MY MOVIE PLAN CAPSTONE PROJECT

FRONT END:

About us:

```
<div class="about-us-container">
  <div class="about-us-wrapper postion-relative">
    <div class="about-us-banner">
     <div class="about-us-banner-text h-100">
       <h1 class="fs-1">
         {{ title }}
       </h1>
       <h2 class="fs-2 text-uppercase">WE provide entertainment</h2>
     </div>
    </div>
  </div>
  <div class="description mt-4">
    <div class="mx-4">
     <h1 class="fs-2">About Us</h1>
     <div class="underline text-warning"></div>
    </div>
    22 years ago in South Africa a seed of an idea was planted, a dream was
     shared. Inception happened. 22 years on, we look back at what we've
built.
     Leave it up to us, and we'd love to do it all over again. Here's our
story
   </div>
  <div class="testimonials p-lg-5 bg-dark text-white p-md-3 mt-4">
    <h1 class="fs-2 pb-5 text-center">Our Happy Customer</h1>
    <div class="testimonials-list row g-0">
     <div class="testimonial-card col-4 px-4 my-4">
       <div class="testimonial text-center">
         <div class="image mb-2 col-3 mx-auto">
           <img
             mat-card-image=""
             src="https://material.angular.io/assets/img/examples/shiba2.jpg"
             alt="Photo of a Shiba Inu"
             class="mat-card-image rounded-circle"
             height="120"
             width="120"
```

```
</div>
          <div class="comments">
            <h3 class="fs-3 user">User</h3>
            <div class="text-muted text-start">
              22 years ago in South Africa a seed of an idea was planted, a
              dream was shared. Inception happened. 22 years on, we look back
at
              what we've built. Leave it up to us, and we'd love to do it all
              over again. Here's our story
            </div>
          </div>
        </div>
      </div>
      <div class="testimonial-card col-4 px-4 my-4">
        <div class="testimonial text-center">
          <div class="image mb-2 col-3 mx-auto">
              mat-card-image=""
              src="https://material.angular.io/assets/img/examples/shiba2.jpg"
              alt="Photo of a Shiba Inu"
              class="mat-card-image rounded-circle"
              height="120"
              width="120"
          </div>
          <div class="comments">
            <h3 class="fs-3 user">User</h3>
            <div class="text-muted text-start px-3">
              22 years ago in South Africa a seed of an idea was planted, a
              dream was shared. Inception happened. 22 years on, we look back
at
              what we've built. Leave it up to us, and we'd love to do it all
              over again. Here's our story
            </div>
          </div>
        </div>
      </div>
      <div class="testimonial-card col-4 px-4 my-4">
        <div class="testimonial text-center">
          <div class="image mb-2 col-3 mx-auto">
            <img
              mat-card-image=""
              src="https://material.angular.io/assets/img/examples/shiba2.jpg"
              alt="Photo of a Shiba Inu"
              class="mat-card-image rounded-circle border-1 border-info"
              height="120"
              width="120"
```

```
</div>
          <div class="comments">
            <h3 class="fs-3 user">User</h3>
            <div class="text-muted text-start px-3">
               22 years ago in South Africa a seed of an idea was planted, a
              dream was shared. Inception happened. 22 years on, we look back
at
              what we've built. Leave it up to us, and we'd love to do it all
              over again. Here's our story
            </div>
          </div>
        </div>
    </div>
  </div>
  <div class="branches mt-4 py-5">
    <div class="mx-4">
      <h1 class="fs-2">Our Branches</h1>
      <div class="underline"></div>
    </div>
    <div class="row g-0 justify-content-around align-content-center">
      <mat-card class="col-3 mx-3 my-3 bg-warning" color="accent"</pre>
        >Branch 1</mat-card
      <mat-card class="col-3 mx-3 my-3 bg-warning" color="accent"</pre>
        >Branch 2</mat-card
      <mat-card class="col-3 mx-3 my-3 bg-warning" color="accent"</pre>
        >Branch 3</mat-card</pre>
      <mat-card class="col-3 mx-3 my-3 bg-warning" color="accent"</pre>
        >Branch 1</mat-card
      <mat-card class="col-3 mx-3 my-3 bg-warning" color="accent"</pre>
        >Branch 2</mat-card
      <mat-card class="col-3 mx-3 my-3 bg-warning" color="accent"</pre>
        >Branch 3</mat-card</pre>
    </div>
  </div>
</div>
```

Auditorium Forms:

```
<div class="form-container">
 <div class="mx-auto text-center bg-color">
   <div class="container py-5">
     <h1 class="fs-2 text-dark py-5 text-uppercase">
       Register New Auditorium Here
   </div>
 </div>
 <div class="form-holder border border-4 border-info rounded mx-5">
   <form [formGroup]="auditoriumForm" (ngSubmit)="onSubmit()">
     <mat-vertical-stepper [linear]="true" #stepper>
       <mat-step [stepControl]="auditoriumForm">
          <ng-template matStepLabel>Auditorium Details/ng-template>
          <div class="row g-0 my-3 justify-content-around">
            <div class="col-sm-12 col-lg-5 mx-lg-2">
              <mat-form-field</pre>
                class="d-block w-100 text-dark"
               appearance="outline"
                <mat-label>Name</mat-label>
               <input</pre>
                 matInput
                  placeholder="Auditorium Name"
                  formControlName="name"
                <mat-error *ngIf="nameErrors">{{ nameErrors }}</mat-error>
              </mat-form-field>
            </div>
            <div class="col-sm-12 col-lg-5 mx-lg-2">
              <mat-form-field</pre>
                class="d-block w-100 text-dark"
                appearance="outline"
                <mat-label>Image URL</mat-label>
               <input
                 matInput
                  placeholder="Image Link"
                 formControlName="image"
              </mat-form-field>
            </div>
            <div class="col-sm-12 col-lg-5 mx-lg-2">
              <mat-form-field</pre>
                class="d-block w-100 text-dark"
               appearance="outline"
```

```
<mat-label>Seating Capacity</mat-label>
    <input matInput formControlName="seatCapacity" readonly />
  </mat-form-field>
</div>
<div class="col-sm-12 col-lg-5 mx-lg-2">
  <mat-form-field
    class="d-block w-100 text-dark"
   appearance="outline"
    <mat-label>Email Id</mat-label>
    <input</pre>
     matInput
      placeholder="Email Id"
      formControlName="email"
    <mat-error *ngIf="emailErrors">{{ emailErrors }}</mat-error>
  </mat-form-field>
</div>
<div class="col-sm-12 col-lg-5 mx-lg-2">
    class="d-block w-100 text-dark"
    appearance="outline"
    <mat-label>Customer Care Number</mat-label>
    <input</pre>
     matInput
      placeholder="Cust Care No"
      formControlName="customerCareNo"
    <mat-error *ngIf="customerCareNoErrors">{{
      customerCareNoErrors
    }}</mat-error>
  </mat-form-field>
</div>
<div class="col-sm-12 col-lg-5 mx-lg-2">
  <mat-form-field</pre>
    class="d-block w-100 text-dark"
    appearance="outline"
    <mat-label>Address</mat-label>
    <input</pre>
     matInput
      placeholder="Address"
     formControlName="address"
```

```
<mat-error *ngIf="addressErrors">{{ addressErrors }}</mat-</pre>
error>
              </mat-form-field>
            </div>
          </div>
          <div>
            <button mat-button matStepperNext type="button">Next</button>
          </div>
        <mat-step [stepControl]="auditoriumForm.get('safeties')!" optional>
          <ng-template matStepLabel>Add Safeties</ng-template>
          <div class="row g-0 justify-content-around">
               class="col-sm-12 col-lg-5 form-field"
              formArrayName="safeties"
               *ngFor="let safety of safeties.controls; index as i"
               <mat-form-field</pre>
                 class="d-block w-100 text-dark"
                appearance="outline"
                 <mat-label>Safety</mat-label>
                <input</pre>
                  matInput
                  placeholder="Hand Sanitizers Available"
                  [formControlName]="i"
                  [attr.list]="'safety-' + i"
                 <datalist [id]="'safety-' + i">
                   <option [value]="safety" *ngFor="let safety of allSafeties">
                     {{ safety }}
                  </option>
                 </datalist>
                 <mat-error *ngIf="safeties.touched">
                  <span *ngIf="safety.errors?.required"</pre>
                     >Safety cannot be empty</span
                  <span *ngIf="safety.errors?.uniqueName"</pre>
                     >Safety already added</span
                 </mat-error>
               </mat-form-field>
               <mat-icon
                 class="fs-2 w-auto text-danger delete-icon"
                (click)="removeSafety(i)"
```

```
aria-hidden="false"
        matTooltip="Remove the Safety"
        aria-label="delete icon"
        >delete</mat-icon</pre>
    </div>
  </div>
  <div class="text-center text-primary mt-4">
    <mat-icon
      class="pe-cursor fs-2"
      aria-hidden="false"
     matTooltip="Add one more safety"
      aria-label="add circle icon"
      (click)="addSafety()"
      >add circle</mat-icon</pre>
  </div>
  <div>
    <button mat-button matStepperPrevious type="button">Back</button>
    <button mat-button matStepperNext type="button">Next</button>
  </div>
</mat-step>
<mat-step [stepControl]="auditoriumForm.get('facilities')!" optional>
  <ng-template matStepLabel>Add Facilities/ng-template>
  <div class="row g-0 justify-content-around">
    <div
      class="col-sm-12 col-lg-5 form-field"
      formArrayName="facilities"
      *ngFor="let facility of facilities.controls; index as i"
      <mat-form-field</pre>
        class="d-block w-100 text-dark"
        appearance="outline"
        <mat-label>Facility</mat-label>
        <input</pre>
          matInput
          placeholder="Parking Facility"
          [formControlName]="i"
          [attr.list]="'facility-' + i"
        <datalist [id]="'facility-' + i">
          <option
            [value]="facility"
            *ngFor="let facility of allFacilities"
            {{ facility }}
```

```
</option>
        </datalist>
        <mat-error *ngIf="facilities.touched">
          <span *ngIf="facility.errors?.required"</pre>
            >Facility cannot be empty</span
          <span *ngIf="facility.errors?.uniqueName"</pre>
            >Facility already added</span
        </mat-error>
      </mat-form-field>
      <mat-icon
        class="fs-2 w-auto text-danger delete-icon"
        (click)="removeFacility(i)"
        aria-hidden="false"
        matTooltip="Remove the Facility"
        aria-label="delete icon"
        >delete</mat-icon</pre>
    </div>
  </div>
  <div class="text-center text-primary mt-4">
    <mat-icon
      class="pe-cursor fs-2"
      aria-hidden="false"
      matTooltip="Add one more facility"
      aria-label="add_circle icon"
      (click)="addFacility()"
      >add_circle</mat-icon</pre>
  </div>
    <button mat-button matStepperPrevious type="button">Back</button>
    <button mat-button matStepperNext type="button">Next</button>
  </div>
</mat-step>
<mat-step [stepControl]="auditoriumForm.get('shows')!" optional>
  <ng-template matStepLabel>Add Shows</ng-template>
  <div
    class="w-100"
    formArrayName="shows"
    *ngFor="let show of shows.controls; index as i"
    <div
      class="
       row
```

```
g-0
  justify-content-around
  align-content-center
  form-field
[formGroupName]="i"
<div class="col-lg-5 col-sm-12">
  <mat-form-field
    class="d-block w-100 text-dark"
    appearance="outline"
    <mat-label>Show Name</mat-label>
    <input</pre>
      matInput
      formControlName="name"
      [attr.list]="'show-name-' + i"
    <datalist [id]="'show-name-' + i">
      <option *ngFor="let show of showNames" [value]="show">
        {{ show }}
      </option>
    </datalist>
    <mat-error *ngIf="shows.touched">
      <span *ngIf="show.get('name')?.errors?.required"</pre>
        >Show Name cannot be empty</span
      <span *ngIf="show.get('name')?.errors?.uniqueName"</pre>
        >Show Name already added</span
    </mat-error>
  </mat-form-field>
</div>
<div class="col-lg-5 col-sm-12">
  <mat-form-field
    class="d-block w-100 text-dark"
    appearance="outline"
    <mat-label>Show Timing</mat-label>
    <input</pre>
      type="time"
      matInput
      placeholder="Matnee"
      formControlName="startTime"
    <mat-error *ngIf="shows.touched">
      <span *ngIf="show.get('startTime')?.errors?.required">
        Show Start Time cannot be empty</span
```

```
<span *ngIf="show.get('startTime')?.errors?.uniqueTime">
                      Time gap between the shows must be at-least 3
hours</span
                  </mat-error>
                </mat-form-field>
              </div>
              <mat-icon
                class="fs-2 w-auto text-danger delete-icon"
                (click)="removeShow(i)"
                aria-hidden="false"
                matTooltip="Remove the Show"
                aria-label="delete icon"
                >delete</mat-icon</pre>
            </div>
          </div>
          <div class="text-center text-primary mt-4">
            <mat-icon
              class="pe-cursor fs-2"
              aria-hidden="false"
              matTooltip="Add one more facility"
              aria-label="add_circle icon"
              (click)="addShow()"
              >add_circle</mat-icon</pre>
          </div>
          <div>
            <button mat-button matStepperPrevious type="button">Back</button>
            <button mat-button matStepperNext type="button">Next</button>
          </div>
        </mat-step>
        <mat-step>
          <ng-template matStepLabel>Review</ng-template>
            {{ auditoriumForm.value | json }}
          <div>
            <button mat-button matStepperPrevious type="button">Back</button>
              mat-button
              color="primary"
              [disabled]="!auditoriumForm.valid"
              Submit
            </button>
```

Contact Us:

```
<div class="contact-us-container">
 <div class="contact-us-wrapper postion-relative">
   <div class="contact-us-banner">
     <div class="contact-us-banner-text h-100">
       <h1 class="fs-1">Contact Us</h1>
       <h2 class="fs-2 text-uppercase">Drop us a line, get in touch</h2>
     </div>
   </div>
 </div>
 <div class="get-in-touch my-5">
   <div class="row g-0 justify-content-around">
     <div class="write-to-us col-sm-12 col-md-12 col-lg-7">
       <h1 class="fs-2">Write to us by filling in the form below</h1>
       <div class="underline"></div>
       <div class="form-container">
          <form class="example-form col-sm-12 col-lg-8 mx-auto">
           <mat-form-field</pre>
              class="example-full-width d-block text-dark"
              appearance="standard"
              <mat-label class="text-dark">Your Name</mat-label>
              <input type="text" matInput class="fs-5 text-dark" />
            </mat-form-field>
            <mat-form-field
              class="example-full-width d-block w-100 text-dark"
              appearance="standard"
              <mat-label class="text-dark">Email Id</mat-label>
              <input type="email" matInput class="fs-5 text-dark" />
            </mat-form-field>
            <mat-form-field</pre>
              class="example-full-width d-block w-100 text-dark"
              appearance="standard"
```

```
<mat-label class="text-dark">Message</mat-label>
              <textarea matInput placeholder="How can we help
you!"></textarea>
            </mat-form-field>
            <button mat-raised-button color="accent" type="submit">
            </button>
          </form>
        </div>
      </div>
      <div class="address col-sm-12 col-md-12 col-lg-4">
        <h1 class="fs-2">Contact Us</h1>
        <div class="underline text-success"></div>
        <div class="contact-address">
          <mat-list>
            <mat-list-item role="listitem" class="py-2 h-auto">
              <mat-icon class="d-inline-block"> place </mat-icon>
              <div class="address ms-3 text-muted col-10">
                Big Tree Entertainment Private Limited Ground Floor, Wajeda
                House, Gulmohar Cross Road No. 7, Juhu Scheme, Mumbai,
                Maharashtra - 400049
              </div>
            </mat-list-item>
            <mat-divider></mat-divider>
            <mat-list-item role="listitem" class="py-2 h-auto">
              <mat-icon class="d-inline-block"> email </mat-icon>
              <div class="address ms-3 text-muted col-</pre>
10">nms@cinemas.com</div>
            </mat-list-item>
            <mat-divider></mat-divider>
            <mat-list-item role="listitem" class="py-2 h-auto">
              <mat-icon class="d-inline-block col-1"> support_agent </mat-</pre>
icon>
              <div class="address ms-3 text-muted col-10">1800-894-4059</div>
            </mat-list-item>
          </mat-list>
        </div>
      </div>
    </div>
  </div>
</div>
```

Footer:

```
<footer
 *ngIf="router.url !== '/select-seats'"
 class="row w-100 justify-content-around mx-0 footer"
 [ngClass]="fixed ? 'fixed-bottom' : ''"
 <div
   class="text-center text-white"
   style="height: 50px; line-height: 50px"
   [ngClass]="{
     'bg-dark': !bgColor,
     bgColor: bgColor,
      'text-white': !textColor,
     textColor: textColor
   Designed & Developed by
     href="https://jriyaz.github.io/Portfolio/"
     target="_blank"
     class="text-decoration-none mx-2"
     ><strong>Hari G</strong></a
 </div>
</footer>
```

Forgot Password:

```
<mat-label>Enter your username</mat-label>
      <input</pre>
        matInput
        type="text"
        placeholder="nms@cinemas.com"
        formControlName="username"
        class="fs-5"
      <mat-hint *ngIf="username.pending" class="text-warning"</pre>
        >Checking for username...</mat-hint
      <mat-error *ngIf="usernameErrors">{{ usernameErrors }}</mat-error>
    </mat-form-field>
 </div>
 <div class="col-12 mb-3">
    <mat-form-field appearance="outline" class="text-white d-block">
      <mat-label>Enter your password</mat-label>
      <input</pre>
        matInput
        [type]="hidePassword ? 'password' : 'text'"
        formControlName="password"
        class="fs-5"
      <mat-error *ngIf="passwordErrors">{{ passwordErrors }}</mat-error>
      <button</pre>
        mat-icon-button
        matSuffix
        (click)="hidePassword = !hidePassword"
        [attr.aria-label]="'Hide password'"
        [attr.aria-pressed]="hidePassword"
        <mat-icon>{{
          hidePassword ? "visibility_off" : "visibility"
        }}</mat-icon>
      </button>
    </mat-form-field>
 </div>
 <button
   mat-raised-button
   [color]="!forgotPasswordForm.valid ? 'accent' : 'primary'"
   class="col-12"
   type="submit"
   Change Password
  </button>
</form>
```

```
</div>
</main>
```

