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www.earth.lk/community
2004-2024 (20th Anniversary)

Sprint-2 Plan

Employee Detail Management

1. Establishing Project Folder Architecture
2. Server App Initialization
3. **Sprint-2 Execution** [2(a), **2(b)**, 2(c), 2(d), 2(e), 2(f)]
4. Completing Sprint-1 Objectives

2(a) Employee Module - Analysis, Design & DB-Preparation

Data Design, UI Design, Sample Data, Database Preparation

2(b) Employee View

1. [Controller Design](#)
2. [Coding-Server App](#)
 - [Version-1 \(Client Pagination\)](#)
[Entity Coding, DAO Coding, Controller Coding, Testing](#)
 - Version-2 (Server Pagination)
Controller Modification, Testing
3. [Coding-Client App](#)
 - [Version-1 \(Client Pagination\)](#)
[UI Preparation, Entity Coding, Service Coding, Controller Coding, Testing](#)
 - Version-2 (Server Pagination)
Service Modification, Controller Modification, Testing

2(c) Employee Search

2(d) Employee Insert

2(e) Employee Update

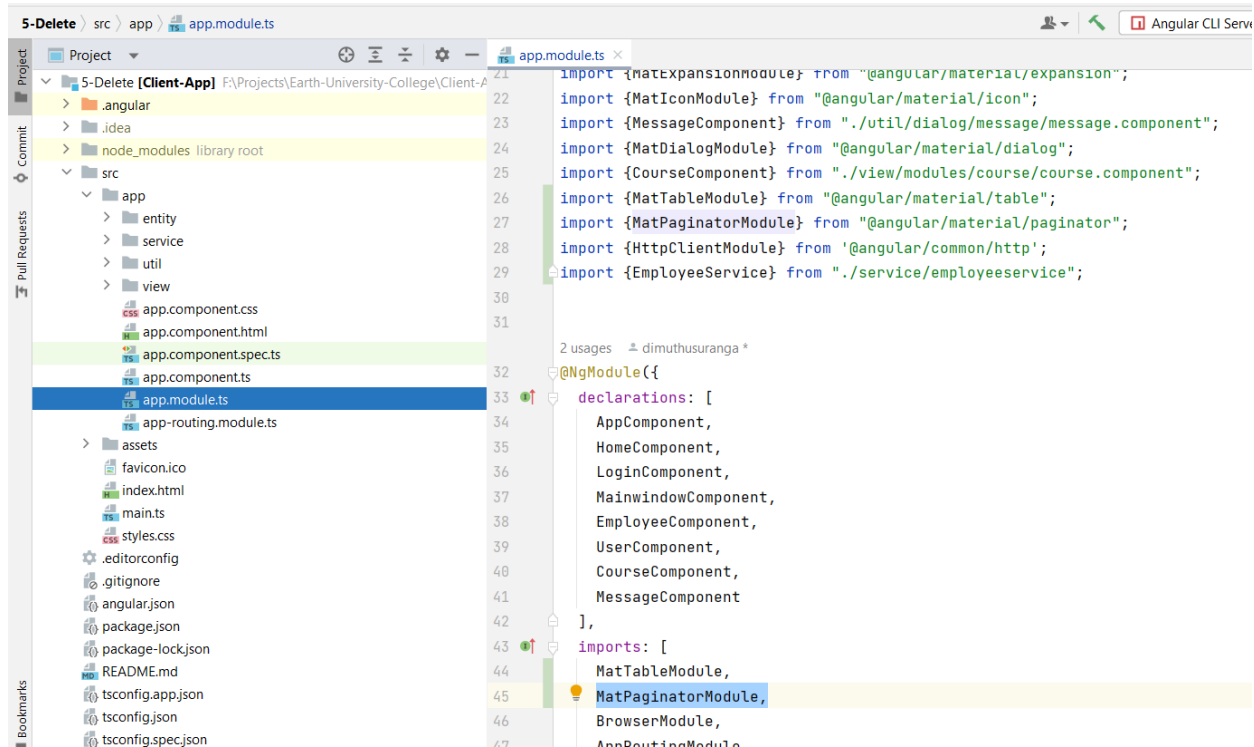
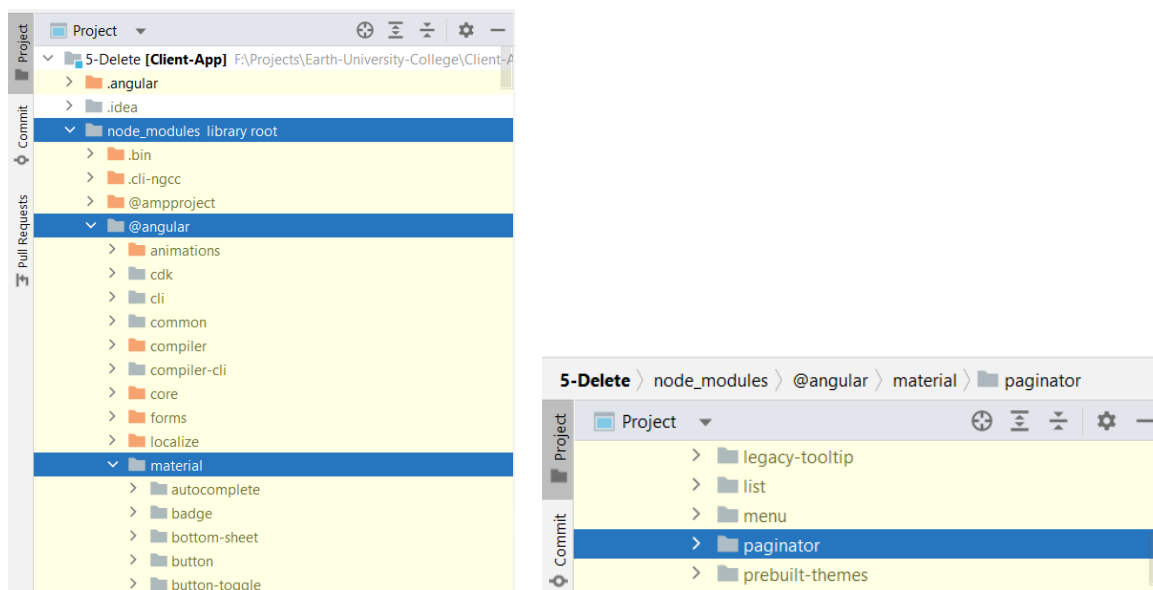
2(f) Employee Delete

