# **MEAN STACK PROJECT**

## MEAN STACK EMPLOYEE CRUD APPLICATION

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**DEMO URL:** MEAN-STACK-EMPLOYEE-CRUD-APP DEMO -ASWIN J.mp4

**Code Snippets:** 

Backend:

Inside the backend inside the models folder I have created an employee.js file where I created schema for creating an employee details

#### Employee.json

```
const mongoose = require('mongoose');
const Schema = mongoose.Schema;
// Define collection and schema
let Employee = new Schema({
   name: {
     type: String
   },
   email: {
     type: String
   },
   designation: {
     type: String
   },
   phoneNumber: {
      type: Number
   }
```

```
}, {
   collection: 'employees'
})

module.exports = mongoose.model('Employee', Employee)
```

here used mongoose.

Inside the backend folder there is routes folder where I created employee.route.js

Employee.route.js

```
const express = require("express");
const app = express();
const employeeRoute = express.Router();
const cors = require("cors");
// CORS OPTIONS
var whitelist = ["http://localhost:4200", "http://localhost:4000"];
var corsOptionsDelegate = function (req, callback) {
 var corsOptions;
 if (whitelist.indexOf(req.header("Origin")) !== -1) {
    corsOptions = {
      origin: "*",
      methods: "GET, HEAD, PUT, PATCH, POST, DELETE",
    };
  } else {
    corsOptions = { origin: false }; // disable CORS for this
request
 callback(null, corsOptions);
};
// Employee model
let Employee = require("../models/Employee");
// Add Employee
employeeRoute.route("/create").post(async (req, res, next) => {
  await Employee.create(req.body)
```

```
.then((result) => {
      res.json({
        data: result,
        message: "Data successfully added!",
        status: 200,
      });
    })
    .catch((err) => {
      return next(err);
    });
});
// Get All Employees
employeeRoute
  .route("/", cors(corsOptionsDelegate))
  .get(async (req, res, next) => {
    await Employee.find()
      .then((result) => {
        res.writeHead(201, { "Content-Type": "application/json" });
        res.end(JSON.stringify(result));
      })
      .catch((err) => {
        return next(err);
      });
  });
// Get single employee
employeeRoute.route("/read/:id").get(async (req, res, next) => {
  await Employee.findById(req.params.id, req.body)
    .then((result) => {
      res.json({
        data: result,
        message: "Data successfully retrieved.",
        status: 200,
      });
    })
    .catch((err) => {
      return next(err);
    });
});
// Update employee
```

```
employeeRoute.route("/update/:id").put(async (req, res, next) => {
  await Employee.findByIdAndUpdate(req.params.id, {
    $set: req.body,
  })
    .then((result) => {
      res.json({
        data: result,
        msg: "Data successfully updated.",
      });
    })
    .catch((err) => {
      console.log(err);
    });
});
// Delete employee
employeeRoute.route("/delete/:id").delete(async (req, res) => {
  await Employee.findByIdAndRemove(req.params.id)
    .then(() => {
      res.json({
        msg: "Data successfully updated.",
      });
    })
    .catch((err) => {
      console.log(err);
    });
});
module.exports = employeeRoute;
```

here were I created employee crud functions

```
In index.js file I connected my node backend server with MongoDB.I created a cluster named
clusterO where I get the connection string and pasted inside async function
mongoDbConnection() {
    await mongoose.connect(
        "mongodb+srv://aswinjbca2019:abcd@clusterO.gkkush3.mongodb.net
/?retryWrites=true&w=majority",
```

```
{
    useNewUrlParser: true,
    useUnifiedTopology: true,
},
6000
);
}
```

### Index.js

```
const express = require('express')
const path = require('path')
const mongoose = require('mongoose')
const cors = require('cors')
const bodyParser = require('body-parser')
// Connecting with mongo db
// Connecting MongoDB
async function mongoDbConnection() {
    await mongoose.connect(
      "mongodb+srv://aswinjbca2019:abcd@cluster0.gkkush3.mongodb.net
/?retryWrites=true&w=majority",
        useNewUrlParser: true,
        useUnifiedTopology: true,
      },
     6000
    );
  mongoDbConnection().then(() => {
    console.log("MongoDB successfully connected.");
  }),
    (err) => {
      console.log("Could not connected to database : " + err);
    };
// Setting up port with express js
const employeeRoute = require('../backend/routes/employee.route')
```

```
const app = express()
app.use(bodyParser.json())
app.use(
 bodyParser.urlencoded({
    extended: false,
  }),
)
app.use(cors())
app.use(express.static(path.join( dirname, 'dist/mean-stack-crud-
app')))
app.use('/', express.static(path.join( dirname, 'dist/mean-stack-
crud-app')))
app.use('/api', employeeRoute)
// Create port
const port = process.env.PORT | 4000
const server = app.listen(port, () => {
 console.log('Connected to port ' + port)
})
// Find 404 and hand over to error handler
app.use((req, res, next) => {
 next(createError(404))
})
// error handler
app.use(function (err, req, res, next) {
  console.error(err.message) // Log error message in our server's
console
  if (!err.statusCode) err.statusCode = 500 // If err has no
specified error code, set error code to 'Internal Server Error
(500)'
  res.status(err.statusCode).send(err.message) // All HTTP requests
must have a response, so let's send back an error with its status
code and message
})
```

This is my package.json file

```
{
 "name": "backend",
 "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
   "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "dependencies": {
    "body-parser": "^1.20.2",
    "cors": "^2.8.5",
    "express": "^4.18.2",
   "mongoose": "^7.3.4"
  },
 "devDependencies": {
    "nodemon": "^3.0.1"
 }
}
```

### **Frontend**

Inside the src ,and app ,components folder I created required components for Employee crud app.