Header:

```
<nav
 *ngIf="router.url !== '/select-seats'"
 id="nav-bar"
 class="navbar navbar-expand-lg navbar-dark bg-show text-white px-lg-3"
 <div class="container-fluid">
   <a mat-button class="navbar-brand ms-sm-3 fs-4" routerLink="/home">{{
   }}</a>
   <button
    class="navbar-toggler"
    mat-icon-button
    aria-label="Example icon-button with a menu"
    type="button"
    data-bs-toggle="collapse"
    data-bs-target="#navbarSupportedContent"
    aria-controls="navbarSupportedContent"
    aria-expanded="false"
    aria-label="Toggle navigation"
    <mat-icon>more_vert</mat-icon>
   </button>
   <div class="collapse navbar-collapse" id="navbarSupportedContent">
    mat-button
          class="nav-link"
          aria-current="page"
          routerLinkActive="active"
          routerLink="/home"
          >Home</a
      mat-button
          class="nav-link"
          routerLinkActive="active"
          [routerLink]="['/movies']"
          >Movies</a
```

```
mat-button
  class="nav-link"
  routerLinkActive="active"
  routerLink="/about"
  >About Us</a
mat-button
  class="nav-link"
  routerLinkActive="active"
  routerLink="/contact"
  >Contact Us</a
class="nav-link dropdown-toggle"
  href="#"
  id="admin-panel"
  role="button"
  data-bs-toggle="dropdown"
  aria-expanded="false"
  Admin Panel
 class="dropdown-item"
     href="#"
     routerLinkActive="active"
     routerLink="/admin/add-auditorium"
     >Add Auditorium</a
  class="dropdown-item"
     href="#"
     routerLinkActive="active"
     routerLink="/admin/add-movie"
     >Add Movie</a
```

```
class="dropdown-item"
             href="#"
             routerLinkActive="active"
             routerLink="/admin/manage"
             >Manage</a
          <div class="profile text-sm-center">
      <!-- <button mat-button [matMenuTriggerFor]="menu">
          class="rounded-circle mx-2"
          src="https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcSK9DmK0F9VCBqRzdHLzwyy0XjDm4k0YjD9IZQo2Wvi
iLzzxDmzwYQZaVK6_7o_Qc7famc&usqp=CAU"
          alt=""
          width="45"
          height="45"
        My Account
      </button>
        <a routerLink="/user/login" mat-menu-item>Login</a>
        <a routerLink="/user/register" mat-menu-item>Register</a>
        <a routerLink="/user/forgot-password" mat-menu-item>
          Forgot Password
        </a>
        <a routerLink="/user/profile" mat-menu-item>My Profile</a>
        <a routerLink="/user/bookings" mat-menu-item>My Bookings</a>
        <a routerLink="/user/logout" mat-menu-item>Logout</a>
      class="nav-link dropdown-toggle fs-6 my-2"
            href="#"
            id="account-links"
            role="button"
            data-bs-toggle="dropdown"
            aria-expanded="false"
            >{{ service.getUser()?.email! }}
```

```
class="dropdown-menu dropdown-menu-dark"
           aria-labelledby="account-links"
           <a class="dropdown-item py-1" routerLink="/my/profile"</pre>
               >Profile</a
           <a class="dropdown-item py-1" routerLink="/my/bookings"</pre>
               >Bookings</a
           class="btn btn-outline-warning btn-sm col-11 mt-2"
               (click)="onLogout()"
               >Logout</a
           <div class="btn-group p-2" *ngIf="!service.isLoggedIn()">
          routerLink="/user/login"
          routerLinkActive="active"
          class="btn btn-primary btn-sm rounded mx-1"
          >Login</a
          routerLink="/user/register"
          routerLinkActive="active"
          class="btn btn-success btn-sm rounded mx-1"
          >Register</a
      </div>
    </div>
   </div>
 </div>
</nav>
```

Home Page:

```
<div class="container-fluid my-2 pb-5">
```

```
class="text-center text-warning h-100vh mx-auto"
 *ngIf="(carousel$ | async)?.length! < 1"
 Movie List is empty
<ng-container *ngIf="(carousel$ | async)?.length! > 0">
 <div id="movies-carousel" class="carousel slide" data-bs-ride="carousel">
   <div class="carousel-indicators">
     <button
       [ngClass]="i == 0 ? 'active' : ''"
        [attr.aria-current]="i == 0 ? true : false"
        *ngFor="let movie of carousel$ | async; index as i"
       type="button"
       data-bs-target="#movies-carousel"
       [attr.data-bs-slide-to]="i"
       [attr.aria-label]="'Slide ' + i"
     ></button>
   </div>
   <div class="carousel-inner">
       class="carousel-item"
        *ngFor="let movie of carousel$ | async; index as i"
       [ngClass]="i == 0 ? 'active' : ''"
       <img
         [src]="movie.bgImage"
         class="d-block w-100"
         height="550"
         [alt]="movie.name"
       <div class="carousel-caption d-none d-md-block">
         <h5 class="fs-1 mb-3">{{ movie.name | uppercase }}</h5>
         {{
              (movie.language | titlecase) +
                (movie.genres?.join(" - ") | titlecase) +
               movie.year
           }}
         </div>
     </div>
   </div>
    <button
     class="carousel-control-prev"
```

```
type="button"
        data-bs-target="#movies-carousel"
        data-bs-slide="prev"
        <span class="carousel-control-prev-icon" aria-hidden="true"></span>
        <span class="visually-hidden">Previous</span>
      </button>
      <button
        class="carousel-control-next"
        type="button"
        data-bs-target="#movies-carousel"
        data-bs-slide="next"
        <span class="carousel-control-next-icon" aria-hidden="true"></span>
        <span class="visually-hidden">Next</span>
      </button>
    </div>
    <section
      *ngIf="(nowPlaying$ | async)?.length! > 0"
      class="now-showing my-5 bg-dark text-white p-lg-5"
      <div class="row g-0 mb-5 justify-content-around">
        <h3 class="text-uppercase fs-2 col-11">Now Playing</h3>
          routerLink="../movies"
          [queryParams]="{ show: 'now-playing' }"
          class="d-block col-1 text-end"
          >view all</a</pre>
      </div>
      <div class="now-showing-movies">
        <div class="card-group row g-0 justify-content-around">
            class="col-sm-11 col-md-5 col-lg-3 col-xxl-2 px-2 position-
relative"
            *ngFor="let movie of nowPlaying$ | async"
            <div class="image-card postion-relative rounded-5 overflow-</pre>
hidden">
              <img
                [src]="movie.image"
                class="card-img-top"
                height="400"
                width="284"
                [alt]="movie.name"
```

```
class="
              image-release
              postion-absolute
              bottom-0
              start-0
              bg-white
              text-dark
              w-100
              text-center
              py-2
            {{ formatRelease(movie.release) }}
          </div>
        </div>
        <div class="card-body text-center">
          <h2 class="card-title fs-4 mb-0">
              class="stretched-link"
              routerLink="../movie/{{ movie.id }}"
              >{{ movie.name | uppercase }}</a</pre>
          </h2>
          <h3 class="card-text text-muted">
            {{ movie.language | titlecase }}
          </h3>
        </div>
      </div>
    </div>
  </div>
</section>
<section</pre>
  *ngIf="(upComing$ | async)?.length! > 0"
  class="up-coming my-5 p-lg-5"
  <div class="row g-0 mb-5 justify-content-around">
    <h3 class="text-uppercase fs-2 col-11">Up Coming</h3>
      routerLink="../movies"
      [queryParams]="{ show: 'up-coming' }"
      class="d-block col-1 text-end"
      >view all</a</pre>
  </div>
  <div class="up-coming-movies">
    <div class="card-group row g-0 justify-content-around">
```

```
class="col-sm-11 col-md-5 col-lg-3 col-xxl-2 px-2 position-
relative"
            *ngFor="let movie of upComing$ | async"
            <div class="image-card postion-relative rounded-5 overflow-</pre>
hidden">
                [src]="movie.image"
                class="card-img-top"
                height="400"
                width="284"
                [alt]="movie.name"
                class="
                  image-release
                  postion-absolute
                  bottom-0
                  start-0
                  bg-dark
                  text-white
                  w-100
                  text-center
                  py-2
                {{ formatRelease(movie.release) }}
              </div>
            </div>
            <div class="card-body text-center">
              <h2 class="card-title fs-4 mb-0">
                  class="stretched-link"
                  routerLink="../movie/{{ movie.id }}"
                  >{{ movie.name | uppercase }}</a</pre>
              </h2>
              <h3 class="card-text text-muted">
                {{ movie.language | titlecase }}
              </h3>
          </div>
        </div>
      </div>
    </section>
  </ng-container>
</div>
```

Layout:

```
<app-header></app-header>
<router-outlet></app-footer></app-footer>
```

Log In:

```
<main class="px-3 my-auto">
    class="lead mb-2 p-2 rounded"
    [ngClass]="(alertDanger$ | async) ? 'alert-danger' : 'alert-success'"
    *ngIf="showAlert$ | async"
   {{ alertMessage$ | async }}
  <h1 class="fs-2 py-4">Login Page</h1>
  <div class="example-container">
    <form
     action="#"
      class="row w-100 g-0"
      [formGroup]="loginForm"
      (ngSubmit)="onSubmit()"
      <div class="col-12 mb-3">
        <mat-form-field appearance="outline" class="text-white d-block">
          <mat-label>Enter your username</mat-label>
          <input matInput type="text" formControlName="username" class="fs-5"</pre>
          <mat-error *ngIf="usernameErrors">{{ usernameErrors }}</mat-error>
        </mat-form-field>
      </div>
      <div class="col-12 mb-3">
        <mat-form-field appearance="outline" class="text-white d-block">
          <mat-label>Enter your password</mat-label>
          <input</pre>
            matInput
            [type]="hidePassword ? 'password' : 'text'"
            formControlName="password"
            class="fs-5"
          <mat-error *ngIf="passwordErrors">{{ passwordErrors }}</mat-error>
```

```
<button
           mat-icon-button
           matSuffix
            (click)="hidePassword = !hidePassword"
            [attr.aria-label]="'Hide password'"
            [attr.aria-pressed]="hidePassword"
           <mat-icon>{{
             hidePassword ? "visibility_off" : "visibility"
           }}</mat-icon>
         </button>
       </mat-form-field>
     </div>
     <button
       mat-raised-button
       class="col-12"
       type="submit"
       [color]="!loginForm.valid ? 'accent' : 'primary'"
       Login
     </button>
   </form>
 </div>
</main>
```

LogIn LayOut:

Manage:

```
<div class="wrapper w-100 my-2">
 <div class="container-fluid row g-0 h-90vh">
   <div class="col-lg-3 px-2 border-3 border-end row g-0">
     <h2
       class="
         py-2
         rounded
         text-center text-dark
         shadow-sm
         border border-2 border-dark
         align-self-start
       Cinema Halls
     </h2>
     <div class="overflow-auto h-70vh">
       <h1 *ngIf="!allAuditoriums" class="text-danger text-center">
         Cinema Hall list is empty
       <mat-list role="list" *ngIf="allAuditoriums">
         <mat-list-item
           role="listitem"
           *ngFor="let hall of allAuditoriums"
           class="position-relative options pe-cursor rounded"
           [ngClass]="{ highlight: hall.id == selectedCinemaHallId }"
```

```
(click)="onCinemaHallSelect(hall.id!)"
        <div class="w-100">
          {{ hall.name | uppercase }}
        </div>
        <span class="icon-holder w-auto">
          <mat-icon
            class="w-auto text-info me-1 pe-cursor edit-icon"
            aria-hidden="false"
            matTooltip="Edit Cinema Hall"
            (click)="onEditCinemaHall(hall.id!)"
            aria-label="edit icon"
            >edit
          </mat-icon>
          <mat-icon
            class="w-auto text-danger ms-1 pe-cursor delete-icon"
            aria-hidden="false"
            matTooltip="Delete Cinema Hall"
            (click)="onDeleteCinemaHall(hall.id!)"
            aria-label="delete icon"
            >delete
          </mat-icon>
       </span>
      </mat-list-item>
    </mat-list>
 </div>
   mat-raised-button
   class="align-self-end mt-auto w-100 d-block"
   color="warn"
   routerLink="../add-auditorium"
   Add Cinema Hall
 </a>
</div>
<div class="col-lg-3 px-2 border-3 border-end row g-0">
   class="
      py-2
     rounded
     text-center text-dark
     shadow-sm
     align-self-start
     border border-2 border-dark
   Shows
  </h2>
```

```
<div class="overflow-auto h-70vh">
  <h1 *ngIf="!selectedShows" class="text-danger text-center">
    Select a Cinema Hall
  </h1>
  <mat-list *ngIf="selectedShows" role="list">
    <mat-list-item
      role="listitem"
      *ngFor="let show of selectedShows"
      class="position-relative options pe-cursor rounded"
      [ngClass]="{ highlight: show.id == selectedShowId }"
      (click)="onShowSelect(show.id!)"
      <div class="w-100 row g-0 justify-content-around">
        <div class="col-5">{{ show.name | titlecase }}</div>
        <div class="col-5">
          {{ "Time: " + formatTime(show.startTime) }}
        </div>
      </div>
      <span class="icon-holder w-auto">
        <mat-icon
          class="w-auto text-info me-1 pe-cursor edit-icon"
          aria-hidden="false"
          matTooltip="Edit Show"
          aria-label="edit icon"
          (click)="onEditShow(show.id!)"
          >edit</mat-icon
        <mat-icon
          class="w-auto text-danger ms-1 pe-cursor delete-icon"
          aria-hidden="false"
          matTooltip="Delete Show"
          aria-label="delete icon"
          (click)="onDeleteShow(show.id!)"
          >delete</mat-icon</pre>
      </span>
    </mat-list-item>
  </mat-list>
</div>
<button
  *ngIf="selectedShows"
  mat-raised-button
  class="align-self-end mt-auto w-100 d-block"
  (click)="onAddShow()"
 color="accent"
  Add Show
```

```
</button>
</div>
<div class="col-lg-6 px-2 row g-0">
   class="
     py-2
     rounded
     text-center text-dark
     shadow-sm
     align-self-start
     border border-2 border-dark
   Movies
 </h2>
 <div class="overflow-auto h-70vh">
      *ngIf="selectedShowId && !selectedMovieShows"
     class="text-warning text-center"
      Selected Show has no movies
   <h1 *ngIf="!selectedShowId" class="text-danger text-center">
     Select a Show
    <mat-list *ngIf="selectedShowId" role="list">
      <mat-list-item
        role="listitem"
        *ngFor="let shows of selectedMovieShows"
        class="position-relative show-options pe-cursor rounded h-auto py-
        <div class="w-100">
          <img
            class="example-option-img me-2 rounded d-inline-block"
            aria-hidden
            [src]="getMovieImage(shows.movieId!)"
            height="120"
            width="120"
          {{
            (getShowMovieName(shows.movieId!) | titlecase) +
              " | lang: " +
              getShowMovieLanguage(shows.movieId!) +
              " | start: " +
              (shows.start | date: "longDate") +
              " | end: " +
              (shows.end | date: "longDate")
```

```
}}
            </div>
            <span class="icon-holder w-auto">
              <mat-icon
                class="w-auto text-info me-1 pe-cursor edit-icon"
                aria-hidden="false"
                matTooltip="Edit Movie Show"
                aria-label="edit icon"
                (click)="onEditMovie(shows.id!)"
                >edit</mat-icon
              <mat-icon
                class="w-auto text-danger ms-1 pe-cursor delete-icon"
                aria-hidden="false"
                matTooltip="Delete Movie Show"
                aria-label="delete icon"
                (click)="onDeleteMovie(shows.id!)"
                >delete</mat-icon
            </span>
          </mat-list-item>
       </mat-list>
     </div>
     <div
        class="row g-0 align-self-end mt-auto col-12 justify-content-between"
         mat-raised-button
         class="col-5 text-capitalize"
         routerLink="../add-movie"
         color="primary"
         Add New Movie
       </a>
       <button
         *ngIf="selectedShowId"
         mat-raised-button
         class="col-5 text-capitalize"
         (click)="onAddMovieToTheShow()"
         color="warn"
         Add movie to the show
        </button>
     </div>
   </div>
 </div>
</div>
```

Movies:

```
<div class="movie-section">
 <div class="position-relative poster-wrapper p-3">
     class="movie-banner"
     style="
       background: linear-gradient(
            90deg,
            rgb(34, 34, 34) 24.97%,
           rgb(34, 34, 34) 38.3%,
           rgba(34, 34, 34, 0.04) 97.47%,
            rgb(34, 34, 34) 100%
         no-repeat center center;
       background-size: cover;
     style.background-image="linear-gradient(
       90deg,
       rgb(34, 34, 34) 24.97%,
       rgb(34, 34, 34) 38.3%,
       rgba(34, 34, 34, 0.04) 97.47%,
       rgb(34, 34, 34) 100%
     ), url({{ (selectedMovie$ | async)?.bgImage }})"
     <div class="movie-poster row g-0">
       <div class="movie-image col-lg-3 col-md-6 col-sm-10 rounded-5">
          <img
            [src]="(selectedMovie$ | async)?.image"
            [alt]="(selectedMovie$ | async)?.name"
           width="100%"
           height="100%"
         <div
            class="
             movie-release
              position-absolute
             bottom-0
              start-0
              py-2
             w-100
             bg-white
              text-center
            {{ formatRelease((selectedMovie$ | async)?.release) }}
```

```
</div>
     </div>
     <div class="movie-details text-white mx-3 px-3 col-lg-5 col-sm-12">
       <div class="movie-title mb-lg-5 fs-lg-1">
         <h1>
           {{
             ((selectedMovie$ | async)?.name | uppercase) +
              ((selectedMovie$ | async)?.caption | titlecase)
           }}
         </h1>
       </div>
       <div class="movie-format my-3">
         <button class="btn btn-light btn-sm diabled mx-1">4D</button>
         <button class="btn btn-light btn-sm diabled mx-1">
           {{ (selectedMovie$ | async)?.language }}
         </button>
       </div>
       <div class="movie-duration my-3">
         {{
             ((selectedMovie$ | async)?.duration | titlecase) +
              (selectedMovie$ | async)?.genres?.join(", ")
           }}
         </div>
       <div class="links mt-4 align-self-end">
           mat-raised-button
           color="accent"
           class="me-2"
           (click)="openBottomSheet()"
           >Book Tickets</a
       </div>
     </div>
   </div>
 </div>
</div>
<div class="about-movie text-dark p-4">
 <h2>About the Movie</h2>
 {{ (selectedMovie$ | async)?.story }}
 </div>
<!-- <nav class="px-4 py-3 w-100 shadow-sm bg-white text-dark">
```

```
<h1>{{(selectedMovie$ | async)?.name + ' : '+ (selectedMovie$ |
async)?.caption}}</h1>
    {{(selectedMovie$ | async)?.genres.join(', ')}}
  </nav> -->
 <div class="movie-cast ms-5 my-4" *ngIf="(cast$ | async)?.length! > 0">
    <h1 class="fs-lg-2">Cast</h1>
    <div class="row g-0">
        class="cast text-center col-sm-12 col-md-6 col-lg-3"
        *ngFor="let cast of cast$ | async"
       <div class="image rounded-circle mx-auto mb-3">
         <!-- class="style__Image-eykeme-1 dkwyqp" -->
          <!-- style="border-radius: 60px; opacity: 1" -->
         <img
            [alt]="cast.name"
           width="120px"
           height="120px"
           [src]="cast.image"
       </div>
       <div class="cast-name">
          <h5 class="fs-5">{{ cast.name }}</h5>
       </div>
     </div>
    </div>
  </div>
  <div class="movie-crew ms-5 my-4 pb-5" *ngIf="(crew$ | async)?.length! > 0">
    <h1 class="fs-lg-2">Crew</h1>
    <div class="row g-0">
       class="crew text-center col-sm-12 col-md-6 col-lg-3"
       *ngFor="let crew of crew$ | async"
        <div class="image rounded-circle mx-auto mb-3">
         <img
           [alt]="crew.name"
           width="120px"
           height="120px"
           [src]="crew.image"
        </div>
        <div class="cast-name">
         <h5 class="fs-5">{{ crew.name }}</h5>
        </div>
      </div>
```

```
</div>
</div>
</div>
```

