

Source code:

Front-End(Angular):

About us:

```
<divclass="about-us-container">
  <divclass="about-us-wrapper position-relative">
    <divclass="about-us-banner">
      <divclass="about-us-banner-text h-100">
        <h1class="fs-1">
          {{ title :MY MOVIE PLAN}}
        </h1>
        <h2class="fs-2 text-uppercase">WE provide entertainment</h2>
      </div>
    </div>
  </div>

  <divclass="description mt-4">
    <divclass="mx-4">
      <h1class="fs-2">About Us</h1>
      <divclass="underline text-warning"></div>
    </div>
    <pclass="text-muted text-start px-3 p-lg-4 p-md-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
    </p>
  </div>

  <divclass="testimonials p-lg-5 bg-dark text-white p-md-3 mt-4">
    <h1class="fs-2 pb-5 text-center">Our Happy Customer</h1>
    <divclass="testimonials-list row g-0">
      <divclass="testimonial-card col-4 px-4 my-4">
        <divclass="testimonial text-center">
          <divclass="image mb-2 col-3 mx-auto">
            
          </div>
        </div>
        <divclass="comments">
          <h2class="fs-2 text-center">Happy 1</h2>
        </div>
      </div>
    </div>
  </div>
```

```
<divclass="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>

<divclass="testimonial-card col-4 px-4 my-4">
  <divclass="testimonial text-center">
    <divclass="image mb-2 col-3 mx-auto">
      
    </div>
    <divclass="comments">
      <h3class="fs-3 user">User 2</h3>
      <divclass="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>

<divclass="testimonial-card col-4 px-4 my-4">
  <divclass="testimonial text-center">
    <divclass="image mb-2 col-3 mx-auto">
      
    </div>
    <divclass="comments">
      <h3class="fs-3 user">User 3</h3>
      <divclass="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>

<divclass="branches mt-4 py-5">
  <divclass="mx-4">
    <h1class="fs-2">Our Branches</h1>
    <divclass="underline"></div>
  </div>
  <divclass="row g-0 justify-content-around align-content-center">
    <mat-cardclass="col-3 mx-3 my-3 bg-warning"color="accent"
      >Chennai</mat-card
    >
    <mat-cardclass="col-3 mx-3 my-3 bg-warning"color="accent"
      >Bangalore</mat-card
    >
    <mat-cardclass="col-3 mx-3 my-3 bg-warning"color="accent"
      >Coimbatore</mat-card
    >
    <mat-cardclass="col-3 mx-3 my-3 bg-warning"color="accent"
      >Hyderabad</mat-card
    >
    <mat-cardclass="col-3 mx-3 my-3 bg-warning"color="accent"
      >Goa</mat-card
    >
    <mat-cardclass="col-3 mx-3 my-3 bg-warning"color="accent"
      >Kochi</mat-card
    >
  </div>
</div>
</div>
```

Auditorium Forms:

```
<divclass="form-container">
  <divclass="mx-auto text-center bg-color">
    <divclass="container py-5">
      <h1class="fs-2 text-dark text-align-center">
```

```
Register New Auditorium Here
</h1>
</div>
</div>

<divclass="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-templatematStepLabel>Auditorium Details</ng-template>
        <divclass="row g-0 my-3 justify-content-around">
          <divclass="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
                matInput
                placeholder="Auditorium Name"
                FormControlName="name"
              />
              <mat-error*ngIf="nameErrors">{{ nameErrors }}</mat-error>
            </mat-form-field>
          </div>
          <divclass="col-sm-12 col-lg-5 mx-lg-2">
            <mat-form-field
              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>
          <divclass="col-sm-12 col-lg-5 mx-lg-2">
            <mat-form-field
              class="d-block w-100 text-dark"
              appearance="outline"
            >
              <mat-label>Seating Capacity</mat-label>
              <inputmatInputFormControlName="seatCapacity"readonly/>
            </mat-form-field>
          </div>
        </div>
      </mat-step>
    </mat-vertical-stepper>
  </form>
</div>
```

```
</div>

<divclass="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
      matInput
      placeholder="Email Id"
      FormControlName="email"
    />
    <mat-error*ngIf="emailErrors">{{ emailErrors }}</mat-error>
  </mat-form-field>
</div>

<divclass="col-sm-12 col-lg-5 mx-lg-2">
  <mat-form-field
    class="d-block w-100 text-dark"
    appearance="outline"
  >
    <mat-label>Customer Care Number</mat-label>
    <input
      matInput
      placeholder="Cust Care No"
      FormControlName="customerCareNo"
    />
    <mat-error*ngIf="customerCareNoErrors">{{
      customerCareNoErrors
    }}</mat-error>
  </mat-form-field>
</div>

<divclass="col-sm-12 col-lg-5 mx-lg-2">
  <mat-form-field
    class="d-block w-100 text-dark"
    appearance="outline"
  >
    <mat-label>Address</mat-label>
    <input
      matInput
      placeholder="Address"
      FormControlName="address"
    />
    <mat-error*ngIf="addressErrors">{{ addressErrors }}</mat-error>
  </mat-form-field>
</div>
```

```
</div>
<div>
  <button mat-button matStepperNext type="button">Next</button>
</div>
</mat-step>

<mat-step[stepControl]="auditoriumForm.get('safeties')!" optional>
  <ng-template matStepLabel>Add Safeties</ng-template>
  <div class="row g-0 justify-content-around">
    <div
      class="col-sm-12 col-lg-5 form-field"
      formArrayName="safeties"
      *ngFor="let safety of safeties.controls; index as i"
    >
      <mat-form-field
        class="d-block w-100 text-dark"
        appearance="outline"
      >
        <mat-label>Safety</mat-label>
        <input
          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">
            >Safety cannot be empty</span>
          <span *ngIf="safety.errors?.uniqueName">
            >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>
    >
  </div>
</mat-step>
```

```
        </div>
    </div>
    <divclass="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>
    </div>
    <div>
        <buttonmat-buttonmatStepperPreviousstype="button">Back</button>
        <buttonmat-buttonmatStepperNexttype="button">Next</button>
    </div>
</mat-step>

<mat-step[stepControl]="auditoriumForm.get('facilities')!"optional>
    <ng-templatematStepLabel>Add Facilities</ng-template>
    <divclass="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
                class="d-block w-100 text-dark"
                appearance="outline"
            >
                <mat-label>Facility</mat-label>
                <input
                    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*ngIt="+facility.errors?.required"
```

```
        >Facility cannot be empty</span>
      >
      <span*ngIf="facility.errors?.uniqueName"
        >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>
  >
</div>
</div>
<divclass="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>
  >
</div>
<div>
  <buttonmat-buttonmatStepperPrevious>Back</button>
  <buttonmat-buttonmatStepperNext>Next</button>
</div>
</mat-step>

<mat-step[stepControl]="auditoriumForm.get('shows')!"optional>
  <ng-templatematStepLabel>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"
>
<divclass="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
      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">
        Show Name cannot be empty</span>
      >
      <span*ngIf="show.get('name')?.errors?.uniqueName">
        Show Name already added</span>
      >
    </mat-error>
  </mat-form-field>
</div>
<divclass="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
      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>
    >
  </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>
</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>
  <pre>
    {{ auditoriumForm.value | json }}
  </pre>
  <div>
    <button mat-button matStepperPrevious type="button">Back</button>
    <button
      mat-button
      color="primary"
      [disabled]="!auditoriumForm.valid"
    >
      Submit
    </button>
  </div>
</mat-step>
</mat-vertical-stepper>
</form>
</div>
</div>
```