Employeecreate component

Employee-create.componet.html

```
<div class="row justify-content-center">
  <div class="col-md-4 register-employee">
    <!-- form card register -->
    <div class="card-body">
      <h2>Employee Register</h2>
      <form [formGroup]="employeeForm" (ngSubmit)="onSubmit()">
        <div class="mb-3">
          <label for="inputName">Name</label>
          <input class="form-control" type="text"</pre>
formControlName="name" />
          <!-- error -->
          <div
            class="text-danger"
            *ngIf="submitted && myForm['name'].errors?.['required']"
            Name is required.
          </div>
        </div>
        <div class="mb-3">
          <label for="inputEmail3">Email</label>
          <input class="form-control" type="text"</pre>
formControlName="email" />
          <!-- error -->
          <div
            class="text-danger"
            *ngIf="submitted &&
myForm['email'].errors?.['required']"
            Enter your email.
          </div>
          <div
            class="text-danger"
            *ngIf="submitted && myForm['email'].errors?.['pattern']"
            Enter valid email.
          </div>
        </div>
        <div class="mb-3">
          <label for="inputPassword3">Designation</label>
          <select</pre>
```

```
class="custom-select form-control"
            (change)="updateProfile($event.target.value)"
            formControlName="designation"
            <option value="">Choose...</option>
            <option
              *ngFor="let employeeProfile of EmployeeProfile"
              value="{{ employeeProfile }}"
              {{ employeeProfile }}
            </option>
          </select>
          <!-- error -->
          <div
            class="text-danger"
            *ngIf="submitted &&
myForm['designation'].errors?.['required']"
            Choose designation.
          </div>
        </div>
        <div class="mb-3">
          <label for="inputVerify3">Mobile No</label>
          <input
            class="form-control"
            type="text"
            formControlName="phoneNumber"
          />
          <!-- error -->
          <div
            class="text-danger"
            *ngIf="submitted &&
myForm['phoneNumber'].errors?.['required']"
            Enter your phone number.
          </div>
          <div
            class="text-danger"
            *ngIf="submitted &&
myForm['phoneNumber'].errors?.['pattern']"
          >
```

```
Enter Numbers Only
          </div>
        </div>
        <div class="d-grid">
          <button class="btn btn-primary btn-block "</pre>
(click)="openSnackBar('Employee Successfully Created')"
type="submit">
            Register
          </button>
        </div>
      </form>
    </div>
  </div>
  <!-- form card register -->
  <div class="col-md-4">
    <img src="assets/rocketman.svg" alt="Your Image Alt Text"</pre>
class="img-fluid" />
  </div>
</div>
Employee-create-component.ts
import { Router } from '@angular/router';
import { ApiService } from './../.service/api.service';
import { Component, OnInit, NgZone } from '@angular/core';
import { FormGroup, FormBuilder, Validators } from '@angular/forms';
import { MatSnackBar } from '@angular/material/snack-bar';
@Component({
  selector: 'app-employee-create',
 templateUrl: './employee-create.component.html',
  styleUrls: ['./employee-create.component.scss'],
})
export class EmployeeCreateComponent implements OnInit {
  submitted = false;
  employeeForm: FormGroup;
```

```
EmployeeProfile: any = ['Finance', 'BDM', 'HR', 'Sales', 'Admin'];
  constructor(
    public fb: FormBuilder,
    private router: Router,
    private ngZone: NgZone,
    private apiService: ApiService,
    private _snackBar: MatSnackBar
  ) {
    this.mainForm();
  }
  ngOnInit() {}
  mainForm() {
    this.employeeForm = this.fb.group({
      name: ['', [Validators.required]],
      email: [
        ١١,
          Validators.required,
          Validators.pattern('[a-z0-9._%+-]+@[a-z0-9.-]+.[a-
z]{2,3}$'),
       ],
      1,
      designation: ['', [Validators.required]],
      phoneNumber: ['', [Validators.required,
Validators.pattern('^[0-9]+$')]],
    });
  }
  openSnackBar(message: string): void {
    this._snackBar.open(message, 'Close', {
      duration: 2000,
    });}
  // Choose designation with select dropdown
  updateProfile(e) {
    this.employeeForm.get('designation').setValue(e, {
      onlySelf: true,
    });
  }
```

```
// Getter to access form control
 get myForm() {
   return this.employeeForm.controls;
  }
 onSubmit() {
   this.submitted = true;
    if (!this.employeeForm.valid) {
      return false;
    } else {
      return
this.apiService.createEmployee(this.employeeForm.value).subscribe({
        complete: () => {
          console.log('Employee successfully created!'),
            this.ngZone.run(() =>
this.router.navigateByUrl('/employees-list'));
        },
        error: (e) => {
          console.log(e);
        },
     });
    }
 }
}
```

## Employee-create.component.scss

```
/* employee-create.component.scss */
@keyframes hovering {
    /* Define your keyframes here */
    0% {
        /* Styles at the start of the animation */
        transform: translateY(0);
    }
    50% {
        /* Styles at the middle of the animation */
        transform: translateY(-10px);
```

```
}
    100% {
      /* Styles at the end of the animation */
      transform: translateY(0);
   }
  }
  /* Apply the animation properties to the image element */
  .col-md-4 img {
    animation-duration: 5s;
    animation-timing-function: ease;
    animation-delay: 0s;
    animation-iteration-count: infinite;
    animation-direction: normal;
    animation-fill-mode: none;
    animation-play-state: running;
    animation-name: hovering;
    /* You can remove the rest of the animation properties if not
needed for your case */
  }
```

Now I am adding employeelist, employeeedit component, home component, user component, login component, user component, manageemployee component