2(b) Employee View

1. [Controller Design](#)
2. [Coding Server-App](#)
3. [Coding Client-App](#)
 - Version-1 (Client Pagination)**
 1. Client App Preparation for Sprint-2
 2. UI Preparation with Static Data & Testing
 3. Coding Entity Classes
 4. Data Loading with Dynamic Data & Testing
 5. Coding Service Classes for Dynamic Data & Testing (With & Without DI)
 6. Error Correction – Server App – Employee Data Service
 7. Data loading from Server & Testing, Promise-Pending/Resolve/Reject Status
 8. **Client Pagination**
 9. Client Search
 - Version-2 (Server Pagination)**

Client Pagination

1. Import Mat-Pagination Module from the downloaded dependent libraries in “node-modules”



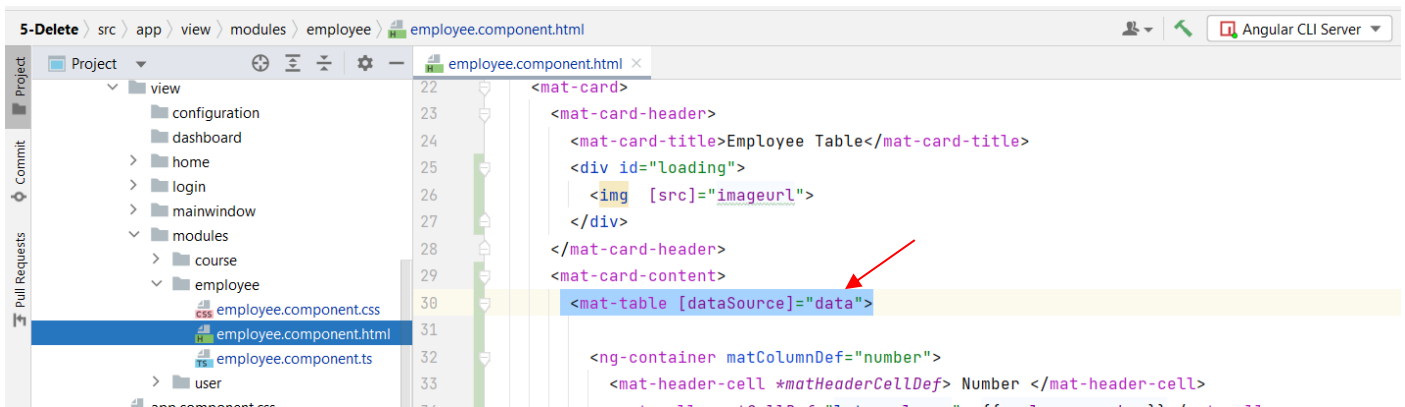
2. Expected output with pagination

Employee Table				
Number	Calling Name	Gender	Designation	Full Name
2201	Ashan	Male	Demon	Ashan Pathum
2202	Rukmal	Male	Demon	Dileesha Rukmal
2203	Imran	Male	Demon	Thahir Imran

Items per page: 3 1 - 3 of 6

3. Change the HTML as follows

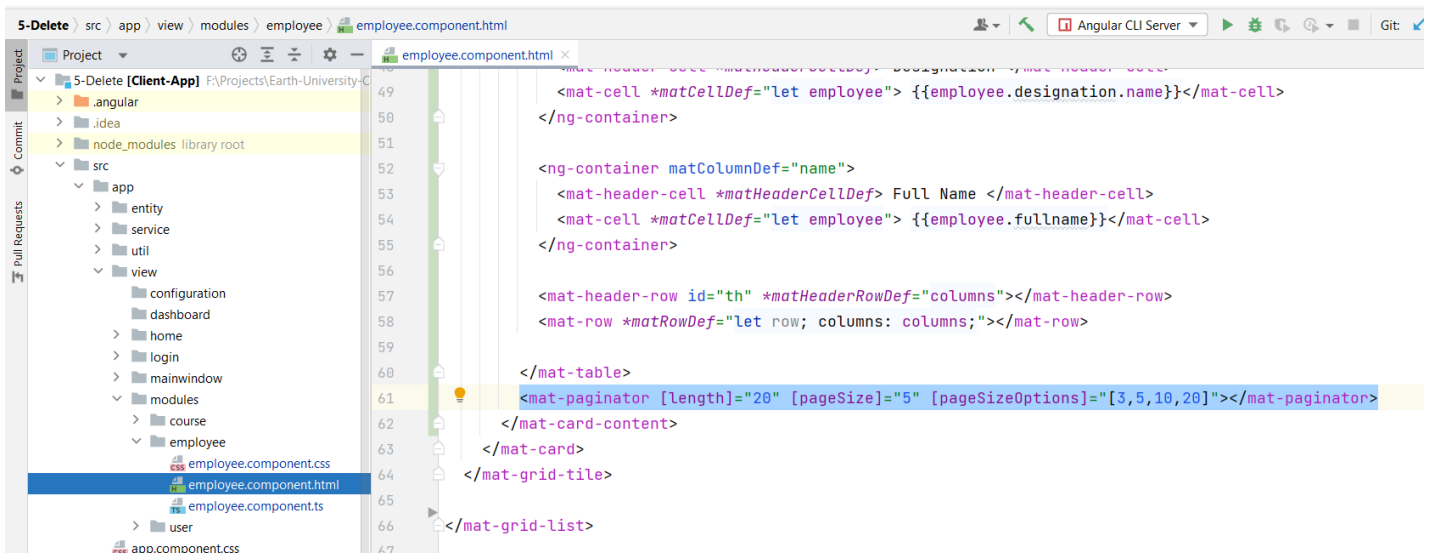
Name of the data source changed to “data” (“employees” → “data”)



```
5-Delete src > app > view > modules > employee > employee.component.html
Project view
configuration
dashboard
home
login
mainwindow
modules
course
employee
employee.component.css
employee.component.html
employee.component.ts
user
app.component.css

22 <mat-card>
23   <mat-card-header>
24     <mat-card-title>Employee Table</mat-card-title>
25     <div id="loading">
26       <img [src]="imageUrl">
27     </div>
28   </mat-card-header>
29   <mat-card-content>
30     <mat-table [dataSource]='data'>
31   </mat-card-content>
32   <ng-container matColumnDef="number">
33     <mat-header-cell *matHeaderCellDef> Number </mat-header-cell>
```