Movie Forms:

```
<div class="form-container">
 <div class="mx-auto text-center bg-color">
   <div class="container py-5">
     <h1 class="fs-2 text-dark py-5 text-uppercase">Add New Movie</h1>
   </div>
 </div>
 <div class="form-holder border border-4 border-warning rounded mx-5">
   <form [formGroup]="movieForm" (ngSubmit)="onSubmit()">
     <mat-horizontal-stepper [linear]="true" #stepper>
       <mat-step
         [stepControl]="validMovieDetails"
         errorMessage="Movie details required"
         <ng-template matStepLabel>Movie Details</ng-template>
          <div class="row g-0 my-3 justify-content-around">
            <div class="col-sm-12 col-lg-5 mx-lg-2">
              <mat-form-field
                class="d-block w-100 text-dark"
                appearance="outline"
                <mat-label>Name</mat-label>
                <input</pre>
                 matInput
                  placeholder="Movie Name"
                  formControlName="name"
                <mat-error *ngIf="nameErrors">{{ nameErrors }}</mat-error>
              </mat-form-field>
            </div>
            <div class="col-sm-12 col-lg-5 mx-lg-2">
              <mat-form-field
                class="d-block w-100 text-dark"
                appearance="outline"
                <mat-label>Release Date</mat-label>
                <input</pre>
                  matInput
                  [min]="todayDate"
```

```
[matDatepicker]="picker"
                   placeholder="Release Date"
                   formControlName="release"
                 <mat-datepicker #picker></mat-datepicker>
                 <mat-datepicker-toggle</pre>
                   matSuffix
                   [for]="picker"
                 ></mat-datepicker-toggle>
                 <mat-error *ngIf="releaseErrors">{{ releaseErrors }}</mat-</pre>
              </mat-form-field>
            </div>
            <div class="col-sm-12 col-lg-5 mx-lg-2">
                class="d-block w-100 text-dark"
                appearance="outline"
                 <mat-label>Image URL</mat-label>
                <input</pre>
                   matInput
                   placeholder="Image Link"
                   formControlName="image"
                 <mat-error *ngIf="imageErrors">{{ imageErrors }}</mat-error>
              </mat-form-field>
            </div>
            <div class="col-sm-12 col-lg-5 mx-lg-2">
               <mat-form-field
                 class="d-block w-100 text-dark"
                appearance="outline"
                 <mat-label>Background Image URL</mat-label>
                <input</pre>
                   matInput
                   placeholder="Background Image Link"
                   formControlName="bgImage"
                 <mat-error *ngIf="bgImageErrors">{{ bgImageErrors }}</mat-</pre>
error>
               </mat-form-field>
            </div>
            <div class="col-sm-12 col-lg-5 mx-lg-2">
               <mat-form-field</pre>
                class="d-block w-100 text-dark"
```

```
appearance="outline"
      <mat-label>Duration</mat-label>
      <input</pre>
        matInput
        placeholder="2h 25m"
        formControlName="duration"
      <mat-error *ngIf="durationErrors">{{
        durationErrors
      }}</mat-error>
    </mat-form-field>
  </div>
  <div class="col-sm-12 col-lg-5 mx-lg-2">
    <mat-form-field
      class="d-block w-100 text-dark"
      appearance="outline"
      <mat-label>Movie Caption</mat-label>
      <input matInput formControlName="caption" />
    </mat-form-field>
  </div>
  <div class="col-sm-12 col-lg-11">
    <mat-form-field</pre>
      class="d-block w-100 text-dark"
      appearance="outline"
      <mat-label>Story</mat-label>
      <textarea
        matInput
        formControlName="story"
        placeholder="Narrate the story here"
      ></textarea>
      <mat-error *ngIf="storyErrors">{{ storyErrors }}</mat-error>
    </mat-form-field>
  </div>
</div>
<div>
  <button
    mat-button
    matStepperNext
    type="button"
    [disabled]="!validMovieDetails.valid"
    Next
  </button>
```

```
</div>
</mat-step>
<mat-step [stepControl]="movieForm.get('languages')!">
  <ng-template matStepLabel>Add Language</ng-template>
  <div class="col-12 my-4 px-sm-1 px xl-4">
    <mat-form-field
      class="example-chip-list"
      class="d-block w-100 text-dark"
      <mat-label>Add Language</mat-label>
      <mat-chip-list #languageList aria-label="language selection">
        <mat-chip
          *ngFor="let language of languages"
          [selectable]="true"
          [removable]="true"
          (removed)="removeLanguage(language)"
          {{ language }}
          <mat-icon matChipRemove *ngIf="true">cancel</mat-icon>
        </mat-chip>
        <input</pre>
          placeholder="New Language..."
          #languageInput
          formControlName="languages"
          [matAutocomplete]="auto"
          [matChipInputFor]="languageList"
          [matChipInputSeparatorKeyCodes]="separatorKeysCodes"
          (matChipInputTokenEnd)="addLanguage($event)"
        <mat-error
          *ngIf="movieForm.get('languages')?.hasError('required')"
          >Language cannot be empty</mat-error
      </mat-chip-list>
      <mat-autocomplete
        #auto="matAutocomplete"
        (optionSelected)="selectedLanguage($event)"
        <mat-option
          *ngFor="let language of filteredLanguages | async"
          [value]="language"
          {{ language }}
        </mat-option>
      </mat-autocomplete>
    </mat-form-field>
```

```
</div>
  <!-- <div class="row g-0 justify-content-around">
      class="col-sm-12 col-lg-5 form-field"
      formArrayName="genres"
      *ngFor="let genre of genres.controls; index as i"
      <mat-form-field
        class="d-block w-100 text-dark"
        appearance="outline"
        <mat-label>Genre</mat-label>
        <input matInput placeholder="Romantic" [formControlName]="i"</pre>
        <mat-error *ngIf="genre.errors?.required && genres.touched"</pre>
          >Genre Cannot be empty</mat-error
      </mat-form-field>
      <mat-icon
        class="fs-2 w-auto text-danger delete-icon"
        (click)="removeGenre(i)"
        aria-hidden="false"
        aria-label="delete icon"
        >delete</mat-icon</pre>
    </div>
  </div>
  <div class="text-center text-primary mt-4">
      class="pe-cursor fs-2"
      aria-hidden="false"
     matTooltip="Add one more Genre"
     aria-label="add circle icon"
     (click)="addGenre()"
  </div> -->
  <div>
    <button mat-button matStepperPrevious type="button">Back</button>
    <button mat-button matStepperNext type="button">Next</button>
  </div>
</mat-step>
<mat-step [stepControl]="movieForm.get('genres')!">
  <ng-template matStepLabel>Add Language</ng-template>
  <div class="row g-0 justify-content-around">
```

```
<div
    class="col-sm-12 col-lg-5 form-field"
    formArrayName="genres"
    *ngFor="let genres of genres.controls; index as i"
    <mat-form-field
      class="d-block w-100 text-dark"
      appearance="outline"
      <mat-label>Genre</mat-label>
      <input</pre>
        matInput
        placeholder="Comedy"
        [formControlName]="i"
        [attr.list]="'genres-' + i"
      <datalist [id]="'genres-' + i">
        <option [value]="genre" *ngFor="let genre of allGenres">
          {{ genre }}
        </option>
      </datalist>
      <mat-error *ngIf="genres.touched">
        <span class="mx-1" *ngIf="genres.errors?.required"</pre>
          >Genre cannot be empty</span
        <span class="mx-1" *ngIf="genres.errors?.validGenre"</pre>
          >Invalid movie genre</span
        <span class="mx-1" *ngIf="genres.errors?.uniqueName"</pre>
          >Genre already added</span
      </mat-error>
    </mat-form-field>
    <mat-icon
      class="fs-2 w-auto text-danger delete-icon"
      (click)="removeGenre(i)"
      aria-hidden="false"
      matTooltip="Remove the Genre"
      aria-label="delete icon"
      >delete</mat-icon</pre>
  </div>
</div>
<div class="text-center text-primary mt-4">
  <mat-icon
   class="pe-cursor fs-2"
```

```
aria-hidden="false"
     matTooltip="Add one more Genre"
      aria-label="add circle icon"
      (click)="addGenre()"
      >add circle</mat-icon</pre>
 </div>
  <div>
   <button mat-button matStepperPrevious type="button">Back</button>
    <button mat-button matStepperNext type="button">Next</button>
 </div>
</mat-step>
<mat-step [stepControl]="movieForm.get('casts')!">
 <ng-template matStepLabel>Add Cast Details
 <div
   class="w-100"
   formArrayName="casts"
    *ngFor="let cast of casts.controls; index as i"
    <div
     class="
       row
       g-0
        justify-content-around
        align-content-center
        form-field
      [formGroupName]="i"
      <div class="col-lg-3 col-sm-6">
        <mat-form-field
          class="d-block w-100 text-dark"
          appearance="outline"
          <mat-label>Actor Name</mat-label>
          <input</pre>
           matInput
            placeholder="Actor Name"
            formControlName="name"
          <mat-error
            *ngIf="cast.get('name')?.errors?.required && cast.touched"
            Name cannot be empty
          </mat-error>
        </mat-form-field>
      </div>
```

```
<div class="col-lg-3 col-sm-6">
                <mat-form-field</pre>
                  class="d-block w-100 text-dark"
                  appearance="outline"
                  <mat-label>Actor Role</mat-label>
                  <input matInput placeholder="Hero" formControlName="role" />
                  <mat-error
                    *ngIf="cast.get('role')?.errors?.required && cast.touched"
                    Actor role cannot be empty
                  </mat-error>
                </mat-form-field>
              </div>
              <div class="col-lg-3 col-sm-6">
                <mat-form-field</pre>
                  class="d-block w-100 text-dark"
                  appearance="outline"
                  <mat-label>Actor Image/mat-label>
                  <input</pre>
                    matInput
                    placeholder="Actor image"
                    formControlName="image"
                  <mat-error
                    *ngIf="cast.get('image')?.errors?.required &&
cast.touched"
                    Actor image cannot be empty
                  </mat-error>
                </mat-form-field>
              </div>
              <mat-icon
                class="fs-2 w-auto text-danger delete-icon"
                (click)="removeCast(i)"
                aria-hidden="false"
                matTooltip="Remove the Cast"
                aria-label="delete icon"
                >delete</mat-icon</pre>
            </div>
          </div>
          <div class="text-center text-primary mt-4">
              class="pe-cursor fs-2"
```

```
aria-hidden="false"
     matTooltip="Add one more Cast"
      aria-label="add circle icon"
      (click)="addCast()"
      >add circle</mat-icon</pre>
 </div>
  <div>
   <button mat-button matStepperPrevious type="button">Back</button>
   <button mat-button matStepperNext type="button">Next</button>
 </div>
</mat-step>
<mat-step [stepControl]="movieForm.get('crews')!">
 <ng-template matStepLabel>Add Crew Details
 <div
   class="w-100"
   formArrayName="crews"
    *ngFor="let crew of crews.controls; index as i"
    <div
     class="
       row
       g-0
        justify-content-around
        align-content-center
        form-field
      [formGroupName]="i"
      <div class="col-lg-3 col-sm-6">
        <mat-form-field
          class="d-block w-100 text-dark"
          appearance="outline"
          <mat-label>Crew Name</mat-label>
          <input</pre>
           matInput
            placeholder="Crew Name"
            formControlName="name"
          <mat-error
            *ngIf="crew.get('name')?.errors?.required && crew.touched"
            Name cannot be empty
          </mat-error>
        </mat-form-field>
      </div>
```

```
<div class="col-lg-3 col-sm-6">
                <mat-form-field</pre>
                  class="d-block w-100 text-dark"
                  appearance="outline"
                  <mat-label>Crew Role</mat-label>
                  <input</pre>
                    matInput
                    placeholder="Director"
                    formControlName="role"
                  <mat-error
                    *ngIf="crew.get('role')?.errors?.required && crew.touched"
                    Crew role cannot be empty
                  </mat-error>
                </mat-form-field>
              </div>
              <div class="col-lg-3 col-sm-6">
                <mat-form-field</pre>
                  class="d-block w-100 text-dark"
                  appearance="outline"
                  <mat-label>Crew Image/mat-label>
                  <input</pre>
                    matInput
                    placeholder="Crew image"
                    formControlName="image"
                  <mat-error
                    *ngIf="crew.get('image')?.errors?.required &&
crew.touched"
                    Crew image cannot be empty
                  </mat-error>
                </mat-form-field>
              </div>
              <mat-icon
                class="fs-2 w-auto text-danger delete-icon"
                (click)="removeCrew(i)"
                aria-hidden="false"
                matTooltip="Remove the Cast"
                aria-label="delete icon"
                >delete</mat-icon
            </div>
```

```
</div>
          <div class="text-center text-primary mt-4">
            <mat-icon
              class="pe-cursor fs-2"
             aria-hidden="false"
             matTooltip="Add one more Cast"
             aria-label="add circle icon"
              (click)="addCrew()"
             >add circle</mat-icon</pre>
         </div>
         <div>
           <button mat-button matStepperPrevious type="button">Back</button>
            <button mat-button matStepperNext type="button">Next</button>
         </div>
       </mat-step>
         <ng-template matStepLabel>Review</ng-template>
              {{ movieForm.value | json }}
           </pre
         <div>
           <button mat-button matStepperPrevious type="button">Back</button>
           <button
             mat-button
             class="text-success"
              [disabled]="!movieForm.valid"
             Submit
           </button>
         </div>
       </mat-step>
     </mat-horizontal-stepper>
   </form>
 </div>
</div>
```

Movies:

```
<mat-form-field appearance="outline" class="d-block w-100">
    <mat-label>Show</mat-label>
    <mat-select name="showText" [(ngModel)]="showText">
      <mat-option
        *ngFor="let type of types"
        [value]="type"
        (onSelectionChange)="onTypeChange(type)"
        >{{ type }}</mat-option</pre>
    </mat-select>
  </mat-form-field>
</div>
<div class="filter">
  <h2 class="fs-2 text-center text-dark text-uppercase">Filters</h2>
  <mat-accordion
    class="example-headers-align"
    multi
   togglePosition="before"
    <mat-expansion-panel class="rounded my-1">
      <mat-expansion-panel-header>
        <mat-panel-title
          [ngClass]="{
            'text-danger': languageFilter != null && languageFilter != ''
          Language
        </mat-panel-title>
        <mat-panel-description</pre>
          (click)="clearLanguageFilter()"
          class="clear-filter"
          [ngClass]="{
             'text-danger': languageFilter != null && languageFilter != ''
          Clear
        </mat-panel-description>
      </mat-expansion-panel-header>
      <div class="row g-0 justify-content-around">
        <div
          class="my-2 col-4 text-start"
          *ngFor="let language of allLanguages"
          <input</pre>
            type="radio"
            autocomplete="off"
```

```
[checked]="language == languageFilter"
                class="btn-check"
                [id]="language"
                name="selectedLanguage"
                 (change)="handleLanguageChange(language)"
              <label
                 class="btn btn-sm"
                [for]="language"
                [ngClass]="{
                   'btn-warning': language == languageFilter,
                   'btn-info': language != languageFilter
                >{{ language }}</label</pre>
            </div>
          </div>
        </mat-expansion-panel>
        <mat-expansion-panel class="rounded my-1">
          <mat-expansion-panel-header>
            <mat-panel-title</pre>
              [ngClass]="{
                 'text-danger': genreFilter != null && genreFilter != ''
              Genre
            </mat-panel-title>
            <mat-panel-description</pre>
              class="clear-filter"
              (click)="clearGenreFilter()"
              [ngClass]="{
                 'text-danger': genreFilter != null && genreFilter != ''
              >Clear</mat-panel-description
          </mat-expansion-panel-header>
          <div class="row g-0 justify-content-around">
            <div class="my-2 col-4 text-start" *ngFor="let genre of</pre>
allGenres">
              <input</pre>
                type="radio"
                autocomplete="off"
                 [checked]="genre == genreFilter"
                 class="btn-check"
                 [id]="genre"
                 name="selectedGenre"
                 (change)="handleGenreChange(genre)"
```

```
<label
                class="btn btn-sm"
                [for]="genre"
                [ngClass]="{
                  'btn-warning': genre == genreFilter,
                  'btn-info': genre != genreFilter
                </div>
          </div>
        </mat-expansion-panel>
      </mat-accordion>
   </div>
  </div>
  <div class="col-8 movies">
    <div class="now-showing">
      <mat-toolbar
        [color]="showText == 'Now Playing' ? 'primary' : 'accent'"
       class="rounded"
        <div class="row g-0 justify-content-around w-100 h-auto py-3">
          <div class="col-sm-12 col-lg-3 text-center">{{ showText }}</div>
          <div class="col-sm-12 col-lg-9">
            <input</pre>
              class="form-control me-2 w-100"
              type="search"
              placeholder="Search for movie, genre or language"
              aria-label="Search"
              name="search"
              [(ngModel)]="search"
          </div>
        </div>
      </mat-toolbar>
      <h1 class="text-center text-warning my-4" *ngIf="!(moviesList$ |</pre>
async)">
        No movies found
      </h1>
      <div class="now-showing-movies my-4" *ngIf="moviesList$ | async">
        <div class="card-group justify-content-around">
          <ng-container
            *ngIf="
              moviesList$
                async
                 search: search:genreFilter:languageFilter as result
```

```
class="lead my-2 p-2 rounded alert-danger"
  *ngIf="result.length < 1 || !result"
 No result found with
  <span class="text-danger"</pre>
    >{{ search }}{{ " " + languageFilter
   }}{{{ " " + genreFilter }}</span</pre>
<div
  class="col-4 px-2 position-relative"
  *ngFor="let movie of result"
    class="image-card position-relative rounded-5 overflow-hidden"
      [src]="movie.image"
      class="card-img-top"
      height="400"
      width="280"
      [alt]="movie.name"
    <!-- <svg
      class="bd-placeholder-img card-img-top"
     width="100%"
      height="350"
      xmlns="http://www.w3.org/2000/svg"
      role="img"
      aria-label="Placeholder: Thumbnail"
      preserveAspectRatio="xMidYMid slice"
      focusable="false"
      <title>Placeholder</title>
      <rect width="100%" height="100%" fill="#55595c"></rect>
    </svg> -->
      class="
        image-release
        position-absolute
        bottom-0
        start-0
        bg-dark
        text-white
       w-100
```

```
text-center
                    py-2
                  {{ formatRelease(movie.release) }}
                </div>
              </div>
              <div class="card-body text-center">
                <h2 class="card-title fs-4 mb-0">
                    class="stretched-link"
                    routerLink="../movie/{{ movie.id }}"
                    >{{ movie.name | uppercase }}</a</pre>
                </h2>
                <h3 class="card-text text-muted">
                  {{ movie.language | titlecase }}
              </div>
            </div>
          </ng-container>
       </div>
     </div>
   </div>
 </div>
</div>
```

