEmployees –skip-tests --flat

```
Would you like to share pseudonymous usage data about this project with the Angular Team
at Google under Google's Privacy Policy at https://policies.google.com/privacy. For more
details and how to change this setting, see https://angular.dev/cli/analytics.

    no
Global setting: enabled
Local setting: disabled
Effective status: disabled
CREATE src/app/employees/list-employees.component.html (30 bytes)
CREATE src/app/employees/list-employees.component.ts (277 bytes)
CREATE src/app/employees/list-employees.component.css (0 bytes)
```

We will place all employee components in "employees" folder. This is the reason we prefixed the "employees" folder name in the command.

Also, notice we have set --flat option to true as we do not want to place the ListEmployeesComponent files in its own dedicated folder.

```
∨ public
  ★ favicon.ico
  🖼 John.png
  🖼 Mark.png
  🖼 Mary.png
```

Add few Images, to be used an Emp Images, in Public folder.

Do changes in list-employees.component.ts : The changes are commented and self-explanatory. Infact we are populating few employee records to be displayed on page.

```typescript
import { Component, OnInit } from '@angular/core';
import { Employee } from '../models/employee.model';
import { DatePipe } from '@angular/common';

@Component({
  selector: 'app-list-employees',
  standalone: true,
  imports: [DatePipe],

  templateUrl: './list-employees.component.html',
  styleUrl: './list-employees.component.css'
})
export class ListEmployeesComponent implements OnInit {
  employees: Employee[] = [
    {
      id: 1,
      name: 'Mark',
      gender: 'Male',
      contactPreference: 'Email',
      email: 'mark@pragimtech.com',
      dateOfBirth: new Date('10/25/1988'),
      department: 'IT',
      isActive: true,
      photoPath: './John.png'
    },
    {
      id: 2,
      name: 'Mary',
      gender: 'Female',
      contactPreference: 'Phone',
      phoneNumber: 2345978640,
      dateOfBirth: new Date('11/20/1979'),
      department: 'HR',
      isActive: true,
      photoPath: './Mary.png'
    },
    {
      id: 3,
      name: 'John',
      gender: 'Male',
      contactPreference: 'Phone',
      phoneNumber: 5432978640,
```

```
        dateOfBirth: new Date('3/25/1976'),
        department: 'IT',
        isActive: false,
        photoPath: './Mark.png'
    },
  ];
  constructor() { }

  ngOnInit() {
  }
}
```

Replace the existing HTML, with the following HTML in list-employees.component.html. Notice we are using Bootstrap for styling.

```html
<div class="container">
  <div class="row">
    @for (employee of employees; track $index) {

    <div class="col-md-4 mb-3">
      <div class="card">
        <img class="card-img-top" [src]="employee.photoPath"
alt="Card image" />
        <div class="card-body">
          <h4 class="card-title">{{ employee.name }}</h4>
          <div class="card-text">
            <div class="col-xs-8">
              <div class="row">
                <div class="col-xs-6">Gender: {{ employee.gender
}}</div>
              </div>
              <div class="row">
                <div class="col-xs-6">
                  Date of Birth: {{ employee.dateOfBirth | date }}

                </div>
              </div>
              <div class="row">
                <div class="col-xs-6">
                  Contact Preference : {{ employee.contactPreference
}}
                </div>
              </div>
```

```html
              <div class="row">
                <div class="col-xs-6">Phone: {{ employee.phoneNumber
}}</div>
              </div>
              <div class="row">
                <div class="col-xs-6">Email: {{ employee.email
}}</div>
              </div>
              <div class="row">
                <div class="col-xs-6">
                  Department: {{ employee.department }}
                </div>
              </div>
              <div class="row">
                <div class="col-xs-6">Is Active: {{
employee.isActive }}</div>
              </div>
            </div>
          </div>
        </div>
      </div>
    }
  </div>
</div>
```

Include the ListEmployeesComponent selector (app-list-employees) as a directive in the root component (app.component.html).

```html
<div class="container">
  <app-list-employees></app-list-employees>
</div>
```

Save all the changes and run the angular project using the following command.

>ng serve -o

Mark

Gender: Male
Date of Birth: Tue Oct 25 1988 00:00:00 GMT+0530 (India Standard Time)
Contact Preference : Email
Phone:
Email: mark@pragimtech.com
Department: IT
Is Active: true

Mary

Gender: Female
Date of Birth: Tue Nov 20 1979 00:00:00 GMT+0530 (India Standard Time)
Contact Preference : Phone
Phone: 2345978640
Email:
Department: HR
Is Active: true

John

Gender: Male
Date of Birth: Thu Mar 25 1976 00:00:00 GMT+0530 (India Standard Time)
Contact Preference : Phone
Phone: 5432978640
Email:
Department: IT
Is Active: false