Contact Us:

```
<divclass="contact-us-container">
  <divclass="contact-us-wrapper postion-relative">
    <divclass="contact-us-banner">
      <divclass="contact-us-banner-text h-100">
        <h1class="fs-1">Contact Us</h1>
        <h2class="fs-2 text-uppercase">Drop us a line, get in touch</h2>
      </div>
    </div>
  </div>

  <divclass="get-in-touch my-5">
    <divclass="row g-0 justify-content-around">
      <divclass="write-to-us col-sm-12 col-md-12 col-lg-7">
        <h1class="fs-2">Write to us by filling in the form below</h1>
        <divclass="underline"></div>
        <divclass="form-container">
          <formclass="example-form col-sm-12 col-lg-8 mx-auto">
            <mat-form-field
              class="example-full-width d-block text-dark"
              appearance="standard"
            >
              <mat-labelclass="text-dark">Your Name</mat-label>
              <inputtype="text"matInputclass="fs-5 text-dark"/>
            </mat-form-field>

            <mat-form-field
              class="example-full-width d-block w-100 text-dark"
              appearance="standard"
            >
              <mat-labelclass="text-dark">Email Id</mat-label>
              <inputtype="email"matInputclass="fs-5 text-dark"/>
            </mat-form-field>

            <mat-form-field
              class="example-full-width d-block w-100 text-dark"
              appearance="standard"
            >
              <mat-labelclass="text-dark">Message</mat-label>
              <textareamatInputplaceholder="How can we help you!"></textarea>
            </mat-form-field>
          </form>
        </div>
      </div>
    </div>
  </div>
</div>
```

```
        Contact Us
      </button>
    </form>
  </div>
</div>
<divclass="address col-sm-12 col-md-12 col-lg-4">
  <h1class="fs-2">Contact Us</h1>
  <divclass="underline text-success"></div>

  <divclass="contact-address">
    <mat-list>
      <mat-list-itemrole="listitem"class="py-2 h-auto">
        <mat-iconclass="d-inline-block"> place </mat-icon>
        <divclass="address ms-3 text-muted col-10">
          SPI Network Limited, 25, Mamatha Complex, 5th Floor, Whites Rd, Royapettah,
          Chennai, Tamil Nadu 600014.

        </div>
      </mat-list-item>
      <mat-divider></mat-divider>
      <mat-list-itemrole="listitem"class="py-2 h-auto">
        <mat-iconclass="d-inline-block"> email </mat-icon>
        <divclass="address ms-3 text-muted col-10">ABC@cinemas.com</div>
      </mat-list-item>
      <mat-divider></mat-divider>
      <mat-list-itemrole="listitem"class="py-2 h-auto">
        <mat-iconclass="d-inline-block col-1">support_agent</mat-icon>
        <divclass="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
<a
  target="_blank"
  class="text-decoration-none mx-2"
  ><strong>Abishek S</strong></a>
>
</div>
</footer>
```