My Bookings:

```
<input</pre>
            type="radio"
            autocomplete="off"
            [checked]="booking.id == selectedBookingId"
            class="btn-check"
            [id]="'booking-' + i"
            name="booking"
            (change)="onBookingChange(booking.id!)"
          <label
            class="btn btn-sm w-100 clearfix"
            [for]="'booking-' + i"
            [ngClass]="{
              'btn-dark text-white': booking.id == selectedBookingId,
              'btn-info': booking.id != selectedBookingId
            <span class="d-inline-block float-start">{{
              "Booking " + (i + 1)
            }}</span>
            <span class="d-inline-block float-end">{{ booking.bookedOn
}}</span>
          </label>
        </div>
      </div>
      <div class="col-10 px-2">
        <div class="row g-0 m-3 p-2 shadow-sm border">
            class="
              col-4
              mx-auto
              text-center
              px-1
              position-relative
              overflow-hidden
            <img
              [src]="movieImage$ | async"
              [alt]="movieName$ | async"
              height="400"
              width="300"
              class="
                movie-name
                position-absolute
                w-100
```

```
py-2
    fs-5
    bg-dark
    text-white
    start-0
    bottom-0
   {{ movieName$ | async | uppercase }}
 </div>
</div>
<div class="col-8 px-2 details h-100 my-auto">
 scope="col"
       colspan="2"
       class="text-center fs-4 text-capitalize"
       {{ auditoriumName$ | async }}
      </thead>
   Movie Language
       <h1 class="m-0 d-inline-block">
         {{ movieLanguage$ | async }}
       </h1>
      Total seats
       <h1 class="m-0 d-inline-block">
         {{ noOfTickets$ | async }}
       </h1>
      Seat No.
       <h1 class="m-0 d-inline-block">
         {{ (selectedSeats$ | async)?.join(", ") }}
       </h1>
```

```
Price
             <h1 class="m-0 d-inline-block">
               {{ amount$ | async | currency: "INR" }}
            Date
             <h1 class="m-0 d-inline-block">
               {{ dateOfBooking$ | async | date: "mediumDate" }}
             </h1>
            Time
             <h1 class="m-0 d-inline-block">
               {{ formatTime((showTiming$ | async)!) }}
             </h1>
            Status
             <span class="text-muted text-success">Confirmed</span>
            </div>
     </div>
   </div>
  </div>
 </mat-card>
</div>
```

Profile:

```
<div class="h-80vh">
  <div class="col-10 mx-auto my-4">
      <mat-toolbar color="primary" class="rounded text-center"
      >Your profile</mat-toolbar</pre>
```

```
</div>
<mat-card class="col-10 mx-auto">
  Name
     {{ (user | async)?.name }}
     Email
     {{ (user | async)?.email }}
    Mobile
     {{ (user | async)?.mobile }}
    Gender
     {{ (user | async)?.gender }}
    </mat-card>
</div>
```

Register:

```
<mat-form-field appearance="outline" class="d-block text-white">
    <mat-label>Enter your Email</mat-label>
    <input matInput type="email" formControlName="email" class="fs-5" />
    <mat-hint *ngIf="email.pending" class="text-warning"</pre>
      >Checking For uniqueness...</mat-hint
    <mat-error *ngIf="emailErrors">{{ emailErrors }}</mat-error>
  </mat-form-field>
</div>
<div class="col-sm-12 col-md-12 col-lg-6 mb-2 px-lg-1">
  <mat-form-field appearance="outline" class="d-block text-white">
    <mat-label>Enter your name</mat-label>
    <input matInput type="text" formControlName="name" class="fs-5" />
    <mat-error *ngIf="nameErrors">{{ nameErrors }}</mat-error>
  </mat-form-field>
</div>
<div class="col-sm-12 col-md-12 col-lg-6 mb-2 px-lg-1">
  <mat-form-field appearance="outline" class="d-block text-white">
    <mat-label>Enter your Mobile</mat-label>
    <span matPrefix>+91 &nbsp;</span>
    <input</pre>
      matInput
      type="text"
      formControlName="mobile"
      class="fs-5"
    /><mat-hint *ngIf="mobile.pending" class="text-warning"</pre>
      >Checking For uniqueness...</mat-hint
    <mat-error *ngIf="mobileErrors">{{ mobileErrors }}</mat-error>
  </mat-form-field>
</div>
<div class="col-sm-12 col-md-12 col-lg-6 mb-2 px-lg-1">
  <mat-form-field appearance="outline" class="d-block text-white">
    <mat-label>Enter your password</mat-label>
    <input</pre>
      matInput
      [type]="hidePassword ? 'password' : 'text'"
      formControlName="password"
      class="fs-5"
    <mat-error *ngIf="passwordErrors">{{ passwordErrors }}</mat-error>
    <button
      mat-icon-button
      matSuffix
      (click)="hidePassword = !hidePassword"
```

```
[attr.aria-label]="'Hide password'"
            [attr.aria-pressed]="hidePassword"
            <mat-icon>{{
              hidePassword ? "visibility off" : "visibility"
            }}</mat-icon>
          </button>
        </mat-form-field>
     </div>
     <div class="col-sm-12 col-md-12 col-lg-6 mb-2 px-lg-1">
        <mat-form-field appearance="outline" class="d-block text-white">
          <mat-label>Select Gender</mat-label>
          <mat-select formControlName="gender" class="text-white fs-5">
            <mat-option *ngFor="let sex of genders" [value]="sex.name">
              {{ sex.name }}
            </mat-option>
          </mat-select>
          <mat-error *ngIf="passwordErrors">{{ passwordErrors }}</mat-error>
        </mat-form-field>
     </div>
     <div class="col-lg-12 col-md-12 mb-2">
       <mat-checkbox class="example-margin" formControlName="terms"</pre>
          >Agree to terms & conditions</mat-checkbox
        <mat-error *ngIf="termsErrors">{{ termsErrors }}</mat-error>
     </div>
     <button
       mat-raised-button
       [color]="!registerForm.valid ? 'accent' : 'primary'"
       class="col-12"
       type="submit"
       Register
     </button>
   </form>
 </div>
</main>
```

Add Movie To Show Form:

```
<div class="wrapper">
  <h1 class="text-center mb-3 p-2 rounded border border-2 shadow-sm">
   Add Movie To Show
```

```
<form class="example-form p-4" [formGroup]="movieShowForm">
  <mat-form-field class="d-block w-100 text-dark" appearance="outline">
    <mat-label>Select Movie</mat-label>
    <mat-select
      aria-label="State"
      [formControl]="movieId"
      (click)="movieId.reset()"
      (selectionChange)="onMovieChange($event)"
      <mat-option
        *ngFor="let movie of filteredMovies | async"
        [value]="movie.id"
        class="h-auto py-1"
        <!-- (onSelectionChange)="onMovieChange($event, movie.id)" -->
          class="example-option-img me-2 rounded"
          aria-hidden
          [src]="movie.image"
          height="120"
          width="120"
        <span class="me-1">{{ movie.name | uppercase }}</span> |
        <span class="me-1">{{ movie.language | titlecase }}</span> |
        <small class="me-1"</pre>
          >Release: {{ movie.release | date: "fullDate" }}</small</pre>
        <small class="me-1"</pre>
          >Added: {{ movie.addedOn | date: "fullDate" }}</small</pre>
      </mat-option>
    </mat-select>
    <mat-error *ngIf="movieIdErrors">{{ movieIdErrors }}</mat-error>
  <mat-form-field appearance="outline" class="d-block w-100 text-dark">
    <mat-label>Enter a date range</mat-label>
    <mat-date-range-input</pre>
      [formGroup]="range"
      [rangePicker]="picker"
      [min]="startDate"
      [max]="endDate"
      <input matStartDate formControlName="start" placeholder="Start date"</pre>
```

```
<input matEndDate formControlName="end" placeholder="End date" />
     </mat-date-range-input>
     <mat-datepicker-toggle matSuffix [for]="picker"></mat-datepicker-toggle>
     <mat-date-range-picker #picker></mat-date-range-picker>
     <mat-error class="d-inline-block mx-1" *ngIf="startDateErrors">{{
       startDateErrors
     }}</mat-error>
     <mat-error class="d-inline-block mx-1" *ngIf="endDateErrors">{{
       endDateErrors
     }}</mat-error>
*ngIf="range.controls.start.hasError('matStartDateInvalid')"
     <mat-error *ngIf="range.controls.end.hasError('matEndDateInvalid')"</pre>
       >Invalid end date</mat-error
   </mat-form-field>
   <fieldset>
     <legend class="lead">Price details</legend>
     <div class="row g-0 justify-content-around">
       <mat-form-field</pre>
         appearance="outline"
         class="d-block col-4 px-1 text-dark"
         <mat-label>Gold Section/mat-label>
         <input type="number" matInput formControlName="gold" />
         <mat-error *ngIf="goldPriceErrors">{{ goldPriceErrors }}</mat-error>
       </mat-form-field>
       <mat-form-field
         appearance="outline"
         class="d-block col-4 px-1 text-dark"
         <mat-label>Silver Section</mat-label>
         <input type="number" matInput formControlName="silver" />
         <mat-error *ngIf="silverPriceErrors">{{
           silverPriceErrors
         }}</mat-error>
       </mat-form-field>
       <mat-form-field
         appearance="outline"
         class="d-block col-4 px-1 text-dark"
         <mat-label>General Section</mat-label>
         <input type="number" matInput formControlName="general" />
         <mat-error *ngIf="generalPriceErrors">{{
           generalPriceErrors
         }}</mat-error>
```

Payment Form:

```
<div class="wrapper p-5">
  <div class="text-center mb-3 p-2 rounded border border-2 shadow-sm">
    <h1 class="text-center d-inline-block my-2">Payment Gateway</h1>
    (<span class="text-danger d-inline-block my-2">do not refresh the
page</span
    >)
  </div>
  <div class="my-auto h-70vh row g-0 justify-content-around">
    <div class="col-6 px-2 mx-auto order-2">
      <form [formGroup]="paymentForm" class="example-form p-4">
        <mat-form-field appearance="outline" class="d-block w-100 text-dark">
          <mat-label>Card Number/mat-label>
          <input</pre>
            matInput
            formControlName="cardNumber"
            type="tel"
            #ccNumber
            class="fs-3 bolder col-12"
            (keyup)="creditCardNumberSpacing()"
          <mat-hint>16 digit card number/mat-hint>
          <mat-error *ngIf="cardNumberErrors">{{ cardNumberErrors }}</mat-</pre>
error>
        </mat-form-field>
        <div class="row g-0 justify-content-around">
            appearance="outline"
```

```
class="d-block text-dark col-sm-12 col-lg-4 px-1"
    <mat-label>Month</mat-label>
    <mat-select formControlName="cardExpiryMonth">
      <mat-option *ngFor="let month of tempMonths" [value]="month">
        {{ month }}
      </mat-option>
    <mat-hint>Select card expiry month</mat-hint>
    <mat-error *ngIf="monthErrors">{{ monthErrors }}</mat-error>
  </mat-form-field>
  <mat-form-field
    appearance="outline"
    class="d-block text-dark col-sm-12 col-lg-4 px-1"
    <mat-label>Year</mat-label>
    <mat-select formControlName="cardExpiryYear">
      <mat-option *ngFor="let year of tempYears" [value]="year">
        {{ year }}
      </mat-option>
    <mat-hint>select card expiry year</mat-hint>
    <mat-error *ngIf="yearErrors">{{ yearErrors }}</mat-error>
  <mat-form-field</pre>
    appearance="outline"
   class="d-block text-dark col-sm-12 col-lg-4 px-1"
    <mat-label>CVV</mat-label>
    <input</pre>
      matInput
      [type]="cvvHide ? 'password' : 'text'"
     formControlName="cardCVV"
    <button
     mat-icon-button
     matSuffix
      (click)="cvvHide = !cvvHide"
      [attr.aria-label]="'Hide password'"
      [attr.aria-pressed]="cvvHide"
      <mat-icon>{{
        cvvHide ? "visibility_off" : "visibility"
     }}</mat-icon>
    </button>
    <mat-error *ngIf="cvvErrors">{{ cvvErrors }}</mat-error>
  </mat-form-field>
</div>
```

```
<button
     mat-raised-button
     (click)="onSubmit()"
     [disabled]="!paymentForm.valid"
     color="primary"
     class="col-12 my-3"
     Pay {{ tempScreen.amount | currency: "INR" }}
    </button>
   </form>
  </div>
  <div class="col-6 px-2 mx-auto order-1">
   Booking Details
    </thead>
    Auditorium
      Show
      {{ selectedMembers.showName }}
      Show Timing
      {{ formatTime(selectedMembers.showTime) }}
      Movie Name
      Movie Lang
      Date
      {{ selectedMembers.date | date: "mediumDate"}
}}
```

Screen:

```
<div class="screen-container w-100 py-3 bg-dark text-white">
 <span class="d-inline-block text-warning mx-auto text-center py-2 w-100"</pre>
   >NOTE: do not refresh the page</span
 <div class="my-auto row g-0 align-content-center">
   <div class="ticket-details mb-3 row g-0 justify-content-between">
     <div class="col-4 text-center">
       Movie:  
       <span class="lead text-white">{{
         selectMembers.movieName | uppercase
       }}</span>
     </div>
     <div class="col-4 text-center">
       Time:  
       <span class="lead">{{ formatTime(selectMembers.showTime) }}</span>
     </div>
     <div class="col-4 text-center">
       Date:  
       <span class="lead">{{ selectMembers.date | date: "fullDate" }}</span>
     </div>
   </div>
   <div class="ticket-details mb-3 row g-0 justify-content-between">
     <div class="col-4 text-center">
       Seats Selected:  
       <span class="lead text-danger">{{ getSelectedSeats() }}</span>
     </div>
     <div class="col-4 text-center">
       Amount:  
       <span class="lead">{{ totalAmount }}</span>
     </div>
     <div class="col-4 text-center">
       <button
```

```
mat-raised-button
     type="submit"
     [disabled]="seatsToBeSelected != 0"
      (click)="onProceed()"
      Proceed
    </button>
 </div>
</div>
<!-- <div class="row g-0 text-center">
 <div class="col-4 text-center">
     class="fs-sm-5 fs-lg-3 w-auto h-auto text-danger"
     aria-label="Example home icon"
      >chair
   </mat-icon>
    - <span class="text-white">Booked</span>
 <div class="col-4 text-center">
     class="fs-sm-5 fs-lg-3 w-auto h-auto text-white"
     aria-label="Example home icon"
     >chair
   </mat-icon>
    - <span class="text-white">Avaliable</span>
 </div>
  <div class="col-4 text-center">
     class="fs-sm-5 fs-lg-3 w-auto h-auto text-info"
     aria-hidden="false"
     aria-label="Example home icon"
     >chair
   </mat-icon>
    - <span class="text-white">Your Selection</span>
 </div>
</div> -->
 class="screen-layout position-relative w-100 bg-dark text-white p-sm-0"
 <mat-card class="bg-dark text-white text-center">
   <mat-list class="bg-dark text-white">
     <ng-container
        *ngFor="let item of tempSeatColumns.reverse(); index as i"
```

```
<h3 class="text-danger m-1" *ngIf="i == 7">
  <!-- EXECUTIVE &#8377;200.00 -->
 EXECUTIVE {{ generalPrice$ | async | currency: "INR" }}
</h3>
<h3 class="text-danger m-1" *ngIf="i == 3">
 SILVER {{ silverPrice$ | async | currency: "INR" }}
</h3>
<h3 class="text-danger m-1" *ngIf="i == 0">
 GOLD {{ goldPrice$ | async | currency: "INR" }}
</h3>
<mat-list-item class="justify-content-center py-1 h-auto px-sm-0">
   class="
     row
     col-12
     g-0
     mx-auto
     justify-content-center
     px-sm-0
     text-center
    <div class="col-1 text-center text-info fs-3">
     {{ item }}
   </div>
   <div class="col-auto">
      <ng-container *ngFor="let seat of tempSeatRows; index as i">
        <div
          class="me-sm-1 mx-lg-4 d-inline"
          *ngIf="i == 3 || i == 7"
        <input
          type="checkbox"
          class="btn-check"
          name="{{ item + seat }}"
          [checked]="isAdded(item + seat)"
          [disabled]="isSeatAlreadySelected(item + seat)"
          [id]="item + seat"
          [value]="item + seat"
          (click)="addSeat($event)"
        <label
          [for]="item + seat"
          class="
            col-auto
           p-sm-0
```

```
me-sm-1
                        ms-sm-0
                        mx-lg-2
                        pe-cursor
                        h-auto
                      [ngClass]="{
                        'text-white': !isAdded(item + seat),
                        'text-info': isAdded(item + seat),
                        'text-danger': isSeatAlreadySelected(item + seat)
                      <mat-icon
                        class="fs-sm-5 fs-lg-3 w-auto h-auto"
                        aria-hidden="false"
                        aria-label="Example home icon"
                        >chair
                      </mat-icon>
                    </label>
                  </ng-container>
             </div>
         </ng-container>
       </mat-list>
     </mat-card>
   </div>
     class="
       screen
       col-10
       mx-auto
       py-3
       text-white
       bg-danger
       mt-sm-1 mt-lg-4
     Screen is this way
   </div>
 </div>
</div>
```

Select Members:

```
<mat-card>
  <form [formGroup]="ticketsForm" (ngSubmit)="proceed()">
    <mat-horizontal-stepper [linear]="true" labelPosition="bottom" #stepper>
      <mat-step [stepControl]="ticketsForm.get('auditoriumName')!">
        <ng-template matStepLabel>Select the Cinema Hall
        <mat-form-field class="d-block w-100 mt-2">
          <mat-label>Cinema Hall Name</mat-label>
          <mat-select class="text-dark" formControlName="auditoriumName">
            <mat-option
              *ngFor="let hall of allAuditoriums$ | async"
              [value]="hall.name"
              (onSelectionChange)="onAuditoriumSelect(hall.id!, hall.name!)"
              {{ hall.name }}
            </mat-option>
          </mat-select>
          <mat-error *ngIf="auditoriumErrors">{{ auditoriumErrors }}</mat-</pre>
error>
        </mat-form-field>
        <div>
          <button mat-button matStepperNext type="button">Next</button>
        </div>
      <mat-step
        [stepControl]="ticketsForm.get('showName')!"
        label="Select the Show Timing"
        <mat-form-field class="d-block w-100 mt-2">
          <mat-label class="text-dark">Show Timing</mat-label>
          <mat-select class="text-dark" formControlName="showName">
            <mat-option
              *ngFor="let show of allShows$ | async"
              [value]="show.name"
              (onSelectionChange)="onShowSelect(show.id!, show.name!)"
              {{ show.name + " | Time: " + formatTime(show.startTime) }}
            </mat-option>
          </mat-select>
          <mat-error *ngIf="showErrors">{{ showErrors }}</mat-error>
        </mat-form-field>
          <button mat-button matStepperPrevious type="button">Back</button>
          <button mat-button matStepperNext type="button">Next</button>
        </div>
      </mat-step>
      <mat-step
```

```
[stepControl]="ticketsForm.get('date')!"
  label="Select the Date"
  <mat-form-field class="d-block w-100 mt-2">
    <mat-label class="text-dark">Choose a date</mat-label>
    <input
      class="text-dark"
      formControlName="date"
      (dateChange)="onDateSelect($event)"
      matInput
      [matDatepicker]="picker"
      [min]="startDate$ | async"
      [max]="endDate$ | async"
    <mat-datepicker-toggle</pre>
      matSuffix
      [for]="picker"
    ></mat-datepicker-toggle>
    <mat-datepicker #picker></mat-datepicker>
    <mat-error *ngIf="dateErrors">{{ dateErrors }}</mat-error>
  </mat-form-field>
  <div>
    <button mat-button matStepperPrevious type="button">Back</button>
    <button mat-button matStepperNext type="button">Next</button>
  </div>
</mat-step>
  [stepControl]="ticketsForm.get('seats')!"
  label="Select No.of seats"
  <div
    class="col-12 my-4 text-center"
    [ngClass]="selectedSeats! > 0 ? 'text-primary' : 'text-danger'"
    <mat-icon
     class="fs-1"
      aria-hidden="false"
      aria-label="Example home icon"
      \{\{ icon \}\}
    </mat-icon>
  </div>
  <div *ngIf="selectedSeats! < 1" class="text-center text-danger">
    No Seats avaliable, please select different show timing
  </div>
  <div
    *ngIf="selectedSeats! > 0"
```

```
class="row g-0 justify-content-around mb-4"
   <div
     class="col-auto mx-2"
     *ngFor="let seat of avaliableSeats$ | async"
     <input</pre>
       type="radio"
       class="btn-check"
       formControlName="seats"
       [checked]="seat == selectedSeats"
       (change)="onSeatsChange(seat)"
       [id]="seat"
       [value]="seat"
     <label
       [for]="seat"
       class="px-3 py-2 rounded-circle border border-4 pe-cursor fs-5"
       [ngClass]="
         seat == selectedSeats!
           ? 'text-success, border-success'
           : 'text-warning, border-secondary'
       {{ seat }}
     </label>
   </div>
 </div>
   <button mat-button matStepperPrevious type="button">Back</button>
     mat-button
     matStepperNext
     [disabled]="selectedSeats! < 1"</pre>
     type="button"
     next
   </button>
 </div>
</mat-step>
<mat-step>
 <ng-template matStepLabel>Review</ng-template>
 Auditorium
     {{ ticketsForm.get("auditoriumName")?.value! }}
```

```
Show
         {{
            ticketsForm.get("showName")?.value! +
              " | Time: " +
             formatTime(selectMembers?.showTime!)
          }}
         Date
         {{ ticketsForm.get("date")?.value! | date: "fullDate" }}
       Seats
         {{ ticketsForm.get("seats")?.value! }}
      <div>
       <button mat-button matStepperPrevious type="button">Back</button>
       <button mat-button color="primary" [disabled]="!ticketsForm.valid">
         Proceed
       </button>
      </div>
    </mat-step>
  </mat-horizontal-stepper>
 </form>
</mat-card>
```