# Employee-edit.componet.html

```
<div class="card-body">
        <form [formGroup]="editForm" (ngSubmit)="onSubmit()">
          <div class="mb-3">
            <label for="inputName">Name</label>
            <input class="form-control" type="text"</pre>
formControlName="name" />
            <div
              class="text-danger"
              *ngIf="submitted &&
myForm['name'].errors?.['required']"
              Name is required.
            </div>
          </div>
          <div class="mb-3">
            <label for="inputEmail3">Email</label>
            <input class="form-control" type="text"</pre>
formControlName="email" />
            <!-- error -->
            <div
              class="text-danger"
              *ngIf="submitted &&
myForm['email'].errors?.['required']"
              Enter your email.
            </div>
            <div
              class="text-danger"
              *ngIf="submitted &&
myForm['email'].errors?.['pattern']"
              Enter valid email.
            </div>
          </div>
          <div class="mb-3">
            <label for="inputPassword3">Designation</label>
            <select
              class="custom-select form-control"
              (change)="updateProfile($event.target.value)"
              formControlName="designation"
            >
```

```
<option value="">Choose...</option>
              <option
                *ngFor="let employeeProfile of EmployeeProfile"
                value="{{ employeeProfile }}"
                {{ employeeProfile }}
              </option>
            </select>
            <!-- error -->
            <div
              class="text-danger"
              *ngIf="submitted &&
myForm['designation'].errors?.['required']"
              Choose designation.
            </div>
          </div>
          <div class="mb-3">
            <label for="inputVerify3">Mobile No</label>
            <input</pre>
              class="form-control"
              type="text"
              formControlName="phoneNumber"
            />
            <!-- error -->
            <div
              class="text-danger"
              *ngIf="submitted &&
myForm['phoneNumber'].errors?.['required']"
              Enter your phone number.
            </div>
            <div
              class="text-danger"
              *ngIf="submitted &&
myForm['phoneNumber'].errors?.['pattern']"
              Enter Numbers Only
            </div>
          </div>
```

```
<div class="d-grid">
            <button class="btn btn-dark btn-</pre>
         (click)="openSnackBar('Employee Updated
block"
Successfully')" type="submit">
              Update
            </button>
          </div>
        </form>
      </div>
    </div>
    <!-- form -->
  </div>
</div>
Employee-edit.component.ts
import { Employee } from './../../model/employee';
import { Component, OnInit } from '@angular/core';
import { ActivatedRoute, Router } from '@angular/router';
import { ApiService } from './../service/api.service';
import { FormGroup, FormBuilder, Validators } from '@angular/forms';
import { MatSnackBar } from '@angular/material/snack-bar';
@Component({
  selector: 'app-employee-edit',
 templateUrl: './employee-edit.component.html',
  styleUrls: ['./employee-edit.component.scss'],
})
export class EmployeeEditComponent implements OnInit {
  submitted = false;
 editForm: FormGroup;
  employeeData: Employee[];
  EmployeeProfile: any = ['Finance', 'BDM', 'HR', 'Sales', 'Admin'];
  constructor(
    public fb: FormBuilder,
    private actRoute: ActivatedRoute,
    private apiService: ApiService,
    private router: Router,
    private _snackBar: MatSnackBar
```

```
) {}
  ngOnInit() {
    this.updateEmployee();
    let id = this.actRoute.snapshot.paramMap.get('id');
    this.getEmployee(id);
    this.editForm = this.fb.group({
      name: ['', [Validators.required]],
      email: [
          Validators.required,
          Validators.pattern('[a-z0-9. %+-]+@[a-z0-9.-]+.[a-
z]{2,3}$'),
        ],
      1,
      designation: ['', [Validators.required]],
      phoneNumber: ['', [Validators.required,
Validators.pattern('^[0-9]+$')]],
    });
  }
  openSnackBar(message: string): void {
    this. snackBar.open(message, 'Close', {
      duration: 2000,
    });}
  // Choose options with select-dropdown
 updateProfile(e) {
    this.editForm.get('designation').setValue(e, {
      onlySelf: true,
   });
  }
  // Getter to access form control
 get myForm() {
   return this.editForm.controls;
  }
 getEmployee(id) {
    this.apiService.getEmployee(id).subscribe((data) => {
      this.editForm.setValue({
        name: data.data['name'],
        email: data.data['email'],
```

```
designation: data.data['designation'],
        phoneNumber: data.data['phoneNumber'],
      });
    });
  }
 updateEmployee() {
    this.editForm = this.fb.group({
      name: ['', [Validators.required]],
      email: Γ
          Validators.required,
          Validators.pattern('[a-z0-9._%+-]+@[a-z0-9.-]+.[a-
z]{2,3}$'),
        1,
      1,
      designation: ['', [Validators.required]],
      phoneNumber: ['', [Validators.required,
Validators.pattern('^[0-9]+$')]],
    });
  }
 onSubmit() {
    this.submitted = true;
    if (!this.editForm.valid) {
      return false;
    } else {
       if (window.confirm('Are you sure?')) {
        let id = this.actRoute.snapshot.paramMap.get('id');
         this.apiService.updateEmployee(id,
this.editForm.value).subscribe({
          complete: () => {
            this.router.navigateByUrl('/employees-list');
            console.log('Content updated successfully!');
          },
          error: (e) => {
            console.log(e);
          },
        });
     }
    }
```

```
}
}
```