Forgot Password:

```
<mainclass="px-3 my-auto">
  <p
    class="lead mb-2 p-2 rounded"
    [ngClass]="(alertDanger$ | async) ? 'alert-danger' : 'alert-success'"
    *ngIf="showAlert$ | async"
  >
    {{ alertMessage$ | async }}
  </p>
  <h1class="fs-2 py-4">Change Password Here</h1>

  <divclass="example-container">
    <form
      #passwordForm
      class="row w-100 g-0"
      [formGroup]="forgotPasswordForm"
      (ngSubmit)="onSubmit()"
    >
      <divclass="col-12 mb-3">
        <mat-form-fieldappearance="outline"class="text-white d-block">
          <mat-label>Enter your username</mat-label>
          <input
            matInput
            type="text"
            placeholder="ABCbranch@cinemas.com"
            FormControlName="username"
          >
        </mat-form-field>
      </div>
    </form>
  </div>
</main>
```

```
    />
    <mat-hint*ngIf="username.pending"class="text-warning"
      >Checking for username...</mat-hint
    >
    <mat-error*ngIf="usernameErrors">{{ usernameErrors }}</mat-error>
  </mat-form-field>
</div>

<divclass="col-12 mb-3">
  <mat-form-fieldappearance="outline"class="text-white d-block">
    <mat-label>Enter your password</mat-label>
    <input
      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
  [color]="!forgotPasswordForm.valid ? 'accent' : 'primary'"
  class="col-12"
  type="submit"
>
  Change Password
</button>
</form>
</div>
</main>
```

```
<nav
  *ngIf="router.url !== '/select-seats'"
  id="nav-bar"
  class="navbar navbar-expand-lg navbar-dark bg-show text-white px-lg-3"
>
  <divclass="container-fluid">
    <amat-buttonclass="navbar-brand ms-sm-3 fs-4"routerLink="/home">{{
      title
    }}</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>
    <divclass="collapse navbar-collapse" id="navbarSupportedContent">
      <ulclass="navbar-nav me-auto mb-2 mb-lg-0 text-sm-center">
        <liclass="nav-item mx-lg-2 mx-md-auto">
          <a
            mat-button
            class="nav-link"
            aria-current="page"
            routerLinkActive="active"
            routerLink="/home"
          >Home</a>
        >
      </li>
        <liclass="nav-item mx-lg-2 mx-md-auto">
          <a
            mat-button
            class="nav-link"
            routerLinkActive="active"
            [routerLink]="['/movies']"
          >Movies</a>
        >
      </li>
        <liclass="nav-item mx-lg-2 mx-md-auto">
          <a
            mat-button
            class="nav-link"
            routerLinkActive="active"
```

```
        routerLink="/about"
      >About Us</a>
    >
  </li>
  <liclass="nav-item mx-lg-2 mx-md-auto">
    <a
      mat-button
      class="nav-link"
      routerLinkActive="active"
      routerLink="/contact"
      >Contact Us</a>
    >
  </li>
  <liclass="nav-item dropdown"*ngIf="service.isAdmin()">
    <a
      class="nav-link dropdown-toggle"
      href="#"
      id="admin-panel"
      role="button"
      data-bs-toggle="dropdown"
      aria-expanded="false"
    >
      Admin Panel
    </a>
    <ulclass="dropdown-menu"aria-labelledby="admin-panel">
      <liclass="nav-item mx-lg-2 mx-md-auto">
        <a
          class="dropdown-item"
          href="#"
          routerLinkActive="active"
          routerLink="/admin/add-auditorium"
          >Add Auditorium</a>
        >
      </li>
      <liclass="nav-item mx-lg-2 mx-md-auto">
        <a
          class="dropdown-item"
          href="#"
          routerLinkActive="active"
          routerLink="/admin/add-movie"
          >Add Movie</a>
        >
      </li>
      <liclass="nav-item mx-lg-2 mx-md-auto">
        <a
          class="dropdown-item"
          href="#"
          routerLinkActive="active"
```



```
        routerLink="/admin/manage"
      >Manage</a>
    >
  </li>
</ul>
</li>
</ul>
<divclass="profile text-sm-center">
  <!--<button mat-button [matMenuTriggerFor]="menu">
    
    My Account
  </button>
  <mat-menu #menu="matMenu">
    <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>
  </mat-menu> -->
  <ulclass="navbar-nav col-auto"*ngIf="service.isLoggedIn()">
    <liclass="nav-item dropdown">
      <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! }}
      </a>
      <ul
        class="dropdown-menu dropdown-menu-dark"
        aria-labelledby="account-links"
      >
        <liclass="nav-item">
          <aclass="dropdown-item py-1"routerLink="/my/profile"
            >Profile</a>
```

Home Page:

```
<div class="container-fluid my-2 pb-5">
  <h1
    class="text-center text-warning h-100vh mx-auto"
    *ngIf="(carousel$ | async)?.length! < 1"
  >
    Movie List is empty
  </h1>
</div>
```

```
<ng-container*ngIf="(carousel$ | async)?.length! > 0">
  <divid="movies-carousel"class="carousel slide"data-bs-ride="carousel">
    <divclass="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>

    <divclass="carousel-inner">
      <div
        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"
        />
        <divclass="carousel-caption d-none d-md-block">
          <h5class="fs-1 mb-3">{{ movie.name | uppercase }}</h5>
          <pclass="lead">
            {{
              (movie.language | titlecase) +
              " | " +
              (movie.genres?.join(" - ") | titlecase) +
              " | " +
              movie.year
            }}
          </p>
        </div>
      </div>
    </div>
    <button
      class="carousel-control-prev"
      type="button"
      data-bs-target="#movies-carousel"
      data-bs-slide="prev"
    >
      <spanclass="carousel-control-prev-icon"aria-hidden="true"></span>
      <spanclass="visually-hidden">Previous</span>
    </button>
  </div>
</ng-container>
```

```
</button>
<button
  class="carousel-control-next"
  type="button"
  data-bs-target="#movies-carousel"
  data-bs-slide="next"
>
  <spanclass="carousel-control-next-icon"aria-hidden="true"></span>
  <spanclass="visually-hidden">Next</span>
</button>
</div>

<section
  *ngIf="(nowPlaying$ | async)?.length! > 0"
  class="now-showing my-5 bg-dark text-white p-lg-5"
>
  <divclass="row g-0 mb-5 justify-content-around">
    <h3class="text-uppercase fs-2 col-11">Now Playing</h3>
    <a
      routerLink="../movies"
      [queryParams]="{ show: 'now-playing' }"
      class="d-block col-1 text-end"
    >view all</a>
  >
</div>
<divclass="now-showing-movies">
  <divclass="card-group row g-0 justify-content-around">
    <div
      class="col-sm-11 col-md-5 col-lg-3 col-xxl-2 px-2 position-relative"
      *ngFor="let movie of nowPlaying$ | async"
    >
      <divclass="image-card postion-relative rounded-5 overflow-hidden">
        <img
          [src]="movie.image"
          class="card-img-top"
          height="400"
          width="284"
          [alt]="movie.name"
        />
        <div
          class="
            image-release
            postion-absolute
            bottom-0
            start-0
            bg-white
            text-dark
            w-100
```

```
        text-center
        py-2
    "
    >
    {{ formatRelease(movie.release) }}
</div>
</div>
<divclass="card-body text-center">
    <h2class="card-title fs-4 mb-0">
        <a
            class="stretched-link"
            routerLink="../movie/{{ movie.id }}"
            >{{ movie.name | uppercase }}</a>
        >
    </h2>
    <h3class="card-text text-muted">
        {{ movie.language | titlecase }}
    </h3>
</div>
</div>
</div>
</div>
</section>

<section
    *ngIf="(upComing$ | async)?.length! > 0"
    class="up-coming my-5 p-lg-5"
>
    <divclass="row g-0 mb-5 justify-content-around">
        <h3class="text-uppercase fs-2 col-11">Up Coming</h3>
        <a
            routerLink="../movies"
            [queryParams]="{ show: 'up-coming' }"
            class="d-block col-1 text-end"
            >view all</a>
        >
    </div>
    <divclass="up-coming-movies">
        <divclass="card-group row g-0 justify-content-around">
            <div
                class="col-sm-11 col-md-5 col-lg-3 col-xxl-2 px-2 position-relative"
                *ngFor="let movie of upComing$ | async"
            >
                <divclass="image-card position-relative rounded-5 overflow-hidden">
                    <img
                        [src]="movie.image"
                        class="card-img-top"
                        height="400"
```

```
        width="284"
        [alt]="movie.name"
    />
    <div
        class="
            image-release
            postion-absolute
            bottom-0
            start-0
            bg-dark
            text-white
            w-100
            text-center
            py-2
        "
    >
        {{ formatRelease(movie.release) }}
    </div>
</div>
<divclass="card-body text-center">
    <h2class="card-title fs-4 mb-0">
        <a
            class="stretched-link"
            routerLink="../../movie/{{ movie.id }}"
            >{{ movie.name | uppercase }}</a>
        >
    </h2>
    <h3class="card-text text-muted">
        {{ movie.language | titlecase }}
    </h3>
</div>
</div>
</div>
</div>
</section>
</ng-container>
</div>
```