Show Form:

```
</mat-error>
   </mat-form-field>
   <mat-form-field class="d-block w-100 text-dark" appearance="outline">
     <mat-label>Show Timing</mat-label>
     <input</pre>
       type="time"
       matInput
       placeholder="1H 20M"
       formControlName="startTime"
     <mat-error *ngIf="startTimeErrors" color="accent"</pre>
        >{{ startTimeErrors }}
     </mat-error>
   </mat-form-field>
 <button mat-raised-button (click)="onCancel()" class="me-2">Cancel</button>
   mat-raised-button
   (click)="onSubmit()"
   [disabled]="!showForm.valid"
   color="primary"
   class="ms-2"
   Submit
 </button>
</div>
```

INDEX.HTML

```
crossorigin="anonymous"
    <!-- Animated CSS -->
    <!-- <link
     rel="stylesheet"
     href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/4.1.1/animate.m
     crossorigin="anonymous"
    <link rel="preconnect" href="https://fonts.gstatic.com" />
     href="https://fonts.googleapis.com/css2?family=Roboto:wght@300;400;500&d
isplay=swap"
      rel="stylesheet"
    link
     href="https://fonts.googleapis.com/icon?family=Material+Icons"
     rel="stylesheet"
    <link rel="preconnect" href="https://fonts.gstatic.com" />
      href="https://fonts.googleapis.com/css2?family=Roboto:wght@300;400;500&d
isplay=swap"
      rel="stylesheet"
    link
     href="https://fonts.googleapis.com/icon?family=Material+Icons"
     rel="stylesheet"
    <link rel="preconnect" href="https://fonts.gstatic.com" />
     href="https://fonts.googleapis.com/css2?family=Roboto:wght@300;400;500&d
isplay=swap"
     rel="stylesheet"
   klink
      href="https://fonts.googleapis.com/icon?family=Material+Icons"
      rel="stylesheet"
  </head>
  <body class="mat-typography">
    <app-root></app-root>
    <script
      src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/js/bootstrap.bund
le.min.js"
```

DOCKER FILE:

```
# RUN mkdir -p /app

WORKDIR /usr/src/app

COPY package.json package-lock.json ./

RUN npm install

COPY . .

RUN npm run build --prod

# CMD ["npm", "start"]

FROM nginx:latest-alpine as prod-stage

COPY --from=build-stage /usr/src/app/dist/my-movie-plan /user/share/nginx/html

COPY nginx.conf /etc/nginx/conf.d/default.conf

EXPOSE 4040
```

JENKINS FILES:

```
pipeline {
    agent any
    stages {
        stage('git repo clone') {
           steps {
                git branch: 'main', url: 'https://github.com/JRiyaz/my-movie-
plan.git'
        // stage('clean') {
        // stage('package') {
        // stage('docker build') {
                  sh "docker build -t employee-management ."
        stage('docker compose build') {
             steps {
                sh "docker-compose build"
        stage('docker compose start') {
             steps {
                sh "docker-compose up"
```

KARMA CONFIG:

```
// Karma configuration file, see link for more information
// https://karma-runner.github.io/1.0/config/configuration-file.html

module.exports = function (config) {
  config.set({
   basePath: '',
   frameworks: ['jasmine', '@angular-devkit/build-angular'],
```

```
plugins: [
      require('karma-jasmine'),
      require('karma-chrome-launcher'),
      require('karma-jasmine-html-reporter'),
      require('karma-coverage'),
      require('@angular-devkit/build-angular/plugins/karma')
    ],
    client: {
      jasmine: {
        // you can add configuration options for Jasmine here
        // the possible options are listed at
https://jasmine.github.io/api/edge/Configuration.html
        // for example, you can disable the random execution with `random:
false`
        // or set a specific seed with `seed: 4321`
      },
      clearContext: false // leave Jasmine Spec Runner output visible in
browser
    },
    jasmineHtmlReporter: {
      suppressAll: true // removes the duplicated traces
    },
    coverageReporter: {
      dir: require('path').join(__dirname, './coverage/my-movie-plan'),
      subdir: '.',
      reporters: [
        { type: 'html' },
        { type: 'text-summary' }
    },
    reporters: ['progress', 'kjhtml'],
    port: 9876,
    colors: true,
    logLevel: config.LOG_INFO,
    autoWatch: true,
    browsers: ['Chrome'],
    singleRun: false,
    restartOnFileChange: true
 });
```

BACK END

CONFIG:

Initial Data:

```
package com.MyMoviePlan.config;
import com.MyMoviePlan.service.UserService;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.boot.CommandLineRunner;
import org.springframework.security.crypto.password.PasswordEncoder;
import org.springframework.stereotype.Component;
@Component
public class InitialData implements CommandLineRunner {
    @Autowired
    private UserService service;
    @Autowired
    private PasswordEncoder passwordEncoder;
    @Override
    public void run(String... args) throws Exception {
          final UserEntity super admin = new UserEntity("Riyaz J",
"j.riyazu@gmail.com",
                  "8099531318", "Male",
passwordEncoder.encode("super"), true,
                  true, true, true, true,
//
//
                  ROLE SUPER ADMIN);
//
          final UserEntity admin = new UserEntity("Fayaz J",
"j.fayaz@gmail.com",
                  "9019168638", "Male",
//
passwordEncoder.encode("admin"), true,
//
                  true, true, true, true,
//
                  ROLE ADMIN);
//
          final UserEntity user = new UserEntity("Inthiyaz J",
"j.inthiyaz@gmail.com",
                  "8985462507", "Male",
passwordEncoder.encode("user"), true,
//
                  true, true, true, true,
//
                  ROLE USER);
//
//
         service.save(super admin);
//
         service.save(admin);
//
         service.save(user);
    }
}
```

CONTROLLERS:

Auditorium Controller:

```
package com.MyMoviePlan.controller;
import com.MyMoviePlan.entity.*;
import com.MyMoviePlan.exception.AuditoriumNotFoundException;
import com.MyMoviePlan.exception.BookingNotFoundException;
import com.MyMoviePlan.exception.MovieShowNotFoundException;
import com.MyMoviePlan.exception.ShowNotFoundException;
import com.MyMoviePlan.model.TicketDetails;
import com.MyMoviePlan.model.UserRole;
import com.MyMoviePlan.repository.*;
import com.MyMoviePlan.service.UserService;
import lombok.AllArgsConstructor;
import org.springframework.security.access.prepost.PreAuthorize;
import org.springframework.web.bind.annotation.*;
import java.util.List;
import java.util.stream.Collectors;
@CrossOrigin
@RestController
@RequestMapping("/auditorium")
@AllArgsConstructor
public class AuditoriumController {
    private final ShowRepository show;
    private final UserService service;
    private final BookingRepository booking;
    private final MovieRepository movie;
    private final MovieShowsRepository movieShow;
    private final AuditoriumRepository auditorium;
   @GetMapping({"/", "all"})
    public List<AuditoriumEntity> findAllAuditoriums() {
        return this.auditorium.findAll();
    }
    @GetMapping("{auditorium id}")
    @PreAuthorize("hasAuthority('WRITE')")
    public AuditoriumEntity findAuditoriumById(@PathVariable final
int auditorium id) {
        return this.auditorium.findById(auditorium id)
                .orElseThrow(() ->
                        new AuditoriumNotFoundException("Auditorium
with id: " + auditorium id + " not found."));
    }
    @PostMapping("add")
    @PreAuthorize("hasAuthority('WRITE')")
```

```
public AuditoriumEntity saveAuditorium(@RequestBody final
AuditoriumEntity auditorium) {
       return this.auditorium.save(auditorium);
   @PutMapping("update")
   @PreAuthorize("hasAuthority('UPDATE')")
   public AuditoriumEntity updateAuditorium(@RequestBody final
AuditoriumEntity auditorium) {
       return this.auditorium.save(auditorium);
   @DeleteMapping("delete/{auditorium id}")
   @PreAuthorize("hasAuthority('DELETE')")
   public void deleteAuditorium(@PathVariable final int
auditorium id) {
       this.auditorium.deleteById(auditorium id);
    }
    /*
        ======= Show Controller
* /
   @GetMapping("{auditorium id}/show/{show id}")
   public ShowEntity findShowById(@PathVariable final int
auditorium id,
                                  @PathVariable final int show id)
{
       return this.findAuditoriumById(auditorium id).getShows()
               .stream()
               .filter(show -> show.getId() == show id)
                .findFirst()
               .orElseThrow(() ->
                       new ShowNotFoundException("Show with Id: " +
show_id + " not found"));
   @GetMapping("{auditorium id}/show/all")
   public List<ShowEntity> findAllShows(@PathVariable final int
auditorium id) {
        return this.findAuditoriumById(auditorium id).getShows();
    }
   @PostMapping("{auditorium id}/show/add")
   @PreAuthorize("hasAuthority('WRITE')")
   public ShowEntity saveShow(@PathVariable final int
auditorium id,
                              @RequestBody final ShowEntity show) {
        final AuditoriumEntity auditorium =
this.findAuditoriumById(auditorium id);
       show.setAuditorium(auditorium);
       return this.show.save(show);
    }
   @PutMapping("{auditorium id}/show/update")
```

```
@PreAuthorize("hasAuthority('UPDATE')")
    public ShowEntity updateShow(@PathVariable final int
auditorium id,
                                 @RequestBody final ShowEntity show)
{
        final AuditoriumEntity auditorium =
this.findAuditoriumById(auditorium id);
        show.setAuditorium(auditorium);
        return this.show.save(show);
    @DeleteMapping("{auditorium id}/show/delete/{show id}")
    @PreAuthorize("hasAuthority('DELETE')")
    public void deleteShow(@PathVariable final int auditorium id,
                           @PathVariable final int show id) {
        final ShowEntity show = this.findShowById(auditorium id,
show id);
        this.show.deleteById(show.getId());
        ====== Movie Show Controller
      * /
    @GetMapping("movie/{movieId}")
   public List<AuditoriumEntity>
findAuditoriumsByMovieId(@PathVariable final int movieId) {
        return this.findAllAuditoriums().stream()
                .filter(halls -> halls.getShows()
                        .stream()
                        .anyMatch(show -> show.getMovieShows()
                                .stream()
                                .anyMatch(m show ->
m show.getMovieId() == movieId)))
               .collect(Collectors.toList());
    }
    @GetMapping("{auditorium id}/movie/{movieId}")
    public List<ShowEntity> findShowsByMovieId(@PathVariable final
int auditorium id, @PathVariable final int movieId) {
        return this.findAllShows(auditorium id).stream()
                .filter(show -> show.getMovieShows()
                        .stream()
                        .anyMatch(m show -> m show.getMovieId() ==
movieId))
               .collect(Collectors.toList());
    @GetMapping("{auditorium id}/show/{show id}/movie-show/all")
    public List<MovieShowsEntity> findAllMovieShows(@PathVariable
final int auditorium id,
                                                   @PathVariable
final int show id) {
        return this.findShowById(auditorium_id, show_id)
                .getMovieShows();
```

```
}
    @GetMapping("{auditorium id}/show/{show id}/movie-
show/{movie show id}")
    public MovieShowsEntity findMovieShowById(@PathVariable final
int auditorium id,
                                               @PathVariable final
int show id,
                                               @PathVariable final
int movie show id) {
        return this.findShowById(auditorium id, show id)
                .getMovieShows()
                .stream()
                .filter(movie show -> movie show.getId() ==
movie show id)
                .findFirst()
                .orElseThrow(
                        () -> new MovieShowNotFoundException("Movie
Show with id: "
                                + movie show id + " not found"));
    }
    @PostMapping("{auditorium id}/show/{show id}/movie-show/add")
    @PreAuthorize("hasAuthority('WRITE')")
    public MovieShowsEntity saveMovieShow(@PathVariable final int
auditorium id,
                                           @PathVariable final int
show id,
                                           @RequestBody final
MovieShowsEntity movieShow) {
        final ShowEntity show = this.findShowById(auditorium id,
show id);
        final int movieId = movieShow.getMovieId();
        movieShow.setShow(show);
movieShow.setMovieId(this.movie.findById(movieId).get().getId());
        return this.movieShow.save(movieShow);
    }
    @PutMapping("{auditorium id}/show/{show id}/movie-show/update")
    @PreAuthorize("hasAuthority('UPDATE')")
    public MovieShowsEntity updateMovieShow(@PathVariable final int
auditorium id,
                                             @PathVariable final int
show_id,
                                             @RequestBody final
MovieShowsEntity movieShow) {
        final ShowEntity show = this.findShowById(auditorium id,
show id);
        movieShow.setShow(show);
        return this.movieShow.save(movieShow);
    }
    @DeleteMapping("{auditorium id}/show/{show id}/movie-
show/delete/{movie show id}")
    @PreAuthorize("hasAuthority('DELETE')")
```

```
public void deleteMovieShow(@PathVariable final int
auditorium id,
                                @PathVariable final int show id,
                                @PathVariable final int
movie show id) {
        final MovieShowsEntity movieShow =
this.findMovieShowById(auditorium id, show id, movie show id);
        this.movieShow.deleteById(movieShow.getMovieId());
    }
    /*
        ====== Booking Controller
_____
     * /
    @GetMapping("{auditorium id}/show/{show id}/movie-
show/{movie show id}/booking/{booking id}")
    @PreAuthorize("hasAuthority('READ')")
    public BookingEntity findBookingById(@PathVariable final int
auditorium id,
                                        @PathVariable final int
show id,
                                        @PathVariable final int
movie show id,
                                        @PathVariable final int
booking id) {
        final MovieShowsEntity movieShow =
this.findMovieShowById(auditorium id, show id, movie show id);
        return movieShow.getBookings()
                .stream().filter(booking -> booking.getId() ==
booking id)
                .findFirst()
                .orElseThrow(() -> new
BookingNotFoundException("Booking with id: "
                       + booking id + " not found."));
    }
    @GetMapping("{auditorium id}/show/{show id}/movie-
show/{movie show id}/booking/all")
    @PreAuthorize("hasAuthority('WRITE')")
    public List<BookingEntity> allBookings(@PathVariable final int
auditorium id,
                                           @PathVariable final int
show id,
                                          @PathVariable final int
movie show id) {
        final UserEntity user = this.service.getLoggedInUser();
        if (user.getUserRole().equals(UserRole.ROLE ADMIN) ||
user.getUserRole().equals(UserRole.ROLE SUPER ADMIN))
           return this.findMovieShowById(auditorium id, show id,
movie show id).getBookings();
        else
           return this.findMovieShowById(auditorium id, show id,
movie show id).getBookings()
                    .stream().filter(booking ->
booking.getUserId().equals(user.getId()))
```

```
.collect(Collectors.toList());
    }
    @PostMapping("{auditorium id}/show/{show id}/movie-
show/{movie show id}/booking/add")
      @PreAuthorize("hasAuthority('WRITE')")
    public BookingEntity saveBooking(@PathVariable final int
auditorium id,
                                      @PathVariable final int
show id,
                                      @PathVariable final int
movie show id,
                                      @RequestBody final
BookingEntity booking) {
        final MovieShowsEntity moveShow =
this.findMovieShowById(auditorium id, show id, movie show id);
        booking.setUserId(this.service.getLoggedInUser().getId());
booking.setUserId(this.service.findByMobile("8099531318").get().getI
d());
        booking.setMovieShow(moveShow);
        booking.setBookingDetails(new
BookingDetailsEntity(auditorium id, show id, movie show id,
moveShow.getMovieId());
        return this.booking.save(booking);
    }
    @PutMapping("{auditorium id}/show/{show id}/movie-
show/{movie show id}/booking/update")
    @PreAuthorize("hasAuthority('UPDATE')")
    public BookingEntity updateBooking(@PathVariable final int
auditorium id,
                                        @PathVariable final int
show id,
                                        @PathVariable final int
movie show id,
                                       @RequestBody final
BookingEntity booking) {
        final MovieShowsEntity moveShow =
this.findMovieShowById(auditorium id, show id, movie show id);
        booking.setMovieShow(moveShow);
        return this.booking.save(booking);
    }
    @DeleteMapping("{auditorium id}/show/{show id}/movie-
show/{movie show id}/booking/delete/{booking id}")
    @PreAuthorize("hasAuthority('READ')")
    public void deleteBookingById(@PathVariable final int
auditorium id,
                                  @PathVariable final int show id,
                                  @PathVariable final int
movie show id,
                                  @PathVariable final int
booking id) {
```

```
final BookingEntity booking =
this.findBookingById(auditorium id, show id, movie show id,
booking id);
        this.booking.deleteById(booking.getId());
    @GetMapping("ticket-details/{booking id}")
    @PreAuthorize("hasAuthority('READ')")
    public TicketDetails getMovieDetails(@PathVariable final int
booking id) {
        final PaymentEntity payment =
this.booking.findById(booking id).get().getPayment();
        final MovieShowsEntity movieShow =
this.movieShow.findAll().stream().filter(m show ->
m show.getBookings()
                .stream().anyMatch(booking -> booking.getId() ==
booking id)).findFirst().get();
        final MovieEntity movie =
this.movie.findById(movieShow.getMovieId()).get();
        final ShowEntity showEntity = show.findAll().stream()
                .filter(show -> show.getMovieShows()
                        .stream().anyMatch(m show -> m show.getId()
== movieShow.getId())).findFirst().get();
        final AuditoriumEntity auditorium =
this.auditorium.findAll().stream().filter(hall -> hall.getShows()
                .stream().anyMatch(show -> show.getId() ==
showEntity.getId())).findFirst().get();
        return new TicketDetails(auditorium.getName(),
showEntity.getName(), showEntity.getStartTime(),
payment.getAmount(), movie.getName(), movie.getImage(),
movie.getBgImage());
    }
}
```