Add <mat-paginator> Component Directive as follows

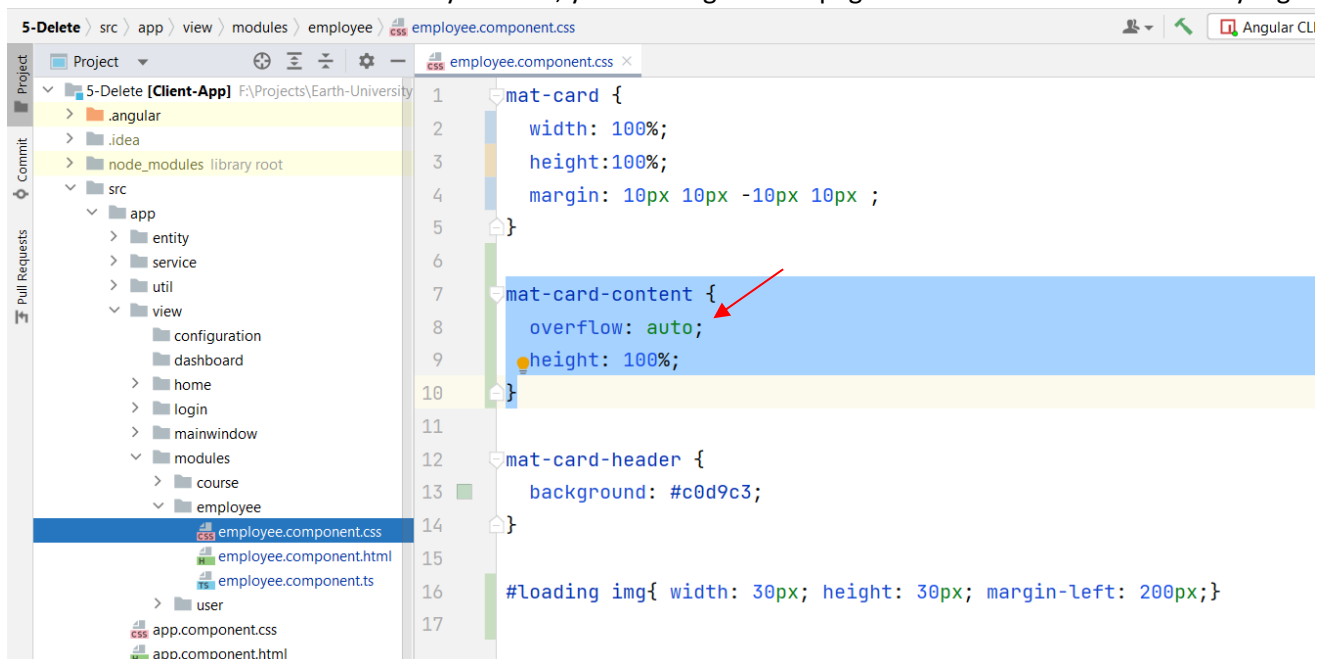


```
5-Delete src > app > view > modules > employee > employee.component.html
Project view
5-Delete [Client-App] F:\Projects\Earth-University-C
> .angular
> .idea
> node_modules library root
src
app
entity
service
util
view
configuration
dashboard
home
login
mainwindow
modules
course
employee
employee.component.css
employee.component.html
employee.component.ts
user
app.component.css

49 <mat-cell *matCellDef="let employee"> {{employee.designation.name}}</mat-cell>
50 </ng-container>
51
52 <ng-container matColumnDef="name">
53   <mat-header-cell *matHeaderCellDef> Full Name </mat-header-cell>
54   <mat-cell *matCellDef="let employee"> {{employee.fullname}}</mat-cell>
55 </ng-container>
56
57 <mat-header-row id="th" *matHeaderRowDef="columns"></mat-header-row>
58 <mat-row *matRowDef="let row; columns: columns;"></mat-row>
59
60 </mat-table>
61 <mat-paginator [length]='20' [pageSize]='5' [pageSizeOptions]='[3,5,10,20]'></mat-paginator>
62 </mat-card-content>
63 </mat-card>
64 </mat-grid-tile>
65
66 </mat-grid-list>
```