Layout:

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

Log In :

```
<mainclass="px-3 my-auto">
  <p
    class="lead mb-2 p-2 rounded"
    [ngClass]="(alertDanger$ | async) ? 'alert-danger' : 'alert-success'"
    *ngIf="showAlert$ | async"
  >
    {{ alertMessage$ | async }}
  </p>
  <h1class="fs-2 py-4">Login Page</h1>

  <divclass="example-container">
    <form
      action="#"
      class="row w-100 g-0"
      [formGroup]="loginForm"
      (ngSubmit)="onSubmit()"
    >
      <divclass="col-12 mb-3">
        <mat-form-fieldappearance="outline"class="text-white d-block">
          <mat-label>Enter your username</mat-label>
          <inputmatInputtype="text"formControlName="username"class="fs-5"/>
          <mat-error*ngIf="usernameErrors">{{ usernameErrors }}</mat-error>
        </mat-form-field>
      </div>

      <divclass="col-12 mb-3">
        <mat-form-fieldappearance="outline"class="text-white d-block">
          <mat-label>Enter your password</mat-label>
          <input
            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>
    </form>
  </div>
</main>
```

```
        </button>
      </mat-form-field>
    </div>

    <button
      mat-raised-button
      class="col-12"
      type="submit"
      [color]="!loginForm.valid ? 'accent' : 'primary'"
    >
      Login
    </button>
  </form>
</div>
</main>
```

LogInLayout:

```
<divclass="d-flex h-100 text-center text-white bg-dark cover-page mb-5">
  <divclass="cover-container d-flex w-100 p-3 mx-auto flex-column">
    <headerclass="mb-5">
      <divclass="clearfix">
        <h3class="float-md-start mb-0 fs-4 text-md-center">{{ title }}</h3>
        <navclass="nav nav-masthead justify-content-center float-md-end">
          <aclass="nav-link"aria-current="page"routerLink="/home">Home</a>
          <aclass="nav-link"routerLinkActive="active"routerLink="/user/login"
            >Login</a>
          <a
            class="nav-link"
            routerLinkActive="active"
            routerLink="/user/register"
            >Register</a>
          <a
            class="nav-link"
            routerLinkActive="active"
            routerLink="/user/forgot-password"
            >Forgot Password</a>
          </nav>
        </div>
      </header>
```



```
</div>
</div>

<app-footer[fixed]="true"></app-footer>

<!-- [fixed]="true"
    bgColor="bg-white"
    textColor="text-dark" -->
```

Manage:

```
<divclass="wrapper w-100 my-2">
  <divclass="container-fluid row g-0 h-90vh">
    <divclass="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>
      <divclass="overflow-auto h-70vh">
        <h1*ngIf="!allAuditoriums"class="text-danger text-center">
          Cinema Hall list is empty
        </h1>
        <mat-listrole="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!)"
          >
            <divclass="w-100">
              {{ hall.name | uppercase }}
            </div>
            <spanclass="icon-holder w-auto">
              <mat-icon
                class="w-auto text-info me-1 pe-cursor edit-icon"
                [ngClass]="{ edit: hall.id == selectedCinemaHallId }"
              >
```

```
        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>
<a
  mat-raised-button
  class="align-self-end mt-auto w-100 d-block"
  color="warn"
  routerLink="../../add-auditorium"
>
  Add Cinema Hall
</a>
</div>
<divclass="col-lg-3 px-2 border-3 border-end row g-0">
  <h2
    class="
      py-2
      rounded
      text-center text-dark
      shadow-sm
      align-self-start
      border border-2 border-dark
    "
  >
    Shows
  </h2>
  <divclass="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!)"
>
<divclass="w-100 row g-0 justify-content-around">
  <divclass="col-5">{{ show.name | titlecase }}</div>
  |
  <divclass="col-5">
    {{ "Time: " + formatTime(show.startTime) }}
  </div>
</div>
<spanclass="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>
  >
</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>
<divclass="col-lg-6 px-2 row g-0">
  <h2
    class="
      py-2
      rounded
      text-center text-dark
      shadow-sm
```

```
        align-self-start
        border border-2 border-dark
    "
>
    Movies
</h2>
<divclass="overflow-auto h-70vh">
    <h1
        *ngIf="selectedShowId&& !selectedMovieShows"
        class="text-warning text-center"
    >
        Selected Show has no movies
    </h1>
    <h1*ngIf="!selectedShowId"class="text-danger text-center">
        Select a Show
    </h1>
    <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-2"
        >
            <divclass="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>
            <spanclass="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>
            </span>
        </mat-list-item>
    </mat-list>
</div>
```

```
>
<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"
>
  <a
    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:

```
<divclass="movie-section">
  <divclass="position-relative poster-wrapper p-3">
    <div
      class="movie-banner"
      style="width: 100%; height: 100%; background-color: #f0f0f0; display: flex; align-items: center; justify-content: center; text-align: center; padding: 10px;">
```

```
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 }})"
>
<divclass="movie-poster row g-0">
  <divclass="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>
  <divclass="movie-details text-white mx-3 px-3 col-lg-5 col-sm-12">
    <divclass="movie-title mb-lg-5 fs-lg-1">
      <h1>
        {{
          ((selectedMovie$ | async)?.name | uppercase) +
          " : " +
          ((selectedMovie$ | async)?.caption | titlecase)
        }}
      </h1>
    </div>
  </div>
</div>
```

```
    }}
  </h1>
</div>
<divclass="movie-format my-3">
  <buttonclass="btnbtn-light btn-smdiabld mx-1">4D</button>
  <buttonclass="btnbtn-light btn-smdiabld mx-1">
    {{ (selectedMovie$ | async)?.language }}
  </button>
</div>
<divclass="movie-duration my-3">
  <pstyle="font: unset; font-size: 20px">
    {{
      ((selectedMovie$ | async)?.duration | titlecase) +
      " . " +
      (selectedMovie$ | async)?.genres?.join(", ")
    }}
  </p>
</div>
<divclass="links mt-4 align-self-end">
  <a
    mat-raised-button
    color="accent"
    class="me-2"
    (click)="openBottomSheet()"
  >Book Tickets</a>
</div>
</div>
</div>
</div>
</div>
</div>

<divclass="about-movie text-dark p-4">
  <h2>About the Movie</h2>
  <pclass="lead"style="font-family: sans-serif">
    {{ (selectedMovie$ | async)?.story }}
  </p>
</div>
<!--<nav class="px-4 py-3 w-100 shadow-smbg-white text-dark">
  <h1>{{(selectedMovie$ | async)?.name + ' : ' + (selectedMovie$ | async)?.caption}}</h1>
  <p class="lead">{{(selectedMovie$ | async)?.genres.join(', ')}}</p>
</nav> -->

<divclass="movie-cast ms-5 my-4"*ngIf="(cast$ | async)?.length! > 0">
  <h1class="fs-lg-2">Cast</h1>
  <divclass="row g-0">
    <div
      class="cast text-center col-sm-12 col-md-6 col-lg-3"
```

```
*ngFor="let cast of cast$ | async"
>
<divclass="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>
<divclass="cast-name">
  <h5class="fs-5">{{ cast.name }}</h5>
</div>
</div>
</div>
</div>

<divclass="movie-crew ms-5 my-4 pb-5"*ngIf="(crew$ | async)?.length! > 0">
  <h1class="fs-lg-2">Crew</h1>
  <divclass="row g-0">
    <div
      class="crew text-center col-sm-12 col-md-6 col-lg-3"
      *ngFor="let crew of crew$ | async"
    >
      <divclass="image rounded-circle mx-auto mb-3">
        <img
          [alt]="crew.name"
          width="120px"
          height="120px"
          [src]="crew.image"
        />
      </div>
      <divclass="cast-name">
        <h5class="fs-5">{{ crew.name }}</h5>
      </div>
    </div>
  </div>
</div>
</div>
```

Movie Forms:


```
<divclass="mx-auto text-center bg-color">
  <divclass="container py-5">
    <h1class="fs-2 text-dark py-5 text-uppercase">Add New Movie</h1>
  </div>
</div>

<divclass="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-templatematStepLabel>Movie Details</ng-template>
        <divclass="row g-0 my-3 justify-content-around">
          <divclass="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
                matInput
                placeholder="Movie Name"
                FormControlName="name"
              />
              <mat-error*ngIf="nameErrors">{{ nameErrors }}</mat-error>
            </mat-form-field>
          </div>
          <divclass="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
                matInput
                [min]="todayDate"
                [matDatepicker]="picker"
                placeholder="Release Date"
                FormControlName="release"
              />
              <mat-datepicker#picker></mat-datepicker>
              <mat-datepicker-toggle
                matSuffix
                [for]="picker"
              ></mat-datepicker-toggle>
            </div>
          </div>
        </div>
      </mat-step>
    </mat-horizontal-stepper>
  </form>
</div>
```

```
        <mat-error*ngIf="releaseErrors">{{ releaseErrors }}</mat-error>
    </mat-form-field>
</div>

<divclass="col-sm-12 col-lg-5 mx-lg-2">
    <mat-form-field
        class="d-block w-100 text-dark"
        appearance="outline"
    >
        <mat-label>Image URL</mat-label>
        <input
            matInput
            placeholder="Image Link"
            FormControlName="image"
        />
        <mat-error*ngIf="imageErrors">{{ imageErrors }}</mat-error>
    </mat-form-field>
</div>

<divclass="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
            matInput
            placeholder="Background Image Link"
            FormControlName="bgImage"
        />
        <mat-error*ngIf="bgImageErrors">{{ bgImageErrors }}</mat-error>
    </mat-form-field>
</div>

<divclass="col-sm-12 col-lg-5 mx-lg-2">
    <mat-form-field
        class="d-block w-100 text-dark"
        appearance="outline"
    >
        <mat-label>Duration</mat-label>
        <input
            matInput
            placeholder="2h 25m"
            FormControlName="duration"
        />
        <mat-error*ngIf="durationErrors">{{
            durationErrors
        }}</mat-error>
```



```
<mat-label>Add Language</mat-label>
<mat-chip-list#languageListaria-label="language selection">
  <mat-chip
    *ngFor="let language of languages"
    [selectable]="true"
    [removable]="true"
    (removed)="removeLanguage(language)"
  >
    {{ language }}
    <mat-iconmatChipRemove*ngIf="true">cancel</mat-icon>
  </mat-chip>
</mat-chip-list>
<input
  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">
  <div
    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>Add Genre</mat-label>
      <mat-chip-list#genreListaria-label="genre selection">
        <mat-chip
          *ngFor="let genre of genres"
          [selectable]="true"
          [removable]="true"
          (removed)="removeGenre(genre)"
        >
          {{ genre }}
          <mat-iconmatChipRemove*ngIf="true">cancel</mat-icon>
        </mat-chip>
      </mat-chip-list>
      <input
        placeholder="New Genre..."
        #genreInput
        formControlName="genres"
        [matAutocomplete]="auto"
        [matChipInputFor]="genreList"
        [matChipInputSeparatorKeyCodes]="separatorKeysCodes"
        (matChipInputTokenEnd)="addGenre($event)"
      />
      <mat-error
        *ngIf="movieForm.get('genres')?.hasError('required')"
        >Genre cannot be empty</mat-error>
    </mat-form-field>
  </div>
</div>
-->
```