Booking:

```
package com.MyMoviePlan.controller;
import com.MyMoviePlan.entity.BookingDetailsEntity;
import com.MyMoviePlan.entity.BookingEntity;
import com.MyMoviePlan.entity.UserEntity;
import com.MyMoviePlan.exception.BookingNotFoundException;
import com.MyMoviePlan.model.UserRole;
import com.MyMoviePlan.repository.BookingRepository;
import com.MyMoviePlan.service.UserService;
import lombok.AllArgsConstructor;
import org.springframework.security.access.prepost.PreAuthorize;
```

```
import org.springframework.web.bind.annotation.*;
import java.util.List;
@CrossOrigin
@RestController
@RequestMapping("/booking")
@AllArgsConstructor
public class BookingController {
    private final BookingRepository repository;
    private final UserService service;
    @GetMapping("{id}")
    @PreAuthorize("hasAuthority('READ')")
    public BookingEntity findById(@PathVariable final int id) {
        return repository.findById(id)
                .orElseThrow(() -> new
BookingNotFoundException("Booking with id: " + id + " not found."));
    }
    @GetMapping("all")
    @PreAuthorize("hasAuthority('READ')")
    public List<BookingEntity> allBookings() {
        final UserEntity user = service.getLoggedInUser();
        if (user.getUserRole().equals(UserRole.ROLE ADMIN) | |
user.getUserRole().equals(UserRole.ROLE SUPER ADMIN))
            return repository.findAll();
        else return
repository.findAllByUserIdOrderByBookedOnAsc(user.getId());
    }
    @GetMapping("{username}/all")
    @PreAuthorize("hasAuthority('READ')")
    public List<BookingEntity> findAllByUserId(@PathVariable String
username) {
        if (!(username.contains("-") && username.length() > 10))
            username = service.getUser(username).getId();
        return
repository.findAllByUserIdOrderByBookedOnAsc(username);
    @DeleteMapping("delete/{id}")
    @PreAuthorize("hasAuthority('DELETE')")
    public void deleteBooking(@PathVariable final int id) {
        repository.deleteById(id);
    }
    @GetMapping("{id}/details")
    @PreAuthorize("hasAuthority('READ')")
    public BookingDetailsEntity findByDetailsId(@PathVariable final
int id) {
        return this.findById(id).getBookingDetails();
    }
}
```

Movie:

```
package com.MyMoviePlan.controller;
import com.MyMoviePlan.entity.MovieEntity;
import com.MyMoviePlan.exception.MovieNotFoundException;
import com.MyMoviePlan.repository.MovieRepository;
import com.MyMoviePlan.repository.MovieShowsRepository;
import lombok.AllArgsConstructor;
import org.springframework.security.access.prepost.PreAuthorize;
import org.springframework.web.bind.annotation.*;
import java.util.*;
@CrossOrigin
@RestController
@RequestMapping("/movie")
@AllArgsConstructor
public class MovieController {
    private final MovieRepository movieRepository;
    private final MovieShowsRepository movieShowsRepository;
    @GetMapping({"/", "all"})
    public List<MovieEntity> findAll() {
        return movieRepository.findAll();
    @GetMapping("{movie id}")
    public MovieEntity findById(@PathVariable final int movie id) {
        return movieRepository.findById(movie id)
                .orElseThrow(() -> new MovieNotFoundException("Movie
with movie id: " + movie id + " not found."));
    }
    @GetMapping("up-coming")
    public List<MovieEntity> upComing(@RequestParam(value =
"records", required = false) Optional<String> records) {
        List<MovieEntity> movies;
        List<MovieEntity> allMovies;
        if (records.isPresent()) {
            movies = new ArrayList<>();
            allMovies = this.findAll();
movieShowsRepository.findFewUpComing(Integer.parseInt(records.get())
)
                    .forEach(m show -> movies.add(allMovies.stream()
                            .filter(movie -> (movie.getId() ==
m show.getMovieId() && movie.getRelease().getTime() > new
Date().getTime()))
                            .findFirst().orElse(null)));
        } else {
            movies = new ArrayList<>();
```

```
allMovies = this.findAll();
            movieShowsRepository.findAllUpComing()
                    .forEach(m show -> movies.add(allMovies.stream()
                             .filter(movie -> movie.getId() ==
m show.getMovieId() && movie.getRelease().getTime() > new
Date().getTime())
                             .findFirst().orElse(null)));
         return (movies.size() > 0 && !movies.contains(null)) ?
movies : new ArrayList<>();
        movies.removeAll(Collections.singletonList(null));
        return movies;
    }
    @GetMapping("now-playing")
    public List<MovieEntity> nowPlaying(@RequestParam(value =
"records", required = false) Optional < String > records) {
        List<MovieEntity> movies;
        List<MovieEntity> allMovies;
        if (records.isPresent()) {
            movies = new ArrayList<>();
            allMovies = this.findAll();
movieShowsRepository.findFewNowPlaying(Integer.parseInt(records.get(
))))
                    .forEach(m show -> movies.add(allMovies.stream()
                             .filter(movie -> movie.getId() ==
m show.getMovieId())
                             .findFirst().orElse(null)));
        } else {
            movies = new ArrayList<>();
            allMovies = this.findAll();
            movieShowsRepository.findAllNowPlaying()
                    .forEach(m show -> movies.add(allMovies.stream()
                             .filter(movie -> movie.getId() ==
m show.getMovieId())
                            .findFirst().orElse(null)));
        movies.removeAll(Collections.singletonList(null));
        return movies;
    }
    @GetMapping("now-playing-up-coming")
    public List<MovieEntity> nowPlayingAndUpComing() {
        final List<MovieEntity> movies = new ArrayList<>();
        final List<MovieEntity> allMovies = this.findAll();
        movieShowsRepository.findAllNowPlayingAndUpComing()
                .forEach(m show -> movies.add(allMovies.stream()
                        .filter(movie -> movie.getId() ==
m show.getMovieId())
                         .findFirst().orElse(null)));
        movies.removeAll(Collections.singletonList(null));
        return movies;
    }
    @GetMapping("not-playing")
```

```
public List<MovieEntity> notPlaying() {
        final List<MovieEntity> movies = new ArrayList<>();
        final List<MovieEntity> allMovies = this.findAll();
        movieShowsRepository.findAllNotPlaying()
                .forEach(m show -> movies.add(allMovies.stream()
                         .filter(movie -> movie.getId() ==
m show.getMovieId())
                         .findFirst().orElse(null)));
        movies.removeAll(Collections.singletonList(null));
        return movies;
    }
    @PostMapping("add")
    @PreAuthorize("hasAuthority('WRITE')")
    public MovieEntity saveMovie(@RequestBody final MovieEntity
movie) {
        return movieRepository.save(movie);
    }
    @PutMapping("update")
    @PreAuthorize("hasAuthority('UPDATE')")
    public MovieEntity updateMovie(@RequestBody final MovieEntity
movie) {
        return movieRepository.save (movie);
    @DeleteMapping("delete/{movie id}")
    @PreAuthorize("hasAuthority('DELETE')")
    public void deleteMovie(@PathVariable final int movie id) {
        movieRepository.deleteById(movie id);
    }
}
```

Movie Show:

```
package com.MyMoviePlan.controller;
import com.MyMoviePlan.entity.BookingEntity;
import com.MyMoviePlan.entity.MovieShowsEntity;
import com.MyMoviePlan.exception.MovieShowNotFoundException;
import com.MyMoviePlan.model.BookedSeats;
import com.MyMoviePlan.repository.MovieShowsRepository;
import lombok.AllArgsConstructor;
import org.springframework.security.access.prepost.PreAuthorize;
import org.springframework.web.bind.annotation.*;
import java.util.ArrayList;
import java.util.List;
import java.util.Optional;
import java.util.stream.Collectors;

@CrossOrigin
@RestController
```

```
@RequestMapping("/movie-show")
@AllArgsConstructor
public class MovieShowController {
    private final MovieShowsRepository repository;
    @PostMapping("add")
    @PreAuthorize("hasAuthority('WRITE')")
    public MovieShowsEntity save(@RequestBody MovieShowsEntity
movieShow) {
        return repository.save(movieShow);
    }
    @GetMapping("up-coming")
    @PreAuthorize("hasAuthority('READ')")
    public List<MovieShowsEntity> upComing(@RequestParam(value =
"records", required = false) Optional < String > records) {
        if (records.isPresent())
            return
repository.findFewUpComing(Integer.parseInt(records.get()));
        return repository.findAllUpComing();
    }
    @GetMapping("now-playing")
    public List<MovieShowsEntity> nowPlaying(@RequestParam(value =
"records", required = false) Optional < String > records) {
        if (records.isPresent())
            return
repository.findFewNowPlaying(Integer.parseInt(records.get()));
        return repository.findAllNowPlaying();
    }
    @GetMapping("now-playing-up-coming")
    public List<MovieShowsEntity> nowPlayingAndUpComing() {
        return repository.findAllNowPlayingAndUpComing();
    @GetMapping("not-playing")
    @PreAuthorize("hasAuthority('WRITE')")
    public List<MovieShowsEntity> notPlaying() {
        return repository.findAllNotPlaying();
    }
    @GetMapping("all")
    public List<MovieShowsEntity> findAllMovieShows() {
        return repository.findAll();
    }
    @GetMapping("{movie show id}")
    public MovieShowsEntity findMovieShowById(@PathVariable final
int movie show id) {
        return repository.findById(movie_show_id)
                .orElseThrow(
                        () -> new MovieShowNotFoundException("Movie
Show with id: " + movie show id + " not found")
                );
```

```
}
   @DeleteMapping("delete/{movie show id}")
   @PreAuthorize("hasAuthority('DELETE')")
   public void deleteMovieShow(@PathVariable final int
movie_show_id) {
       repository.deleteById(movie show id);
        ====== Booking Controller
* /
   @GetMapping("{movie show id}/booked-seats/{on}")
   @PreAuthorize("hasAuthority('READ')")
   public BookedSeats bookedSeats(@PathVariable final int
movie show id, @PathVariable final String on) {
       final List<BookingEntity> bookings =
this.findMovieShowById(movie show id).getBookings()
               .stream().filter(m show ->
m show.getDateOfBooking().toString().equals(on))
               .collect(Collectors.toList());
       int count = 0;
       List<String> seats = new ArrayList<>();
       for (BookingEntity booking : bookings) {
           count += booking.getTotalSeats();
           seats.addAll(booking.getSeatNumbers());
       return new BookedSeats(count, seats);
    }
}
```

Show:

```
import com.MyMoviePlan.entity.BookingEntity;
import com.MyMoviePlan.entity.MovieShowsEntity;
import com.MyMoviePlan.entity.ShowEntity;
import com.MyMoviePlan.exception.BookingNotFoundException;
import com.MyMoviePlan.exception.MovieShowNotFoundException;
import com.MyMoviePlan.exception.ShowNotFoundException;
import com.MyMoviePlan.repository.BookingRepository;
import com.MyMoviePlan.repository.MovieRepository;
import com.MyMoviePlan.repository.MovieShowsRepository;
import com.MyMoviePlan.repository.ShowRepository;
import com.MyMoviePlan.service.UserService;
import lombok.AllArgsConstructor;
import org.springframework.security.access.prepost.PreAuthorize;
import org.springframework.web.bind.annotation.*;
```

```
import java.util.List;
@CrossOrigin
@RestController
@RequestMapping("/show")
@AllArgsConstructor
public class ShowController {
   private final ShowRepository show;
   private final MovieShowsRepository movieShow;
   private final MovieRepository movie;
   private final UserService service;
   private final BookingRepository booking;
   @GetMapping("{show id}")
   public ShowEntity findShowById(@PathVariable final int show id)
{
        return this.show.findById(show id)
                .orElseThrow(() -> new ShowNotFoundException("Show
with Id: " + show id + " not found"));
   }
   @GetMapping({"/", "all"})
   public List<ShowEntity> findAllShows() {
       return this.show.findAll();
   @DeleteMapping("delete/{show id}")
   @PreAuthorize("hasAuthority('DELETE')")
   public void deleteShow(@PathVariable final int show id) {
       this.show.deleteById(show id);
    }
    /*
       ======================== Movie Show Controller
_____
   @GetMapping("{show id}/movie-show/all")
   public List<MovieShowsEntity> findAllMovieShows(@PathVariable
final int show id) {
       return this.findShowById(show id)
               .getMovieShows();
    }
   @GetMapping("{show id}/movie-show/{movie show id}")
   public MovieShowsEntity findMovieShowById(@PathVariable final
int show id,
                                              @PathVariable final
int movie show id) {
        return this.findShowById(show id)
                .getMovieShows()
                .stream()
```

```
.filter(movie show -> movie show.getId() ==
movie show id)
               .findFirst()
                .orElseThrow(
                       () -> new MovieShowNotFoundException("Movie
Show with id: "
                               + movie show id + " not found"));
    }
    @PostMapping("{show id}/movie-show/add")
    @PreAuthorize("hasAuthority('WRITE')")
    public MovieShowsEntity saveMovieShow(@PathVariable final int
show id,
                                         @RequestBody final
MovieShowsEntity movieShow) {
        final ShowEntity show = this.findShowById(show id);
        final int movieId = movieShow.getMovieId();
        movieShow.setShow(show);
movieShow.setMovieId(this.movie.findById(movieId).get().getId());
       return this.movieShow.save(movieShow);
    }
    @PutMapping("{show_id}/movie-show/update")
    @PreAuthorize("hasAuthority('UPDATE')")
    public MovieShowsEntity updateMovieShow(@PathVariable final int
show id,
                                           @RequestBody final
MovieShowsEntity movieShow) {
        final ShowEntity show = this.findShowById(show id);
        movieShow.setShow(show);
        return this.movieShow.save(movieShow);
    }
    @DeleteMapping("{show id}/movie-show/delete/{movie show id}")
    @PreAuthorize("hasAuthority('UPDATE')")
    public void deleteMovieShow(@PathVariable final int show id,
                               @PathVariable final int
movie show id) {
        final MovieShowsEntity movieShow =
this.findMovieShowById(show id, movie show id);
        this.movieShow.deleteById(movieShow.getMovieId());
    }
    /*
       ====== Booking Controller
_____
    @GetMapping("{show id}/movie-
show/{movie show id}/booking/{booking id}")
    @PreAuthorize("hasAuthority('READ')")
    public BookingEntity findBookingById(@PathVariable final int
show id,
                                        @PathVariable final int
movie show id,
```

```
@PathVariable final int
booking id) {
        final MovieShowsEntity movieShow =
this.findMovieShowById(show id, movie show id);
        return movieShow.getBookings()
                .stream().filter(booking -> booking.getId() ==
booking id)
                .findFirst()
                .orElseThrow(() -> new
BookingNotFoundException("Booking with id: "
                        + booking id + " not found."));
    }
    @GetMapping("{show id}/movie-show/{movie_show_id}/booking/all")
    @PreAuthorize("hasAuthority('READ')")
    public List<BookingEntity> allBookings(@PathVariable final int
show id,
                                            @PathVariable final int
movie show id) {
        return this.findMovieShowById(show id,
movie show id).getBookings();
    }
    @PostMapping("{show id}/movie-show/{movie show id}/booking/add")
    @PreAuthorize("hasAuthority('WRITE')")
    public BookingEntity saveBooking(@PathVariable final int
show id,
                                     @PathVariable final int
movie show id,
                                      @RequestBody final
BookingEntity booking) {
        final MovieShowsEntity moveShow =
this.findMovieShowById(show id, movie show id);
          booking.setUserId(this.service.getLoggedInUser().getId());
booking.setUserId(this.service.findByMobile("8099531318").get().getI
d());
        booking.setMovieShow(moveShow);
        return this.booking.save(booking);
    }
    @PutMapping("{show id}/movie-
show/{movie show id}/booking/update")
    @PreAuthorize("hasAuthority('UPDATE')")
    public BookingEntity updateBooking(@PathVariable final int
show id,
                                        @PathVariable final int
movie show id,
                                        @RequestBody final
BookingEntity booking) {
        final MovieShowsEntity moveShow =
this.findMovieShowById(show id, movie show id);
        booking.setMovieShow(moveShow);
        return this.booking.save(booking);
    }
```

User:

```
package com.MyMoviePlan.controller;
import com.MyMoviePlan.entity.UserEntity;
import com.MyMoviePlan.model.Credentials;
import com.MyMoviePlan.model.HttpResponse;
import com.MyMoviePlan.model.Token;
import com.MyMoviePlan.service.UserService;
import lombok.AllArgsConstructor;
import org.springframework.security.access.prepost.PreAuthorize;
import org.springframework.web.bind.annotation.*;
import javax.servlet.http.HttpServletRequest;
import java.util.List;
@CrossOrigin
@RestController
@RequestMapping("/user")
@AllArgsConstructor
public class UserController {
    private final UserService service;
    private final HttpServletRequest request;
    @GetMapping("/")
    public String index() {
        return "Welcome " + service.getUserName();
    @PostMapping("authenticate")
   public Token authenticate(@RequestBody final Credentials
credentials) {
        return service.authenticate(credentials);
    }
    @GetMapping("check/{username}")
```

```
public Token checkUniqueness (@PathVariable final String
username) {
       return service.checkUniqueness(username);
    }
    @GetMapping("get-user")
    @PreAuthorize("hasAuthority('READ')")
    public UserEntity user() {
        return service.getLoggedInUser()
                .setPassword(null);
    @GetMapping("all")
    @PreAuthorize("hasAuthority('WRITE')")
    public List<UserEntity> allUsers() {
        return service.findAll();
    }
    @PutMapping("update/{username}")
    @PreAuthorize("hasAuthority('READ')")
    public UserEntity updateUser(@RequestBody final UserEntity
userEntity,
                                  @PathVariable final String
username) {
        return service.update(userEntity, username);
    }
    @PostMapping("sign-up")
    public HttpResponse signUp(@RequestBody final UserEntity
userEntity) {
        return service.register(userEntity);
    }
    @PutMapping("change-password")
    @PreAuthorize("hasAuthority('READ')")
    public HttpResponse changePassword(@RequestBody final
Credentials credentials) {
        return service.changePassword(credentials);
    }
    @PutMapping("forgot-password")
   public HttpResponse forgotPassword(@RequestBody final
Credentials credentials) {
        return service.forgotPassword(credentials);
    @DeleteMapping("delete/{username}")
    @PreAuthorize("hasAuthority('DELETE')")
    public HttpResponse delete(@PathVariable final String username)
{
        return service.deleteById(username);
    }
}
```

ENTITY:

Actor:

```
package com.MyMoviePlan.entity;
import com.fasterxml.jackson.annotation.JsonIgnore;
import lombok.*;
import javax.persistence.*;
import java.io.Serializable;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "actors")
public class ActorEntity implements Serializable {
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(name = "is cast")
    private String isCast;
    private String name;
    private String role;
    @Column(length = Integer.MAX VALUE, columnDefinition="TEXT")
    private String image;
     @JsonIgnore
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @ManyToOne(targetEntity = MovieEntity.class)
    private MovieEntity movie;
    public ActorEntity(String name, String role, String image) {
        this.name = name;
        this.role = role;
        this.image = image;
    }
}
```