### Employee-list.component.html

```
<div class="container">
 <!-- No data message -->
 There is no employee added yet!
 <!-- Employee list -->
  0">
  <thead class="table-success">
   Employee ID
    Name
    Email
    Designation
    Phone No
    Update
   </thead>
  {{ employee._id }}
    {{ employee.name }}
    {{ employee.email }}
    {{ employee.designation }}
    {{ employee.phoneNumber }}
    <span class="edit" [routerLink]="['/edit-employee/',</pre>
employee. id]">
       <button type="button" class="btn btn-success btn-
sm">Edit
      </span>
      <span class="delete" (click)="removeEmployee(employee,</pre>
i)">
       <button type="button" class="btn btn-danger btn-</pre>
sm">Delete/button>
      </span>
```

```
</div>
Employee-list.component.ts
import { Component, OnInit } from '@angular/core';
import { ApiService } from './../service/api.service';
import { MatSnackBar } from '@angular/material/snack-bar';
@Component({
  selector: 'app-employee-list',
  templateUrl: './employee-list.component.html',
  styleUrls: ['./employee-list.component.scss'],
})
export class EmployeeListComponent implements OnInit {
  Employee: any = [];
  constructor(private apiService: ApiService, private snackBar:
MatSnackBar) {
   this.readEmployee();
  }
  ngOnInit() {}
  readEmployee() {
    this.apiService.getEmployees().subscribe((data) => {
     this.Employee = data;
   });
  }
  openSnackBar(message: string): void {
    this. snackBar.open(message, 'Close', {
     duration: 2000,
    });
  }
  removeEmployee(employee, index) {
```

if (window.confirm('Are you sure?')) {

```
this.apiService.deleteEmployee(employee. id).subscribe((data)
=> {
        this.Employee.splice(index, 1);
        this.openSnackBar('Employee Deleted Successfully');
      });
    }
  }
}
Employee-list.component.scss
/* Add this CSS to your styles.css or component-specific styles file
*/
.container {
    margin: 20px auto;
    padding: 20px;
    width: 1000px;
    border-radius: 10px;
    box-shadow: 0 4px 12px rgba(0, 0, 0, 0.1);
    background-color: #ffffff;
  }
  .no-data {
    color: #ffffff;
    text-align: center;
    margin-top: 20px;
  }
  .table {
    width: 50%;
    border-collapse: collapse;
    margin-top: 20px;
  }
  th, td {
    padding: 15px;
    text-align: left;
  }
  th:nth-child(2), td:nth-child(2) {
    /* Adjust the width as needed */
```

```
width: 200px;
  max-width: 200px;
  overflow: hidden;
  text-overflow: ellipsis;
  white-space: nowrap;
}
thead {
  background-color: #007bff;
  color: #fff;
}
tbody tr:nth-child(even) {
  background-color: #f8f9fa;
}
.edit-block {
  display: flex;
  justify-content: center;
  align-items: center;
}
.edit, .delete {
  margin-right: 10px;
}
.btn {
  padding: 10px 20px;
  font-size: 14px;
  border-radius: 5px;
  transition: background-color 0.3s ease;
}
.btn-success {
  background-color: #ffffff;
  color: #3928cf;
}
.btn-danger {
  background-color: #ffffff;
 color: #1337d6;
}
```

```
.btn:hover {
  background-color: #d4d4d4;
}
@media only screen and (max-width: 768px) {
  .container {
    padding: 15px;
  }
  .table th, .table td {
    font-size: 13px;
    padding: 12px;
  }
  .edit-block {
    flex-direction: column;
    align-items: flex-start;
  }
  .edit, .delete {
    margin-right: 0;
    margin-bottom: 8px;
 }
}
```

### Home.component.html

```
</div>
       </div>
     </div>
   </section>
Login.component.ts
import { Component } from '@angular/core';
@Component({
 selector: 'app-home',
 templateUrl: './home.component.html',
 styleUrls: ['./home.component.scss']
})
export class HomeComponent {
}
Manage-employee.component.html
<div class="container">
  <header>
   <h1>Employee CRUD Application</h1>
   Welcome to our Employee CRUD application! This simple
application allows you to perform basic CRUD operations.
  </header>
 <div class="content">
   <div class="overview">
     <h2>0verview</h2>
     This CRUD application provides the following
operations:
     <l
       <strong>Create:</strong> Add new Employees to the
database.
       <strong>Read:</strong> View a list of existing
Employees.
```

```
<strong>Update:</strong> Modify existing Employees in
the database.
       <strong>Delete:</strong> Remove Employees from the
database.
     </div>
   </div>
   </div>
Manage-employee.component.ts
import { Component } from '@angular/core';
@Component({
  selector: 'app-manage-employee',
 templateUrl: './manage-employee.component.html',
  styleUrls: ['./manage-employee.component.scss']
})
export class ManageEmployeeComponent {
}
Manage-employee.component.scss
.container {
 max-width: 800px;
 margin: 20px auto;
 padding: 20px;
 background-color: #f8f9fa;
 border-radius: 8px;
 box-shadow: 0 0 20px rgba(0, 0, 0, 0.1);
}
header {
 background-color: #007bff;
 color: #fff;
 padding: 20px;
 text-align: center;
```

```
border-radius: 8px 8px 0 0;
}
.content {
 margin-top: 20px;
}
.overview {
 margin-bottom: 20px;
}
.overview h2,
.overview p,
.overview ul,
.overview li {
 color: #333;
}
.overview ul {
  list-style-type: none;
 padding: 0;
}
.overview li {
 margin-bottom: 10px;
}
.crud-actions {
  display: flex;
 flex-wrap: wrap; /* Allow buttons to wrap to the next line on
small screens */
  justify-content: center;
 margin-top: 20px;
}
.btn {
  padding: 12px 24px;
 font-size: 18px;
 text-decoration: none;
  border-radius: 8px;
 transition: background-color 0.3s ease;
  cursor: pointer;
```

```
margin: 5px; /* Add margin between buttons */
}
.btn-primary {
 background-color: #ff5c5c;
 color: #fff;
}
.btn-success {
 background-color: #4caf50;
 color: #fff;
}
.btn-warning {
 background-color: #ffbb33;
 color: #fff;
}
.btn-danger {
 background-color: #dc3545;
 color: #fff;
}
.btn:hover {
 background-color: #555;
}
User.component.html
<mat-card>
   <mat-card-header>
       <h2>User Listing</h2>
   </mat-card-header>
   <mat-card-content>
       <div class="mat-elevation-z8">
          <!-- Position Column -->
            <ng-container matColumnDef="username">
              Username
```

```
{{element.id}} 
        </ng-container>
        <!-- Name Column -->
        <ng-container matColumnDef="name">
         *matHeaderCellDef> Name 
         {{element.name}} 
        </ng-container>
        <!-- Weight Column -->
        <ng-container matColumnDef="email">
          Email 
         {{element.email}} 
        </ng-container>
        <!-- Symbol Column -->
        <ng-container matColumnDef="status">
          Status 
         {{element.isactive ? 'Active':'In Active'}} 
        </ng-container>
        <ng-container matColumnDef="role">
          Role 
         {{element.role ===''? 'Un Assigned':element.role}} 
        </ng-container>
        <ng-container matColumnDef="action">
          Action 
         <button *ngIf="element.role !=='admin'"</pre>
(click)="updateuser(element.id)" mat-raised-button
color="primary">Update</button>
         </ng-container>
        *matHeaderRowDef="displayedColumns">
```