```
>
  <mat-label>Genre</mat-label>
  <input matInput placeholder="Romantic" [formControlName]="i" />
  <mat-error *ngIf="genre.errors?.required&&genres.touched"
    >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"
  matTooltip="Remove the Genre"
  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 Genre"
    aria-label="add_circle icon"
    (click)="addGenre()"
    >add_circle</mat-icon>
  >
</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
          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">
        <spanclass="mx-1"*ngIf="genres.errors?.required">
            >Genre cannot be empty</span>
        >
        <spanclass="mx-1"*ngIf="genres.errors?.validGenre">
            >Invalid movie genre</span>
        >
        <spanclass="mx-1"*ngIf="genres.errors?.uniqueName">
            >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
>
</div>
</div>
<divclass="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
    >
</div>
<div>
    <buttonmat-buttonmatStepperPrevious>Back</button>
    <buttonmat-buttonmatStepperNext>Next</button>
</div>
</mat-step>
```

```
<mat-step[stepControl]="movieForm.get('casts')!">
  <ng-templatematStepLabel>Add Cast Details</ng-template>
  <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"
    >
      <divclass="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
            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>

      <divclass="col-lg-3 col-sm-6">
        <mat-form-field
          class="d-block w-100 text-dark"
          appearance="outline"
        >
          <mat-label>Actor Role</mat-label>
          <inputmatInputplaceholder="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>
  </div>
```

```
        </mat-error>
      </mat-form-field>
    </div>

    <divclass="col-lg-3 col-sm-6">
      <mat-form-field
        class="d-block w-100 text-dark"
        appearance="outline"
      >
        <mat-label>Actor Image</mat-label>
        <input
          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>
  >
</div>
</div>
<divclass="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)="addCast()"
  >add_circle</mat-icon>
  <div>
    <buttonmat-buttonmatStepperPrevious>Back</button>
    <buttonmat-buttonmatStepperNext>Next</button>
  </div>
</mat-step>
```



```
<mat-step[stepControl]="movieForm.get('crews')!">
  <ng-templatematStepLabel>Add Crew Details</ng-template>
  <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"
    >
      <divclass="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
            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>

      <divclass="col-lg-3 col-sm-6">
        <mat-form-field
          class="d-block w-100 text-dark"
          appearance="outline"
        >
          <mat-label>Crew Role</mat-label>
          <input
            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
      class="d-block w-100 text-dark"
      appearance="outline"
    >
      <mat-label>Crew Image</mat-label>
      <input
        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>
  </div>
</div>
<div>
  <button mat-button matStepperPrevious type="button">Back</button>
  <button mat-button matStepperNext type="button">Next</button>
</div>
```

```
        </div>
    </mat-step>

    <mat-step>
        <ng-template matStepLabel>Review</ng-template>
        <pre>
            {{ 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:

```
<div class="px-lg-5 row g-0 my-5 justify-content-around position-relative">
    <div class="col-3">
        <div class="sorting text-center mb-3 align-self-center">
            <h2 class="fs-2 text-center text-dark text-uppercase">Show</h2>
            <br/>
            <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>
                </mat-select>
            </mat-form-field>
        </div>
```

```
<divclass="filter">
  <h2class="fs-2 text-center text-dark text-uppercase">Filters</h2>
  <br/>
  <mat-accordion
    class="example-headers-align"
    multi
    togglePosition="before"
  >
    <mat-expansion-panelclass="rounded my-1">
      <mat-expansion-panel-header>
        <mat-panel-title
          [ngClass]="{
            'text-danger': languageFilter != null &&languageFilter != ''
          }"
        >
          Language
        </mat-panel-title>
        <mat-panel-description
          (click)="clearLanguageFilter()"
          class="clear-filter"
          [ngClass]="{
            'text-danger': languageFilter != null &&languageFilter != ''
          }"
        >
          Clear
        </mat-panel-description>
      </mat-expansion-panel-header>
      <divclass="row g-0 justify-content-around">
        <div
          class="my-2 col-4 text-start"
          *ngFor="let language of allLanguages"
        >
          <input
            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>
    >
</div>
</div>
</mat-expansion-panel>

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

```
</div>
</div>

<divclass="col-8 movies">
  <divclass="now-showing">
    <mat-toolbar
      [color]="showText == 'Now Playing' ? 'primary' : 'accent'"
      class="rounded"
    >
      <divclass="row g-0 justify-content-around w-100 h-auto py-3">
        <divclass="col-sm-12 col-lg-3 text-center">{{ showText }}</div>
        <divclass="col-sm-12 col-lg-9">
          <input
            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>
    <h1class="text-center text-warning my-4"*ngIf="!(moviesList$ | async)">
      No movies found
    </h1>
    <divclass="now-showing-movies my-4"*ngIf="moviesList$ | async">
      <divclass="card-group justify-content-around">
        <ng-container
          *ngIf="
            moviesList$
              | async
              | search: search:genreFilter:languageFilter as result
          ">
        <p
          class="lead my-2 p-2 rounded alert-danger"
          *ngIf="result.length< 1 || !result"
        >
          No result found with
          <spanclass="text-danger"
            >{{ search }}{{ " " + languageFilter
              }}{{ " " + genreFilter }}</span
          </p>
          <div
            class="col-4 px-2 position-relative"
            *ngFor="let movie of result"
```

```
>
<div
  class="image-card position-relative rounded-5 overflow-hidden"
  >
  <img
    [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> -->
  <div
    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">
    <a
      class="stretched-link"
      routerLink="../../movie/{{ movie.id }}"
      >{{ movie.name | uppercase }}</a>
    >
  </h2>
```

My Bookings:

```
<div class="col-10 mx-auto my-4 h-80vh">
  <mat-toolbar color="primary" class="rounded text-center">
    <h1
      class="text-center mx-auto"
      [ngClass]="present ? '' : 'text-danger h-80vh'"
    >
      {{ heading }}
    </h1>
  </mat-toolbar>

  <mat-card *ngIf="present">
    <div class="row g-0 col-12">
      <div class="col-2 p-2">
        <div
          class="my-2 col-12 text-start"
          *ngFor="let booking of allBookings$ | async; index as i"
        >
          <input
            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-check:active': booking.id == selectedBookingId
            }"
          >
            {{ booking.title }}
          </label>
        </div>
      </div>
    </div>
  </mat-card>
</div>
```



```
        'btn-info': booking.id != selectedBookingId
      }"
    >
    <spanclass="d-inline-block float-start">{{
      "Booking " + (i + 1)
    }}</span>
    <spanclass="d-inline-block float-end">{{ booking.bookedOn }}</span>
  </label>
</div>
</div>
<divclass="col-10 px-2">
  <divclass="row g-0 m-3 p-2 shadow-sm border">
    <div
      class="
        col-4
        mx-auto
        text-center
        px-1
        position-relative
        overflow-hidden
      "
    >
      <img
        [src]="movieImage$ | async"
        [alt]="movieName$ | async"
        height="400"
        width="300"
      />
      <div
        class="
          movie-name
          position-absolute
          w-100
          py-2
          fs-5
          bg-dark
          text-white
          start-0
          bottom-0
        "
      >
        {{ movieName$ | async | uppercase }}
      </div>
    </div>
    <divclass="col-8 px-2 details h-100 my-auto">
      <tableclass="table ms-3">
        <thead>
          <tr>
```

```
<th
  scope="col"
  colspan="2"
  class="text-center fs-4 text-capitalize"
>
  {{ auditoriumName$ | async }}
</th>
</tr>
</thead>
<tbody>
<tr>
<thscope="row">Movie Language</th>
<td>
  <h1class="m-0 d-inline-block">
    {{ movieLanguage$ | async }}
  </h1>
</td>
</tr>
<tr>
<thscope="row">Total seats</th>
<td>
  <h1class="m-0 d-inline-block">
    {{ noOfTickets$ | async }}
  </h1>
</td>
</tr>
<tr>
<thscope="row">Seat No.</th>
<td>
  <h1class="m-0 d-inline-block">
    {{ (selectedSeats$ | async)?.join(", ") }}
  </h1>
</td>
</tr>
<tr>
<thscope="row">Price</th>
<td>
  <h1class="m-0 d-inline-block">
    {{ amount$ | async | currency: "INR" }}
  </h1>
</td>
</tr>
<tr>
<thscope="row">Date</th>
<td>
  <h1class="m-0 d-inline-block">
    {{ dateOfBooking$ | async | date: "mediumDate" }}
  </h1>
</td>
</tr>
```

```
        </td>
      </tr>
      <tr>
        <thscope="row">Time</th>
        <td>
          <h1class="m-0 d-inline-block">
            {{ formatTime((showTiming$ | async)!) }}
          </h1>
        </td>
      </tr>
      <tr>
        <thscope="row">Status</th>
        <td>
          <spanclass="text-muted text-success">Confirmed</span>
        </td>
      </tr>
    </tbody>
  </table>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
```

Profile:

```
<divclass="h-80vh">
  <divclass="col-10 mx-auto my-4">
    <mat-toolbarcolor="primary"class="rounded text-center">
      >Your profile</mat-toolbar>
    </div>
  </div>
  <mat-cardclass="col-10 mx-auto">
    <tableclass="table">
      <tbody>
        <tr>
          <thscope="row">Name</th>
          <td>{{ (user | async)?.name }}</td>
        </tr>
        <tr>
          <thscope="row">Email</th>
          <td>{{ (user | async)?.email }}</td>
        </tr>
      </tbody>
    </table>
  </mat-card>
</div>
```

```
        <thscope="row">Mobile</th>
        <td>{{ (user | async)?.mobile }}</td>
    </tr>
    <tr>
        <thscope="row">Gender</th>
        <td>{{ (user | async)?.gender }}</td>
    </tr>
</tbody>
</table>
</mat-card>
</div>
```

Register:

```
<mainclass="px-3 my-auto">
  <p
    class="lead mb-2 p-2 rounded"
    [ngClass]="(alertDanger$ | async) ? 'alert-danger' : 'alert-success'"
    *ngIf="showAlert$ | async"
  >
    {{ alertMessage$ | async }}
  </p>
  <h1class="fs-2 py-4">Register Here</h1>

  <divclass="example-container">
    <form
      class="row w-100 g-0"
      [formGroup]="registerForm"
      (ngSubmit)="onSubmit()"
    >
      <!-- Email Field -->
      <divclass="col-12 mb-2 px-lg-1">
        <mat-form-fieldappearance="outline"class="d-block text-white">
          <mat-label>Enter your Email</mat-label>
          <inputmatInputtype="email"formControlName="email"class="fs-5"/>
          <mat-hint*ngIf="email.pending"class="text-warning">
            >Checking For uniqueness...</mat-hint
          >
          <mat-error*ngIf="emailErrors">{{ emailErrors }}</mat-error>
        </mat-form-field>
      </div>

      <divclass="col-sm-12 col-md-12 col-lg-6 mb-2 px-lg-1">
        <mat-form-fieldappearance="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
            matInput
            type="text"
            formControlName="mobile"
            class="fs-5"
        />
        <mat-hint *ngIf="mobile.pending" class="text-warning">
            >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
            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-selectformControlName="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>