Auditorium:

```
package com.MyMoviePlan.entity;
import lombok.*;
import javax.persistence.*;
import java.io.Serializable;
import java.util.List;
//@JsonIdentityInfo(generator =
ObjectIdGenerators.PropertyGenerator.class,
          property = "id", scope = ShowEntity.class)
@Entity
@Data
@NoArgsConstructor
@AllArgsConstructor
@EqualsAndHashCode
@Table(name = "auditoriums")
public class AuditoriumEntity implements Serializable {
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private String name;
    @Column(length = Integer.MAX VALUE, columnDefinition="TEXT")
    private String image;
    private String email;
    @Column(name = "customer care no")
    private String customerCareNo;
    private String address;
    @Column(name = "seat capacity")
    private int seatCapacity;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @ElementCollection
    @CollectionTable(name = "auditorium facilities", joinColumns =
@JoinColumn(name = "auditorium id"))
    @Column(name = "facility")
    private List<String> facilities;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @ElementCollection
    @CollectionTable(name = "auditorium safeties", joinColumns =
@JoinColumn(name = "auditorium id"))
    @Column(name = "safety")
    private List<String> safeties;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
```

```
@JoinColumn(name = "auditorium id", referencedColumnName = "id")
    @OneToMany(targetEntity = ShowEntity.class, cascade =
CascadeType.ALL)
      @JoinTable(name = "auditorium shows",
//
//
              joinColumns = @JoinColumn(name = "auditorium id",
unique = false),
//
              inverseJoinColumns = @JoinColumn(name = "show id",
unique = false))
   private List<ShowEntity> shows;
    public AuditoriumEntity(String name, String image, String email,
String customerCareNo, String address,
                            int seatCapacity, List<String>
facilities, List<String> safeties, List<ShowEntity> shows) {
        this.name = name;
        this.image = image;
        this.email = email;
        this.customerCareNo = customerCareNo;
        this.address = address;
        this.seatCapacity = seatCapacity;
        this.facilities = facilities;
        this.safeties = safeties;
        this.shows = shows;
    }
    public AuditoriumEntity setId(int id) {
        this.id = id;
        return this;
    public AuditoriumEntity setName(String name) {
        this.name = name;
        return this;
    }
    public AuditoriumEntity setImage(String image) {
        this.image = image;
        return this;
    }
    public AuditoriumEntity setEmail(String email) {
        this.email = email;
        return this;
    }
    public AuditoriumEntity setCustomerCare(String customerCareNo) {
        this.customerCareNo = customerCareNo;
        return this;
    }
    public AuditoriumEntity setAddress(String address) {
        this.address = address;
        return this;
    }
    public AuditoriumEntity setSeatCapacity(int seatCapacity) {
```

```
this.seatCapacity = seatCapacity;
        return this;
    }
   public AuditoriumEntity setFacilities(List<String> facilities) {
        this.facilities = facilities;
        return this;
    }
   public AuditoriumEntity setSafeties(List<String> safeties) {
        this.safeties = safeties;
        return this;
    }
   public AuditoriumEntity setShows(List<ShowEntity> shows) {
        this.shows = shows;
        return this;
    }
}
```

Booking Digitals:

```
package com.MyMoviePlan.entity;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.EqualsAndHashCode;
import lombok.NoArgsConstructor;
import javax.persistence.*;
import java.io.Serializable;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "booking_details")
public class BookingDetailsEntity implements Serializable {
    0 I d
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Column(name = "auditorium id")
    private int auditoriumId;
    @Column(name = "show id")
    private int showId;
    @Column(name = "movie show id")
    private int movieShowId;
```

```
@Column(name = "movie id")
    private int movieId;
   public BookingDetailsEntity(int auditoriumId, int showId, int
movieShowId, int movieId) {
        this.auditoriumId = auditoriumId;
        this.showId = showId;
        this.movieShowId = movieShowId;
        this.movieId = movieId;
    }
}
Booking:
package com.MyMoviePlan.entity;
import com.fasterxml.jackson.annotation.JsonIgnore;
import lombok.*;
import javax.persistence.*;
import java.io.Serializable;
import java.util.Date;
import java.util.List;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "bookings")
public class BookingEntity implements Serializable {
    0 I d
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private double amount;
    @Column(name = "total seats")
```

private int totalSeats;

private Date bookedOn;

@Column(name = "booked_on")
@Temporal(TemporalType.DATE)

@Temporal(TemporalType.DATE)
private Date dateOfBooking;

@Column(name = "user_id")
private String userId;

@EqualsAndHashCode.Exclude

@ToString.Exclude

@ElementCollection

@Column(name = "date of booking")

```
@CollectionTable(name = "booked_seats", joinColumns =
@JoinColumn(name = "booking id"))
    @Column(name = "seat numbers")
    private List<String> seatNumbers;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @OneToOne(targetEntity = PaymentEntity.class, cascade =
CascadeType.ALL)
    @JoinColumn(name = "payment id")
    private PaymentEntity payment;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @OneToOne(targetEntity = BookingDetailsEntity.class, cascade =
CascadeType.ALL)
    @JoinColumn(name = "booking details id")
    private BookingDetailsEntity bookingDetails;
    @JsonIqnore
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @ManyToOne(targetEntity = MovieShowsEntity.class)
    private MovieShowsEntity movieShow;
    public BookingEntity(double amount, int totalSeats, Date
bookedOn, Date dateOfBooking, List<String> seatNumbers,
                         PaymentEntity payment, String userId,
MovieShowsEntity movieShow) {
        this.amount = amount;
        this.totalSeats = totalSeats;
        this.bookedOn = bookedOn;
        this.dateOfBooking = dateOfBooking;
        this.seatNumbers = seatNumbers;
        this.payment = payment;
        this.userId = userId;
        this.movieShow = movieShow;
    }
    public BookingEntity setMovieShow(MovieShowsEntity movieShow) {
        this.movieShow = movieShow;
        return this;
    }
    public BookingEntity setId(int id) {
        this.id = id;
        return this;
    public BookingEntity setAmount(double amount) {
        this.amount = amount;
        return this;
    }
    public BookingEntity setTotalSeats(int totalSeats) {
        this.totalSeats = totalSeats;
```

```
return this;
    }
   public BookingEntity setStatus(Date bookedOn) {
        this.bookedOn = bookedOn;
        return this;
    }
   public BookingEntity setDateOfBooking(Date dateOfBooking) {
        this.dateOfBooking = dateOfBooking;
       return this;
    }
   public BookingEntity setSeatNumbers(List<String> seatNumbers) {
        this.seatNumbers = seatNumbers;
        return this;
    }
   public BookingEntity setPayment(PaymentEntity payment) {
        this.payment = payment;
        return this;
    }
   public BookingEntity setUserId(String userId) {
        this.userId = userId;
        return this;
    }
}
```

Movie:

```
package com.MyMoviePlan.entity;
import lombok.*;
import javax.persistence.*;
import java.io.Serializable;
import java.util.Date;
import java.util.List;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "movies")
public class MovieEntity implements Serializable {
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private String name;
```

```
@Column(length = Integer.MAX_VALUE, columnDefinition = "TEXT")
    private String image;
    @Column(name = "bg image", length = Integer.MAX VALUE,
columnDefinition="TEXT")
    private String bgImage;
    @Column(length = 9000)
    private String story;
    private String year;
    private String duration;
    private String caption;
    @Column(name = "added on")
    @Temporal(TemporalType.DATE)
    private Date addedOn;
    @Temporal(TemporalType.DATE)
    private Date release;
   private String language;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @ElementCollection
    @CollectionTable(name = "movie genres", joinColumns =
@JoinColumn(name = "movie id"))
    @Column(name = "genre")
    private List<String> genres;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @OneToMany(targetEntity = ActorEntity.class, cascade =
CascadeType.ALL)
    @JoinColumn(name = "movie id", referencedColumnName = "id")
    private List<ActorEntity> casts;
    @ToString.Exclude
   @EqualsAndHashCode.Exclude
    @OneToMany(targetEntity = ActorEntity.class, cascade =
CascadeType.ALL)
    @JoinColumn(name = "movie id", referencedColumnName = "id")
    private List<ActorEntity> crews;
    public MovieEntity(String name, String image, String bgImage,
String story, String year,
                       String duration, String caption, Date
addedOn, Date release, String language,
                       List<String> genres, List<ActorEntity> casts,
List<ActorEntity> crews) {
        this.name = name;
        this.image = image;
```

```
this.bgImage = bgImage;
    this.story = story;
    this.year = year;
    this.duration = duration;
    this.caption = caption;
    this.addedOn = addedOn;
    this.release = release;
    this.language = language;
    this.genres = genres;
    this.casts = casts;
    this.crews = crews;
}
public MovieEntity setId(int id) {
    this.id = id;
    return this;
}
public MovieEntity setName(String name) {
    this.name = name;
    return this;
}
public MovieEntity setImage(String image) {
    this.image = image;
    return this;
}
public MovieEntity setBgImage(String bgImage) {
    this.bgImage = bgImage;
    return this;
}
public MovieEntity setStory(String story) {
    this.story = story;
    return this;
public MovieEntity setYear(String year) {
    this.year = year;
    return this;
}
public MovieEntity setDuration(String duration) {
    this.duration = duration;
    return this;
}
public MovieEntity setCaption(String caption) {
    this.caption = caption;
    return this;
}
public MovieEntity setAddedOn(Date addedOn) {
    this.addedOn = addedOn;
    return this;
```

```
}
   public MovieEntity setRelease(Date release) {
        this.release = release;
        return this;
   public MovieEntity setLanguages(String language) {
        this.language = language;
        return this;
    }
   public MovieEntity setGenres(List<String> genres) {
        this.genres = genres;
        return this;
    }
   public MovieEntity setCasts(List<ActorEntity> casts) {
        this.casts = casts;
       return this;
    }
   public MovieEntity setCrews(List<ActorEntity> crews) {
        this.crews = crews;
        return this;
    }
}
```

Movie Show:

```
package com.MyMoviePlan.entity;
import com.fasterxml.jackson.annotation.JsonIgnore;
import lombok.*;
import javax.persistence.*;
import java.io.Serializable;
import java.util.Date;
import java.util.List;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "movie shows")
public class MovieShowsEntity implements Serializable {
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    @Temporal(TemporalType.DATE)
```

```
@Column(name = "show start")
    private Date start;
    @Temporal(TemporalType.DATE)
    @Column(name = "show end")
    private Date end;
    @Column(name = "movie id")
    private int movieId;
    @JsonIgnore
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @ManyToOne(targetEntity = ShowEntity.class)
    private ShowEntity show;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @JoinColumn(name = "movie show id", referencedColumnName = "id")
    @OneToMany(targetEntity = BookingEntity.class, cascade =
CascadeType.ALL)
      @JoinTable(name = "movie show bookings",
//
//
              joinColumns = @JoinColumn(name = "movie show id",
unique = false),
//
              inverseJoinColumns = @JoinColumn(name = "booking id",
unique = false))
    private List<BookingEntity> bookings;
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @OneToOne(targetEntity = PriceEntity.class, cascade =
CascadeType.ALL)
    @JoinColumn(name = "price id")
    private PriceEntity price;
    public MovieShowsEntity(int id, Date start, Date end,
List<BookingEntity> bookings, int movieId) {
        this.id = id;
        this.start = start;
        this.end = end;
        this.bookings = bookings;
        this.movieId = movieId;
    }
    public MovieShowsEntity setId(int id) {
        this.id = id;
        return this;
    public MovieShowsEntity setStart(Date start) {
        this.start = start;
        return this;
    }
    public MovieShowsEntity setEnd(Date end) {
        this.end = end;
```

```
return this;
}

public MovieShowsEntity setShow(ShowEntity show) {
    this.show = show;
    return this;
}

public MovieShowsEntity setMovieId(int movieId) {
    this.movieId = movieId;
    return this;
}
```

Payment:

```
package com.MyMoviePlan.entity;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.EqualsAndHashCode;
import lombok.NoArgsConstructor;
import javax.persistence.*;
import java.io.Serializable;
import java.util.Date;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "payments")
public class PaymentEntity implements Serializable {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private double amount;
    @Column(name = "payment date")
    @Temporal(TemporalType.DATE)
    private Date paymentDate;
    @Column(name = "card_number", length = 20)
    private String cardNumber;
    @Column(name = "card expiry month", length = 5)
    private String cardExpiryMonth;
    @Column(name = "card_expiry_year", length = 5)
    private String cardExpiryYear;
```

```
@Column(name = "card cvv", length = 5)
    private String cardCVV;
    public PaymentEntity(double amount, Date paymentDate, String
cardNumber, String cardExpiryMonth,
                         String cardExpiryYear, String cardCVV) {
        this.amount = amount;
        this.paymentDate = paymentDate;
        this.cardNumber = cardNumber;
        this.cardExpiryMonth = cardExpiryMonth;
        this.cardExpiryYear = cardExpiryYear;
        this.cardCVV = cardCVV;
    }
    public PaymentEntity setId(int id) {
        this.id = id;
        return this;
    public PaymentEntity setAmount(double amount) {
        this.amount = amount;
        return this;
    public PaymentEntity setPaymentDate(Date paymentDate) {
        this.paymentDate = paymentDate;
        return this;
    public PaymentEntity setCardNumber(String cardNumber) {
        this.cardNumber = cardNumber;
        return this;
   public PaymentEntity setCardExpiryMonth(String cardExpiryMonth)
{
        this.cardExpiryMonth = cardExpiryMonth;
        return this;
    }
    public PaymentEntity setCardExpiryYear(String cardExpiryYear) {
        this.cardExpiryYear = cardExpiryYear;
        return this;
    }
    public PaymentEntity setCardCVV(String cardCVV) {
        this.cardCVV = cardCVV;
        return this;
    }
}
```

Price:

```
package com.MyMoviePlan.entity;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.EqualsAndHashCode;
import lombok.NoArgsConstructor;
import javax.persistence.*;
import java.io.Serializable;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "prices")
public class PriceEntity implements Serializable {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private double general;
    private double silver;
    private double gold;
    public PriceEntity(double general, double silver, double gold) {
        this.general = general;
        this.silver = silver;
        this.gold = gold;
}
```

Show:

```
package com.MyMoviePlan.entity;
import com.fasterxml.jackson.annotation.JsonIgnore;
import lombok.*;
import javax.persistence.*;
import java.io.Serializable;
import java.util.List;

@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "shows")
public class ShowEntity implements Serializable {
```

```
@Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;
    private String name;
    @Column(name = "start time")
    private String startTime;
    @JsonIgnore
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @ManyToOne(targetEntity = AuditoriumEntity.class)
    private AuditoriumEntity auditorium;
    //
          @JsonManagedReference
    @ToString.Exclude
    @EqualsAndHashCode.Exclude
    @OneToMany(targetEntity = MovieShowsEntity.class, cascade =
CascadeType.ALL)
    @JoinColumn(name = "show id", referencedColumnName = "id")
    private List<MovieShowsEntity> movieShows;
    public ShowEntity(String name, String startTime,
List<MovieShowsEntity> movieShows) {
        this.name = name:
        this.startTime = startTime;
        this.movieShows = movieShows;
    public ShowEntity setId(int id) {
        this.id = id;
        return this;
    }
    public ShowEntity setName(String name) {
        this.name = name;
        return this;
    }
    public ShowEntity setStartTime(String startTime) {
        this.startTime = startTime;
        return this;
    }
    public ShowEntity setAuditorium(AuditoriumEntity auditorium) {
        this.auditorium = auditorium;
        return this;
    }
    public ShowEntity setMovieShows(List<MovieShowsEntity>
movieShows) {
        this.movieShows = movieShows;
        return this;
    }
```

User:

```
package com.MyMoviePlan.entity;
import com.MyMoviePlan.model.UserRole;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.EqualsAndHashCode;
import lombok.NoArgsConstructor;
import org.hibernate.annotations.GenericGenerator;
import javax.persistence.*;
import java.io.Serializable;
@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "users")
public class UserEntity implements Serializable {
    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY, generator =
"uuid2")
    @GenericGenerator(name = "uuid2", strategy = "uuid2")
    private String id;
    @Column(length = 50)
    private String name;
    @Column(nullable = false, length = 50, unique = true)
    private String email;
    @Column(nullable = false, length = 10, unique = true)
    private String mobile;
    @Column(length = 60)
    private String gender;
    private String password;
    private Boolean terms;
    @Column(name = "is account non expired")
    private Boolean isAccountNonExpired;
    @Column(name = "is account non locked")
    private Boolean isAccountNonLocked;
    @Column(name = "is credentials non expired")
```

```
private Boolean isCredentialsNonExpired;
    @Column(name = "is enabled")
    private Boolean isEnabled;
    @Column(name = "user role", length = 20)
    @Enumerated(EnumType.STRING)
    private UserRole userRole;
    public UserEntity(String name, String email, String mobile,
String gender, String password, Boolean terms,
                      Boolean isAccountNonExpired, Boolean
isAccountNonLocked,
                      Boolean isCredentialsNonExpired, Boolean
isEnabled, UserRole userRole) {
        this.name = name;
        this.email = email;
        this.mobile = mobile;
        this.gender = gender;
        this.password = password;
        this.terms = terms;
        this.isAccountNonExpired = isAccountNonExpired;
        this.isAccountNonLocked = isAccountNonLocked;
        this.isCredentialsNonExpired = isCredentialsNonExpired;
        this.isEnabled = isEnabled;
        this.userRole = userRole;
    }
    public UserEntity setId(String id) {
        this.id = id;
        return this;
    public UserEntity setName(String name) {
        this.name = name;
        return this;
    public UserEntity setEmail(String email) {
        this.email = email;
        return this;
    public UserEntity setMobile(String mobile) {
        this.mobile = mobile;
        return this;
    public UserEntity setGender(String gender) {
        this.gender = gender;
        return this;
    }
    public UserEntity setPassword(String password) {
        this.password = password;
        return this;
```

```
}
    public UserEntity setActive(Boolean active) {
        terms = active;
        return this;
    }
    public UserEntity setAccountNonExpired(Boolean
accountNonExpired) {
        isAccountNonExpired = accountNonExpired;
        return this;
    }
   public UserEntity setAccountNonLocked(Boolean accountNonLocked)
{
        isAccountNonLocked = accountNonLocked;
        return this;
    }
    public UserEntity setCredentialsNonExpired(Boolean
credentialsNonExpired) {
        isCredentialsNonExpired = credentialsNonExpired;
        return this;
    }
    public UserEntity setEnabled(Boolean enabled) {
        isEnabled = enabled;
        return this;
    public UserEntity setUserRole(UserRole userRole) {
        this.userRole = userRole;
        return this;
    }
    public UserEntity setTerms(Boolean terms) {
        this.terms = terms;
       return this;
    }
}
```

EXCEPTION:

Auditorium NotFound:

```
package com.MyMoviePlan.exception;
public class AuditoriumNotFoundException extends RuntimeException {
    public AuditoriumNotFoundException(String message) {
        super(message);
    }
}
```

Booking Notfound:

```
package com.MyMoviePlan.exception;
public class BookingNotFoundException extends RuntimeException{
   public BookingNotFoundException(String message) {
      super(message);
   }
}
```