### User.component.ts

```
import { AfterViewInit, Component, ViewChild } from '@angular/core';
import { FormBuilder} from '@angular/forms'
import { MatTableDataSource } from '@angular/material/table';
import { MatPaginator } from '@angular/material/paginator';
import { MatSort } from '@angular/material/sort';
import { AuthService } from 'src/app/service/auth-service.service';
import { MatDialog } from '@angular/material/dialog';
import { EmployeeCreateComponent } from '../employee-
create/employee-create.component';
@Component({
  selector: 'app-user',
 templateUrl: './user.component.html',
 styleUrls: ['./user.component.scss']
})
export class UserComponent implements AfterViewInit {
  displayedColumns: string[] = ['username', 'name', 'email',
'status', 'role', 'action'];
  constructor(private service: AuthService, private dialog:
MatDialog) {
    this.LoadUser();
  }
  userlist: any;
  dataSource: any;
```

```
@ViewChild(MatPaginator) paginator!: MatPaginator;
 @ViewChild(MatSort) sort!: MatSort;
  ngAfterViewInit(): void {
  }
  LoadUser() {
    this.service.Getall().subscribe(res => {
      this.userlist = res;
      this.dataSource = new MatTableDataSource(this.userlist);
      this.dataSource.paginator = this.paginator;
      this.dataSource.sort = this.sort;
   });
  }
 updateuser(code: any) {
    this.OpenDialog('1000ms', '600ms', code);
  }
 OpenDialog(enteranimation: any, exitanimation: any, code: string)
{
    const popup = this.dialog.open(EmployeeCreateComponent, {
      enterAnimationDuration: enteranimation,
      exitAnimationDuration: exitanimation,
      width: '30%',
      data: {
        usercode: code
      }
    });
    popup.afterClosed().subscribe(res => {
      this.LoadUser();
    });
  }
}
```

```
<mat-card>
  <mat-card-header>
    <h2>User Listing</h2>
  </mat-card-header>
  <mat-card-content>
    <div class="mat-elevation-z8">
       <!-- Position Column -->
        <ng-container matColumnDef="username">
          Username
{{element.id}} 
        </ng-container>
        <!-- Name Column -->
        <ng-container matColumnDef="name">
         *matHeaderCellDef> Name 
         {{element.name}} 
        </ng-container>
        <!-- Weight Column -->
        <ng-container matColumnDef="email">
          Email 
         {{element.email}} 
        </ng-container>
        <!-- Symbol Column -->
        <ng-container matColumnDef="status">
          Status 
         {{element.isactive ? 'Active':'In Active'}} 
        </ng-container>
        <ng-container matColumnDef="role">
          Role
```

```
{{element.role ===''? 'Un Assigned':element.role}} 
          </ng-container>
          <ng-container matColumnDef="action">
            Action 
           <button *ngIf="element.role !=='admin'"</pre>
(click)="updateuser(element.id)" mat-raised-button
color="primary">Update/button>
           </ng-container>
          <tr mat-header-row
*matHeaderRowDef="displayedColumns">
          <mat-paginator [pageSizeOptions]="[5, 10, 20]"</pre>
                   showFirstLastButtons
                   aria-label="Select page of periodic
elements">
        </mat-paginator>
       </div>
  </mat-card-content>
 </mat-card>
```

### Service

Inside the service filder

### Autth-service.service

```
import { HttpClient } from '@angular/common/http';
import { Injectable } from '@angular/core';
```

```
@Injectable({
 providedIn: 'root'
})
export class AuthService {
  constructor(private http:HttpClient) {
  }
  apiurl='http://localhost:4200/user';
  RegisterUser(inputdata:any){
    return this.http.post(this.apiurl,inputdata)
 GetUserbyCode(id:any){
    return this.http.get(this.apiurl+'/'+id);
  }
  Getall(){
    return this.http.get(this.apiurl);
  updateuser(id:any,inputdata:any){
    return this.http.put(this.apiurl+'/'+id,inputdata);
  }
  getuserrole(){
    return this.http.get('http://localhost:4200/role');
  }
  isloggedin(){
    return sessionStorage.getItem('username')!=null;
 getrole(){
    return
sessionStorage.getItem('role')!=null?sessionStorage.getItem('role')?
.toString():'';
  }
 GetAllCustomer(){
    return this.http.get('http://localhost:3000/customer');
  }
 Getaccessbyrole(role:any,menu:any){
    return
this.http.get('http://localhost:3000/roleaccess?role='+role+'&menu='
+menu)
  }
```