4. Change the CSS as follows

If you need, you can target <mat-paginator> and its decedents for styling



```
5-Delete src > app > view > modules > employee > employee.component.css
Project view
5-Delete [Client-App] F:\Projects\Earth-University-C
> .angular
> .idea
> node_modules library root
src
app
entity
service
util
view
configuration
dashboard
home
login
mainwindow
modules
course
employee
employee.component.css
employee.component.html
employee.component.ts
user
app.component.css
app.component.html

1 mat-card {
2   width: 100%;
3   height:100%;
4   margin: 10px 10px -10px 10px ;
5 }
6
7 mat-card-content {
8   overflow: auto;
9   height: 100%;
10 }
11
12 mat-card-header {
13   background: #c0d9c3;
14 }
15
16 #loading img{ width: 30px; height: 30px; margin-left: 200px;}
17
```

5. Change the TS as follows

```

13
14 export class EmployeeComponent {
15
16     2 usages new *
17     columns: string[] = ['number', 'callingname', 'gender', 'designation', 'name'];
18
19     2 usages new *
20     employees: Array<Employee>= [];
21
22     4 usages new *
23     imageUrl: string = '';
24
25     3 usages new *
26     data!: MatTableDataSource<Employee>;
27
28     new *
29     @ViewChild(MatPaginator) paginator!: MatPaginator;
30
31
32     no usages new *
33     constructor(private es: EmployeeService) {
34
35         this.imageUrl='assets/pending.gif';
36
37         this.es.getAll() Promise<Employee[]>
38         .then( (emps: Employee[]) => { this.employees=emps; this.imageUrl='assets/fullfilled.png'; } ) Promise<void>
39         .catch( (error) => { console.log(error); this.imageUrl='assets/rejected.png'; } ) Promise<void>
40         .finally( onfinally: ()=> { this.data = new MatTableDataSource(this.employees); this.data.paginator=this.paginator; } );
41     }
42 }

```

6. Testing with different sizes

Number	Calling Name	Gender	Designation	Full Name
2201	Ashan	Male	Demonstrator L1	Ashan Pathum
2202	Rukmal	Male	Demonstrator L1	Dileesha Rukmal
2203	Imran	Male	Demonstrator L1	Thahir Imran

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Number	Calling Name	Gender	Designation	Full Name
2201	Ashan	Male	Demonstrator L1	Ashan Pathum
2202	Rukmal	Male	Demonstrator L1	Dileesha Rukmal
2203	Imran	Male	Demonstrator L1	Thahir Imran
2301	Lakshan	Male	Demonstrator L1	Lakshan Ruwinda
2302	Arshad	Male	Demonstrator L1	Arshad Ahamad

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2201	Aslihan	Male	Demonstrator L1	Aslihan Fatmahan
2202	Rukmal	Male	Demonstrator L1	Dileesha Rukmal
2203	Imran	Male	Demonstrator L1	Thahir Imran
2301	Lakshan	Male	Demonstrator L1	Lakshan Ruwinda
2302	Arshad	Male	Demonstrator L1	Arshad Ahamad
2303	Imasha	Female	Demonstrator L1	Imasha Gaupadi

Items per page: 20 1 - 6 of 6

7. Discussion

Discuss the importance of “over-flow: auto” in the above codes

Observe the output of the table data, when “over-flow: auto” changed to “over-flow: visible”.

If you need to change the height of the card-content depending on the height of the table under each per-page count instead of showing scroll-bar,

What are the alternate approaches you can achieve this goal.

Explain how the following codes affect the above achievements

```

<mat-grid-tile [colspan]="4" [rowspan]="10"> ← Form
<mat-grid-tile [colspan]="8" [rowspan]="4"> ← Search
<mat-grid-tile [colspan]="8" [rowspan]="6"> ← Table

```

Try to explain following code lines...

```

(1) data!: MatTableDataSource<Employee>;
(2) @ViewChild(MatPaginator) paginator!: MatPaginator;

(3) .finally( () => { } )
(4) this.data = new MatTableDataSource(this.employees);
(5) this.data.paginator=this.paginator;

```