Global:

```
package com.MyMoviePlan.exception;
import com.MyMoviePlan.model.HttpResponse;
import org.springframework.http.HttpStatus;
import org.springframework.http.ResponseEntity;
import org.springframework.web.bind.annotation.ControllerAdvice;
import org.springframework.web.bind.annotation.ExceptionHandler;
import
org.springframework.web.servlet.mvc.method.annotation.ResponseEntity
ExceptionHandler;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
@ControllerAdvice
public class GlobalExceptionHandler extends
ResponseEntityExceptionHandler {
    @ExceptionHandler(Exception.class)
    public ResponseEntity<HttpResponse> handleException(final
Exception exception,
                                                         final
HttpServletRequest request,
                                                         final
HttpServletResponse response) {
        Integer statusCode = (Integer) request
                .getAttribute("javax.servlet.error.status code");
        final int status = response.getStatus();
        final String exceptionMessage = exception.getMessage();
        if (statusCode == null || statusCode == 0) {
            statusCode = status;
            if
(HttpStatus.valueOf(status).getReasonPhrase().equals("OK"))
                statusCode = 403;
        }
```

Movie Show Notfound:

```
package com.MyMoviePlan.exception;

public class MovieShowNotFoundException extends RuntimeException {
    public MovieShowNotFoundException(String message) {
        super(message);
    }
}
```

Show Notfound:

```
package com.MyMoviePlan.exception;

public class ShowNotFoundException extends RuntimeException{
    public ShowNotFoundException(String message) {
        super(message);
    }
}
```

Un Authorized:

```
package com.MyMoviePlan.exception;
public class UnAuthorizedException extends RuntimeException{
```

```
public UnAuthorizedException(String message) {
    super(message);
}
```

User Notfound:

```
package com.MyMoviePlan.exception;

public class UserNotFoundException extends RuntimeException {
    public UserNotFoundException(String message) {
        super(message);
    }
}
```

FILTER:

JWT Filter:

```
package com.MyMoviePlan.filter;
import com.MyMoviePlan.model.HttpResponse;
import com.MyMoviePlan.security.ApplicationUserDetailsService;
import com.MyMoviePlan.util.JWTUtil;
import io.jsonwebtoken.JwtException;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
org.springframework.security.authentication.UsernamePasswordAuthenti
cationToken;
import
org.springframework.security.core.context.SecurityContextHolder;
import org.springframework.security.core.userdetails.UserDetails;
import
org.springframework.security.web.authentication.WebAuthenticationDet
ailsSource;
import org.springframework.stereotype.Component;
import org.springframework.web.filter.OncePerRequestFilter;
import javax.servlet.FilterChain;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import java.io.IOException;
@Component()
```

```
public class JWTFilter extends OncePerRequestFilter {
    @Autowired
    private JWTUtil jwtUtil;
    @Autowired
    private ApplicationUserDetailsService userDetailsService;
    @Override
    protected void doFilterInternal(HttpServletRequest request,
                                    HttpServletResponse response,
                                    FilterChain filterChain) throws
ServletException, IOException {
        try {
            String authorization =
request.getHeader("Authorization");
            String token = null;
            String userName = null;
            if (authorization != null &&
authorization.startsWith("Bearer ")) {
                token = authorization.substring(7);
                userName = jwtUtil.getUsernameFromToken(token);
            }
            if (userName != null &&
SecurityContextHolder.getContext().getAuthentication() == null) {
                UserDetails userDetails
userDetailsService.loadUserByUsername(userName);
                if (jwtUtil.validateToken(token, userDetails)) {
                    UsernamePasswordAuthenticationToken
authenticationToken
                            = new
UsernamePasswordAuthenticationToken (userDetails,
                            null, userDetails.getAuthorities());
                    authenticationToken.setDetails(
WebAuthenticationDetailsSource().buildDetails(request)
                    );
SecurityContextHolder.getContext().setAuthentication(authenticationT
oken);
                }
            filterChain.doFilter(request, response);
        } catch (JwtException exception) {
            setErrorResponse(HttpStatus.NOT ACCEPTABLE, response,
exception);
        } catch (Exception exception) {
           setErrorResponse (HttpStatus.INTERNAL SERVER ERROR,
response, exception);
```

```
}
    private void setErrorResponse (HttpStatus status,
HttpServletResponse response, Exception exception) {
        response.setStatus(status.value());
        response.setContentType("application/json");
        final HttpResponse httpResponse =
                new HttpResponse(status.value(),
HttpStatus.valueOf(status.value()).getReasonPhrase(),
                        exception.getMessage());
        try {
            final String json = httpResponse.covertToJson();
            response.getWriter().write(json);
        } catch (IOException e) {
            e.printStackTrace();
    }
}
```

MODEL:

Booked Seats:

```
package com.MyMoviePlan.model;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.NoArgsConstructor;
import java.util.List;
@Data
@AllArgsConstructor
@NoArgsConstructor
public class BookedSeats {
    private int count;
    private List<String> seats;
}
```

Credentials:

```
package com.MyMoviePlan.model;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.NoArgsConstructor;
```

```
@Data
@AllArgsConstructor
@NoArgsConstructor
public class Credentials {
    private String username;
    private String password;
}
```

HTTP Response:

```
package com.MyMoviePlan.model;
import com.fasterxml.jackson.core.JsonProcessingException;
import com.fasterxml.jackson.databind.ObjectMapper;
import com.fasterxml.jackson.databind.SerializationFeature;
import com.fasterxml.jackson.datatype.jsr310.JavaTimeModule;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.NoArgsConstructor;
@Data
@AllArgsConstructor
@NoArgsConstructor
public class HttpResponse {
    private int statusCode; // 200, 201, 404
    private String error; // OK, CREATED
    private String message;
    public String covertToJson() throws JsonProcessingException {
        if (this == null)
            return null;
        ObjectMapper mapper = new ObjectMapper();
        mapper.registerModule(new JavaTimeModule());
mapper.disable(SerializationFeature.WRITE DATES AS TIMESTAMPS);
        return mapper.writeValueAsString(this);
    }
}
```

Ticket Details:

```
package com.MyMoviePlan.model;
```

```
import lombok.AllArgsConstructor;
import lombok.NoArgsConstructor;
@AllArgsConstructor
@NoArgsConstructor
public class TicketDetails {
    private String auditoriumName;
    private String showName;
    private String showTiming;
    private double amount;
    private String movieName;
    private String movieImage;
    private String movieBgImage;
}
```

Token:

```
package com.MyMoviePlan.model;
import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.NoArgsConstructor;
@Data
@AllArgsConstructor
@NoArgsConstructor
public class Token {
    private String token;
}
```

UserPermisions:

```
package com.MyMoviePlan.model;
import lombok.AllArgsConstructor;
import lombok.Getter;

@Getter
@AllArgsConstructor
public enum UserPermission {
    READ,
```

```
WRITE,
UPDATE,
DELETE
}
```

User Role:

```
package com.MyMoviePlan.model;
import lombok.AllArgsConstructor;
import lombok.Getter;
import java.util.Arrays;
import java.util.List;
import static com.MyMoviePlan.model.UserPermission.*;

@Getter
@AllArgsConstructor
public enum UserRole {

    ROLE_USER(Arrays.asList(READ)),
    ROLE_MANAGER(Arrays.asList(READ, WRITE)),
    ROLE_ADMIN(Arrays.asList(READ, WRITE, UPDATE)),
    ROLE_SUPER_ADMIN(Arrays.asList(READ, WRITE, UPDATE, DELETE));

    private final List<UserPermission> permissions;
}
```

REPOSITORY:

Actor:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.ActorEntity;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
@Repository
public interface ActorRepository extends JpaRepository<ActorEntity,
Integer> {
}
```

Auditorium:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.AuditoriumEntity;
import org.springframework.data.jpa.repository.JpaRepository;
```

```
import org.springframework.stereotype.Repository;
@Repository
public interface AuditoriumRepository extends
JpaRepository<AuditoriumEntity, Integer> {
}
```

Booking Repository:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.BookingEntity;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import java.util.List;
@Repository
public interface BookingRepository extends
JpaRepository<BookingEntity, Integer> {
    List<BookingEntity> findAllByUserIdOrderByBookedOnAsc(final String userId);
}
```

Movie:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.MovieEntity;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
@Repository
public interface MovieRepository extends JpaRepository<MovieEntity,
Integer> {
}
```

MovieShow:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.MovieShowsEntity;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import org.springframework.data.repository.query.Param;
import org.springframework.stereotype.Repository;
```

```
import java.util.List;
@Repository
public interface MovieShowsRepository extends
JpaRepository<MovieShowsEntity, Integer> {
          https://docs.spring.io/spring-
data/commons/docs/current/reference/html/#repositories.limit-query-
result
    //
         https://stackoverflow.com/questions/11401229/how-to-use-
select-distinct-with-random-function-in-postgresql
    // https://stackoverflow.com/questions/32079084/how-to-find-
distinct-rows-with-field-in-list-using-jpa-and-spring
         https://dev.to/golovpavel/make-a-request-with-sub-
condition-for-child-list-via-spring-data-jpa-4inn
         https://docs.spring.io/spring-
data/jpa/docs/current/reference/html/#jpa.query-methods.query-
creation
          @Query(value = "SELECT DISTINCT ON(movie id) * FROM
movie shows WHERE start >= CURRENT DATE", nativeQuery = true)
    @Query(value = "SELECT DISTINCT ON(ms.movie id) * FROM
movie shows ms WHERE ms.show start > CURRENT DATE", nativeQuery =
true)
    List<MovieShowsEntity> findAllUpComing();
    @Query(value = "SELECT DISTINCT ON(ms.movie id) * FROM
movie shows ms WHERE ms.show start <= CURRENT DATE AND ms.show end
>= CURRENT DATE", nativeQuery = true)
    List<MovieShowsEntity> findAllNowPlaying();
    @Query(value = "SELECT DISTINCT ON(ms.movie id) * FROM
movie shows ms WHERE ms.show end >= CURRENT DATE", nativeQuery =
true)
    List<MovieShowsEntity> findAllNowPlayingAndUpComing();
    @Query(value = "SELECT DISTINCT ON(ms.movie id) * FROM
movie shows ms WHERE ms.show end < CURRENT DATE", nativeQuery =
true)
    List<MovieShowsEntity> findAllNotPlaying();
          @Query("FROM MovieShowsEntity ms LEFT JOIN ms.bookings b
WHERE ms.id = ?1 AND b.dateOfBooking = ?2")
         @Query(value = "SELECT * FROM movie shows ms INNER JOIN
bookings b ON ms.id = :id and b.date of booking = ':dateOfBooking'",
nativeQuery = true)
        Optional < Movie Shows Entity >
findByIdAndDateOfBooking(@Param("id") final int id,
@Param("dateOfBooking") final String dateOfBooking);
            SELECT * FROM (SELECT DISTINCT movie id FROM movie shows
WHERE start > CURRENT DATE) ms ORDER BY random() LIMIT :records
    @Query(value = "SELECT DISTINCT ON(ms.movie id) * FROM
movie shows ms WHERE ms.show start > CURRENT DATE LIMIT :records",
nativeQuery = true)
```

```
List<MovieShowsEntity> findFewUpComing(@Param("records") final
int records);

@Query(value = "SELECT DISTINCT ON(ms.movie_id) * FROM
movie_shows ms WHERE ms.show_start <= CURRENT_DATE AND ms.show_end
>= CURRENT_DATE LIMIT :records", nativeQuery = true)
    List<MovieShowsEntity> findFewNowPlaying(@Param("records") final
int records);

// @Query(value = "SELECT ms.id, ms.show_end, ms.movie_id,
ms.show_start, ms.show_id, ms.price_id FROM movie_shows ms INNER
JOIN bookings b ON b.id = :bookingId", nativeQuery = true)
    // MovieShowsEntity findByBookingId(@Param("bookingId") final
int bookingId);
}
```

Payment:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.PaymentEntity;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
@Repository
public interface PaymentRepository extends
JpaRepository<PaymentEntity, Integer> {
}
```

Price:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.PriceEntity;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
@Repository
public interface PriceRepository extends JpaRepository<PriceEntity,
Integer> {
}
```

Show:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.ShowEntity;
import org.springframework.data.jpa.repository.JpaRepository;
```

```
import org.springframework.stereotype.Repository;

@Repository
public interface ShowRepository extends JpaRepository<ShowEntity,
Integer> {
}
```

User:

```
package com.MyMoviePlan.repository;
import com.MyMoviePlan.entity.UserEntity;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import java.util.Optional;
@Repository
public interface UserRepository extends JpaRepository<UserEntity,
String> {
    Optional<UserEntity> findByEmail(final String email);
    Optional<UserEntity> findByMobile(final String mobile);
}
```

SECURITY:

Application Security:

```
package com.MyMoviePlan.security;
import com.MyMoviePlan.filter.JWTFilter;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.http.HttpMethod;
import
org.springframework.security.authentication.AuthenticationManager;
import
org.springframework.security.authentication.dao.DaoAuthenticationPro
vider;
import
org.springframework.security.config.annotation.authentication.builde
rs.AuthenticationManagerBuilder;
org.springframework.security.config.annotation.method.configuration.
EnableGlobalMethodSecurity;
```

```
import
org.springframework.security.config.annotation.web.builders.HttpSecu
rity;
import
org.springframework.security.config.annotation.web.builders.WebSecur
itv;
import
org.springframework.security.config.annotation.web.configuration.Ena
bleWebSecurity;
import
org.springframework.security.config.annotation.web.configuration.Web
SecurityConfigurerAdapter;
import
org.springframework.security.config.http.SessionCreationPolicy;
import org.springframework.security.crypto.password.PasswordEncoder;
org.springframework.security.web.authentication.UsernamePasswordAuth
enticationFilter;
import org.springframework.web.cors.CorsConfiguration;
import org.springframework.web.cors.CorsConfigurationSource;
import org.springframework.web.cors.UrlBasedCorsConfigurationSource;
import java.util.Arrays;
@Configuration
@EnableWebSecurity
@EnableGlobalMethodSecurity(prePostEnabled = true)
public class ApplicationSecurity extends
WebSecurityConfigurerAdapter {
    @Autowired
    private ApplicationUserDetailsService userDetailsService;
    @Autowired
    private PasswordEncoder passwordEncoder;
    @Autowired
    private JWTFilter jwtFilter;
    @Override
    protected void configure (HttpSecurity http) throws Exception {
        http.headers().frameOptions().sameOrigin();
        http.csrf().disable().cors().disable()
.cors().configurationSource(corsConfigurationSource())
                .and()
        .authorizeRequests()
                .antMatchers(HttpMethod.OPTIONS, "/**")
                .permitAll()
                .anyRequest()
                .fullyAuthenticated()
                .and()
                .httpBasic()
                .and()
                .sessionManagement()
```

```
.sessionCreationPolicy(SessionCreationPolicy.STATELESS);
        http.addFilterBefore(jwtFilter,
UsernamePasswordAuthenticationFilter.class);
//
                  .antMatchers (HttpMethod.POST,
"/user/authenticate", "/user/sign-up")
                  .permitAll()
//
//
                  .antMatchers(HttpMethod.PUT, "/user/forgot-
password")
//
                  .permitAll()
                  .antMatchers(HttpMethod.GET, "/auditorium/**",
//
"/movie/**", "/show/**", "/user/check/**")
                  .permitAll()
    @Override
    public void configure(WebSecurity web) throws Exception {
        web.ignoring()
                .antMatchers("/h2-console/**", "/auditorium/**",
"/movie/**", "/show/**", "/user/**", "/user/forgot-password",
"/user/authenticate", "/movie-show/**",
                        "/booking/**", "/logout");
    }
    @Override
    protected void configure (AuthenticationManagerBuilder auth)
throws Exception {
        auth.authenticationProvider(authenticationProvider());
    }
    @Bean
    public DaoAuthenticationProvider authenticationProvider() {
        DaoAuthenticationProvider authenticationProvider = new
DaoAuthenticationProvider();
        authenticationProvider.setPasswordEncoder(passwordEncoder);
authenticationProvider.setUserDetailsService(userDetailsService);
       return authenticationProvider;
    }
    @Bean
    CorsConfigurationSource corsConfigurationSource() {
        CorsConfiguration configuration = new CorsConfiguration();
        configuration.setAllowedOrigins(Arrays.asList("*"));
        configuration.setAllowedMethods(Arrays.asList("GET", "POST",
"PUT", "PATCH", "DELETE", "OPTIONS"));
        configuration.setAllowCredentials(true);
        //the below three lines will add the relevant CORS response
headers
        configuration.addAllowedOrigin("*");
        configuration.addAllowedHeader("*");
        configuration.addAllowedMethod("*");
        UrlBasedCorsConfigurationSource source = new
UrlBasedCorsConfigurationSource();
```

```
source.registerCorsConfiguration("/**", configuration);
return source;
}

@Override
@Bean
protected AuthenticationManager authenticationManager() throws
Exception {
    return super.authenticationManager();
}
```

Application User Details:

```
package com.MyMoviePlan.security;
import com.MyMoviePlan.entity.UserEntity;
import lombok.AllArgsConstructor;
import org.springframework.security.core.GrantedAuthority;
import
org.springframework.security.core.authority.SimpleGrantedAuthority;
import org.springframework.security.core.userdetails.UserDetails;
import java.util.Collection;
import java.util.List;
import java.util.stream.Collectors;
@AllArqsConstructor
public class ApplicationUserDetails implements UserDetails {
    private final UserEntity user;
    @Override
    public Collection<? extends GrantedAuthority> getAuthorities() {
        final List<SimpleGrantedAuthority> authorities =
user.getUserRole()
                .getPermissions()
                .stream()
                .map(permission -> new
SimpleGrantedAuthority(permission.name()))
                .collect(Collectors.toList());
        authorities.add(new
SimpleGrantedAuthority(user.getUserRole().name()));
        return authorities;
    }
    @Override
    public String getPassword() {
        return user.getPassword();
    @Override
```

```
public String getUsername() {
       return user.getEmail();
    }
   @Override
   public boolean isAccountNonExpired() {
        return user.getIsAccountNonExpired();
   @Override
   public boolean isAccountNonLocked() {
       return user.getIsAccountNonLocked();
   @Override
   public boolean isCredentialsNonExpired() {
        return user.getIsCredentialsNonExpired();
   @Override
   public boolean isEnabled() {
        return user.getIsEnabled();
}
```

Application User Srvise:

```
package com.MyMoviePlan.security;
import com.MyMoviePlan.entity.UserEntity;
import com.MyMoviePlan.exception.UserNotFoundException;
import com.MyMoviePlan.service.UserService;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.core.userdetails.UserDetails;
import
org.springframework.security.core.userdetails.UserDetailsService;
import
org.springframework.security.core.userdetails.UsernameNotFoundExcept
import org.springframework.stereotype.Service;
@Service
public class ApplicationUserDetailsService implements
UserDetailsService {
    @Autowired
    private UserService service;
    @Override
    public UserDetails loadUserByUsername(final String username)
throws UsernameNotFoundException {
        final UserEntity userEntity = service.getUser(username);
        return new ApplicationUserDetails(userEntity);
```

```
}
```

SERVLETS UTILIZER:

```
package com.MyMoviePlan;
import org.springframework.boot.builder.SpringApplicationBuilder;
import
org.springframework.boot.web.servlet.support.SpringBootServletInitia
lizer;

public class ServletInitializer extends SpringBootServletInitializer
{
    @Override
    protected SpringApplicationBuilder
configure(SpringApplicationBuilder application) {
        return application.sources(MyMoviePlanApplication.class);
    }
}
```

TEST:

My Movie Application Test:

```
package com.MyMoviePlan;
import org.junit.jupiter.api.Test;
import org.springframework.boot.test.context.SpringBootTest;

@SpringBootTest
class MyMoviePlanApplicationTests {

    @Test
    void contextLoads() {
    }
}
```