}

Inside model

There employee.ts

```
export class Employee {
   name: string;
   email: string;
   designation: string;
   phoneNumber: number;
}
```

# App-routing.module.ts

```
import { NgModule } from '@angular/core';
import { RouterModule, Routes } from '@angular/router';
import { EmployeeCreateComponent } from './components/employee-
create/employee-create.component';
import { AuthGuard } from './auth.guard';
import { AppComponent } from './app.component';
import { LoginComponent } from './components/login/login.component';
import { UserComponent } from './components/user/user.component';
import { EmployeeListComponent } from './components/employee-
list/employee-list.component';
import { EmployeeEditComponent } from './components/employee-
edit/employee-edit.component';
import { HomeComponent } from './components/home/home.component';
import { ManageEmployeeComponent } from './components/manage-
employee/manage-employee.component';
```

```
const routes: Routes = [
 {component:LoginComponent,path:'login'},
 { path: '', redirectTo: '/hell', pathMatch: 'full' },
 {component:AppComponent,path:'',canActivate:[AuthGuard]},
 {component:UserComponent,path:'user',canActivate:[AuthGuard]},
 {component:EmployeeCreateComponent,path:'customer',canActivate:[Aut
hGuard]},
 {component: EmployeeEditComponent,path: 'edit-
employee/:id',canActivate:[AuthGuard] },
 {component: EmployeeListComponent,path:
'manage',canActivate:[AuthGuard] },
 {component:HomeComponent,path:'home',canActivate:[AuthGuard]},
 {component:ManageEmployeeComponent,path:"hell",canActivate:[AuthGua
rd]}
];
@NgModule({
  imports: [RouterModule.forRoot(routes)],
 exports: [RouterModule]
})
export class AppRoutingModule { }
app.component.html
<style>
    :host {
      font-family: -apple-system, BlinkMacSystemFont, "Segoe UI",
Roboto, Helvetica, Arial, sans-serif, "Apple Color Emoji", "Segoe UI
Emoji", "Segoe UI Symbol";
      font-size: 14px;
      color: #333;
      box-sizing: border-box;
      -webkit-font-smoothing: antialiased;
      -moz-osx-font-smoothing: grayscale;
    }
    h1,
    h2,
```

```
h3,
h4,
h5,
h6 {
 margin: 8px 0;
}
p {
 margin: 0;
.spacer {
 flex: 1;
}
.toolbar {
  position: absolute;
  top: 0;
  left: 0;
  right: 0;
  height: 60px;
  display: flex;
  align-items: center;
  background-color: #1976d2;
  color: white;
 font-weight: 600;
}
.toolbar img {
 margin: 0 16px;
}
.toolbar #twitter-logo {
 height: 40px;
 margin: 0 8px;
}
.toolbar #youtube-logo {
 height: 40px;
 margin: 0 16px;
}
```

```
.toolbar #twitter-logo:hover,
.toolbar #youtube-logo:hover {
  opacity: 0.8;
}
.content {
  display: flex;
  margin: 82px auto 32px;
  padding: 0 16px;
  max-width: 960px;
  flex-direction: column;
  align-items: center;
}
svg.material-icons {
  height: 24px;
 width: auto;
}
svg.material-icons:not(:last-child) {
  margin-right: 8px;
}
.card svg.material-icons path {
  fill: #888;
}
.card-container {
  display: flex;
  flex-wrap: wrap;
  justify-content: center;
  margin-top: 16px;
}
.card {
  all: unset;
  border-radius: 4px;
  border: 1px solid #eee;
  background-color: #fafafa;
  height: 40px;
  width: 200px;
  margin: 0 8px 16px;
```

```
padding: 16px;
      display: flex;
      flex-direction: row;
      justify-content: center;
      align-items: center;
      transition: all 0.2s ease-in-out;
      line-height: 24px;
    }
    .card-container .card:not(:last-child) {
      margin-right: 0;
    }
    .card.card-small {
     height: 16px;
     width: 168px;
    }
    .card-container .card:not(.highlight-card) {
      cursor: pointer;
    }
    .card-container .card:not(.highlight-card):hover {
      transform: translateY(-3px);
      box-shadow: 0 4px 17px rgba(0, 0, 0, 0.35);
    }
    .card-container .card:not(.highlight-card):hover .material-icons
path {
     fill: rgb(105, 103, 103);
    }
    .card.highlight-card {
      background-color: #1976d2;
      color: white;
      font-weight: 600;
      border: none;
      width: auto;
      min-width: 30%;
     position: relative;
    }
```

```
.card.card.highlight-card span {
  margin-left: 60px;
}
svg#rocket {
  width: 80px;
  position: absolute;
  left: -10px;
 top: -24px;
}
svg#rocket-smoke {
  height: calc(100vh - 95px);
  position: absolute;
  top: 10px;
  right: 180px;
  z-index: -10;
}
a,
a:visited,
a:hover {
  color: #1976d2;
  text-decoration: none;
}
a:hover {
  color: #125699;
}
.terminal {
  position: relative;
  width: 80%;
  max-width: 600px;
  border-radius: 6px;
  padding-top: 45px;
  margin-top: 8px;
  overflow: hidden;
  background-color: rgb(15, 15, 16);
}
.terminal::before {
```

```
content: "\2022 \2022 \2022";
      position: absolute;
      top: 0;
      left: 0;
      height: 4px;
      background: rgb(58, 58, 58);
      color: #c2c3c4;
      width: 100%;
      font-size: 2rem;
      line-height: 0;
      padding: 14px 0;
      text-indent: 4px;
    }
    .terminal pre {
      font-family: SFMono-Regular,Consolas,Liberation
Mono, Menlo, monospace;
      color: white;
      padding: 0 1rem 1rem;
      margin: 0;
    }
    .circle-link {
      height: 40px;
      width: 40px;
      border-radius: 40px;
      margin: 8px;
      background-color: white;
      border: 1px solid #eeeeee;
      display: flex;
      justify-content: center;
      align-items: center;
      cursor: pointer;
      box-shadow: 0 1px 3px rgba(0, 0, 0, 0.12), 0 1px 2px rgba(0,
0, 0, 0.24);
      transition: 1s ease-out;
    }
    .circle-link:hover {
      transform: translateY(-0.25rem);
     box-shadow: 0px 3px 15px rgba(0, 0, 0, 0.2);
    }
```

```
footer {
      margin-top: 8px;
      display: flex;
      align-items: center;
      line-height: 20px;
    }
    footer a {
      display: flex;
      align-items: center;
    }
    .github-star-badge {
      color: #24292e;
      display: flex;
      align-items: center;
      font-size: 12px;
      padding: 3px 10px;
      border: 1px solid rgba(27,31,35,.2);
      border-radius: 3px;
      background-image: linear-gradient(-180deg, #fafbfc, #eff3f6
90%);
      margin-left: 4px;
      font-weight: 600;
    }
    .github-star-badge:hover {
      background-image: linear-gradient(-180deg,#f0f3f6,#e6ebf1
90%);
      border-color: rgba(27,31,35,.35);
      background-position: -.5em;
    }
    .github-star-badge .material-icons {
      height: 16px;
      width: 16px;
      margin-right: 4px;
    }
    svg#clouds {
      position: fixed;
```

```
bottom: -160px;
    left: -230px;
    z-index: -10;
    width: 1920px;
  }
  /* Responsive Styles */
  @media screen and (max-width: 767px) {
    .card-container > *:not(.circle-link) ,
    .terminal {
     width: 100%;
    }
    .card:not(.highlight-card) {
      height: 16px;
      margin: 8px 0;
    }
    .card.highlight-card span {
      margin-left: 72px;
    }
    svg#rocket-smoke {
      right: 120px;
      transform: rotate(-5deg);
    }
  }
  @media screen and (max-width: 575px) {
    svg#rocket-smoke {
      display: none;
      visibility: hidden;
    }
  }
</style>
<!-- Toolbar -->
<div class="toolbar" *ngIf="isMenuVisible" role="banner">
  <img
    width="40"
    alt="Angular Logo"
    src="assets/Akatsuki-logo-clouds.svg"
```

```
/>
  <span>Employee Crud </span>
  <a routerLink="/hell">Home</a>
  <a routerLink="/home">About me</a>
  <a *ngIf="isadmin" routerLink="/manage">Manage Employee</a>
  <a routerLink="/customer">Add Employee</a>
    <div class="spacer"></div>
    <a routerLink="/login">Logout</a>
 </div>
 <div class="content" style="width: 100%;display: block;"</pre>
role="main">
   <router-outlet></router-outlet>
 </div>
 <!-- * * * * * * * * * * is only a placeholder * * * * * * * * * *
 <!-- * * * * * * * * * * and can be replaced. * * * * * * * * * *
 -->
App.component.ts
import { Component } from '@angular/core';
import { Router } from '@angular/router';
@Component({
 selector: 'app-root',
 templateUrl: './app.component.html',
 styleUrls: ['./app.component.scss']
})
```

```
export class AppComponent {
 title = 'mean-stack-crud-app';
  isadmin=false;
  isMenuVisible=false;
  constructor(private route:Router){
    let role=sessionStorage.getItem('role');
    if(role=='admin'){
      this.isadmin=true;
    }
  }
  ngDoCheck(): void {
    let currentroute = this.route.url;
    let role=sessionStorage.getItem('role');
    if (currentroute == '/login' || currentroute == '/register') {
     this.isMenuVisible = false
    } else {
      this.isMenuVisible = true
    }
    if (role == 'admin') {
      this.isadmin = true;
    }else{
      this.isadmin = false;
   }
  }
}
App.component.scss
/* Set text color for toolbar links */
.toolbar a {
    color: white;
    text-decoration: none;
   margin: 0 16px;
   font-weight: 600;
  }
 /* Change link color on hover */
```

```
.toolbar a:hover {
  color: #cfd8dc; /* You can adjust the hover color as needed */
}
```

### Auth.gaurd.ts

```
import { Injectable } from '@angular/core';
import { ActivatedRouteSnapshot, CanActivate, Router,
RouterStateSnapshot, UrlTree } from '@angular/router';
import { ToastrService } from 'ngx-toastr';
import { Observable } from 'rxjs';
import { AuthService } from './service/auth-service.service';
@Injectable({
 providedIn: 'root'
})
export class AuthGuard implements CanActivate {
  constructor(private service: AuthService, private router:
Router,private tostr:ToastrService) { }
 canActivate(
    route: ActivatedRouteSnapshot,
    state: RouterStateSnapshot): Observable<boolean | UrlTree> |
Promise<boolean | UrlTree> | boolean | UrlTree {
    if (this.service.isloggedin()) {
      if (route.url.length > 0) {
        let menu = route.url[0].path;
        if (menu == 'user') {
          if (this.service.getrole() == 'admin') {
            return true;
          } else {
            this.router.navigate(['']);
              this.tostr.warning('You don't have access.')
            return false;
          }
        }else{
          return true;
      } else {
```

```
return true;
}
}
else {
  this.router.navigate(['login']);
  return false;
}
}
```

### Assets where I upload the images

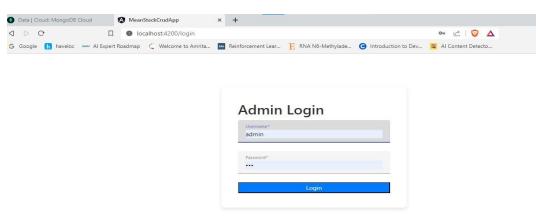
```
Package.json
```

```
{
  "name": "mean-stack-crud-app",
  "version": "0.0.0",
  "scripts": {
    "ng": "ng",
    "start": "ng serve",
    "build": "ng build",
    "watch": "ng build --watch --configuration development",
    "test": "ng test"
  },
  "private": true,
  "dependencies": {
    "@angular/animations": "^16.1.0",
    "@angular/cdk": "^16.2.12",
    "@angular/common": "^16.1.0",
    "@angular/compiler": "^16.1.0",
    "@angular/core": "^16.1.0",
    "@angular/forms": "^16.1.0",
    "@angular/material": "^16.2.12",
    "@angular/platform-browser": "^16.1.0",
    "@angular/platform-browser-dynamic": "^16.1.0",
    "@angular/router": "^16.1.0",
    "@okta/okta-angular": "^6.3.1",
```

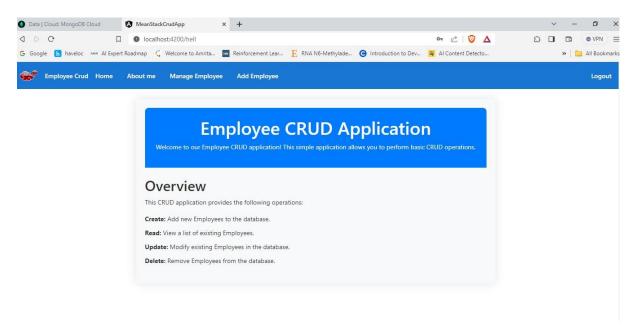
```
"@okta/okta-auth-js": "^7.5.0",
    "bootstrap": "^5.3.0",
    "ngx-toastr": "^18.0.0",
    "primeng": "^17.0.0",
    "rxjs": "~7.8.0",
    "tslib": "^2.3.0",
    "zone.js": "~0.13.0"
  },
  "devDependencies": {
    "@angular-devkit/build-angular": "^16.1.4",
    "@angular/cli": "~16.1.4",
    "@angular/compiler-cli": "^16.1.0",
    "@types/jasmine": "~4.3.0",
    "jasmine-core": "~4.6.0",
    "karma": "~6.4.0",
    "karma-chrome-launcher": "~3.2.0",
    "karma-coverage": "~2.2.0",
    "karma-jasmine": "~5.1.0",
    "karma-jasmine-html-reporter": "~2.1.0",
    "typescript": "~5.1.3"
  }
}
```

#### **Screenshots:**

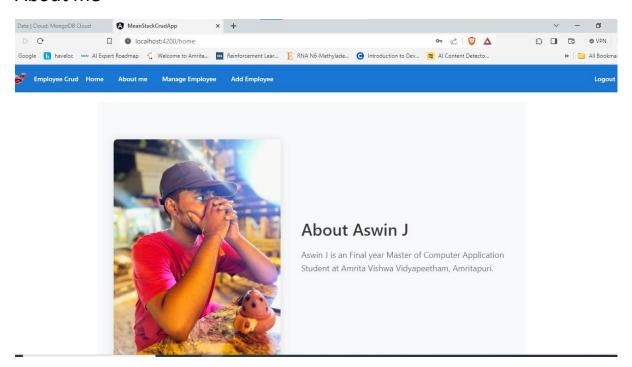
### Login



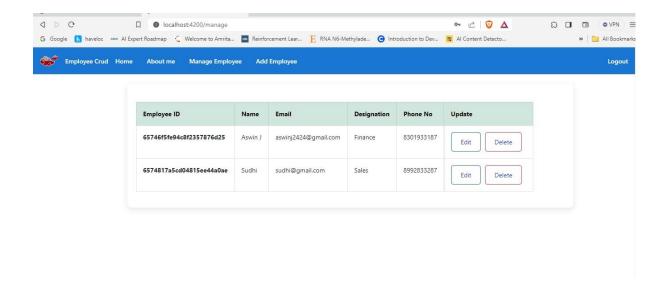
#### Home



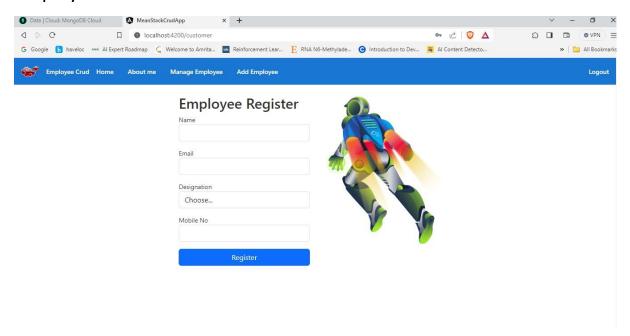
#### About me



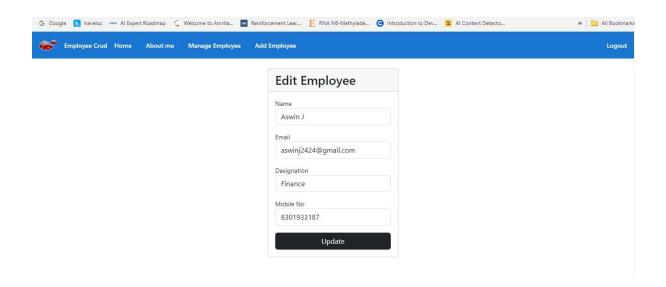
## Manage Employee



## **Employee Add**



# **Employee Edit**



## Database created on MongoDB