    <divclass="col-lg-12 col-md-12 mb-2">
      <mat-checkboxclass="example-margin"formControlName="terms"
        >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:

```
<divclass="wrapper">
  <h1class="text-center mb-3 p-2 rounded border border-2 shadow-sm">
    Add Movie To Show
  </h1>

  <formclass="example-form p-4"[formGroup]="movieShowForm">
    <mat-form-fieldclass="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)"
      >
```

```

*ngFor="let movie of filteredMovies | async"
  [value]="movie.id"
  class="h-auto py-1"
>
<!-- (onSelectionChange)="onMovieChange($event, movie.id)" -->
<img
  class="example-option-img me-2 rounded"
  aria-hidden
  [src]="movie.image"
  height="120"
  width="120"
/>
<spanclass="me-1">{{ movie.name | uppercase }}</span> |
<spanclass="me-1">{{ movie.language | titlecase }}</span> |
<smallclass="me-1"
  >Release: {{ movie.release | date: "fullDate" }}</small
>
|
<smallclass="me-1"
  >Added: {{ movie.addedOn | date: "fullDate" }}</small
>
</mat-option>
</mat-select>
<mat-error*ngIf="movieIdErrors">{{ movieIdErrors }}</mat-error>
</mat-form-field>

<mat-form-fieldappearance="outline"class="d-block w-100 text-dark">
  <mat-label>Enter a date range</mat-label>
  <mat-date-range-input
    [formGroup]="range"
    [rangePicker]="picker"
    [min]="startDate"
    [max]="endDate"
  >
    <inputmatStartDateformControlName="start"placeholder="Start date"/>
    <inputmatEndDateformControlName="end"placeholder="End date"/>
  </mat-date-range-input>
  <mat-datepicker-togglematSuffix[for]="picker"></mat-datepicker-toggle>
  <mat-date-range-picker#picker></mat-date-range-picker>
  <mat-errorclass="d-inline-block mx-1"*ngIf="startDateErrors">{{
    startDateErrors
  }}</mat-error>
  <mat-errorclass="d-inline-block mx-1"*ngIf="endDateErrors">{{
    endDateErrors
  }}</mat-error>
  <!--<mat-error *ngIf="range.controls.start.hasError('matStartDateInvalid')">
    >Invalid start date</mat-error
  >

```

```
<mat-error *ngIf="range.controls.end.hasError('matEndDateInvalid')">
  >Invalid end date</mat-error>
> -->
</mat-form-field>
<fieldset>
  <legendclass="lead">Price details</legend>
  <divclass="row g-0 justify-content-around">
    <mat-form-field
      appearance="outline"
      class="d-block col-4 px-1 text-dark"
    >
      <mat-label>Gold Section</mat-label>
      <inputtype="number"matInputformControlName="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>
      <inputtype="number"matInputformControlName="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>
      <inputtype="number"matInputformControlName="general"/>
      <mat-error*ngIf="generalPriceErrors">{{
        generalPriceErrors
      }}</mat-error>
    </mat-form-field>
  </div>
</fieldset>
</form>
<buttonmat-raised-button(click)="onCancel()"class="me-2">Cancel</button>
<button
  mat-raised-button
  (click)="onSubmit()"
  [disabled]="!movieShowForm.valid"
  color="primary"
  class="ms-2"
>
  Submit
</button>
```


</div>

Payment Form:

```
<divclass="wrapper p-5">
  <divclass="text-center mb-3 p-2 rounded border border-2 shadow-sm">
    <h1class="text-center d-inline-block my-2">Payment Gateway</h1>
    (<spanclass="text-danger d-inline-block my-2">do not refresh the page</span
    >)
  </div>
  <divclass="my-auto h-70vh row g-0 justify-content-around">
    <divclass="col-6 px-2 mx-auto order-2">
      <form[formGroup]="paymentForm"class="example-form p-4">
        <mat-form-fieldappearance="outline"class="d-block w-100 text-dark">
          <mat-label>Card Number</mat-label>
          <input
            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-error>
        </mat-form-field>

        <divclass="row g-0 justify-content-around">
          <mat-form-field
            appearance="outline"
            class="d-block text-dark col-sm-12 col-lg-4 px-1"
          >
            <mat-label>Month</mat-label>
            <mat-selectFormControlName="cardExpiryMonth">
              <mat-option*ngFor="let month of tempMonths"[value]="month">
                {{ month }}
              </mat-option>
            </mat-select>
            <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-selectformControlName="cardExpiryYear">
  <mat-option*ngFor="let year of tempYears"[value]="year">
    {{ year }}
  </mat-option>
</mat-select>
<mat-hint>select card expiry year</mat-hint>
<mat-error*ngIf="yearErrors">{{ yearErrors }}</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>CVV</mat-label>
  <input
    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>
<divclass="col-6 px-2 mx-auto order-1">
  <tableclass="table">
    <thead>
```

```
<tr>
  <thscope="col" colspan="2">Booking Details</th>
</tr>
</thead>
<tbody>
  <tr>
    <td>Auditorium</td>
    <thscope="row">{{ selectedMembers.auditoriumName }}</th>
  </tr>
  <tr>
    <td>Show</td>
    <thscope="row">
      {{ selectedMembers.showName }}
    </th>
  </tr>
  <tr>
    <td>Show Timing</td>
    <thscope="row">
      {{ formatTime(selectedMembers.showTime) }}
    </th>
  </tr>
  <tr>
    <td>Movie Name</td>
    <thscope="row">{{ selectedMembers.movieName | uppercase }}</th>
  </tr>
  <tr>
    <td>Movie Lang</td>
    <thscope="row">{{ selectedMembers.movieLanguage }}</th>
  </tr>
  <tr>
    <td>Date</td>
    <thscope="row">{{ selectedMembers.date | date: "mediumDate" }}</th>
  </tr>
</tbody>
</table>
</div>
</div>
</div>
```

Screen:

```
<divclass="screen-container w-100 py-3 bg-dark text-white">
  <spanclass="d-inline-block text-warning mx-auto text-center py-2 w-100"
    >NOTE: do not refresh the page</span>
```

```
<divclass="my-auto row g-0 align-content-center">
  <divclass="ticket-details mb-3 row g-0 justify-content-between">
    <divclass="col-4 text-center">
      Movie: &nbsp;
      <spanclass="lead text-white">{{
        selectMembers.movieName | uppercase
      }}</span>
    </div>

    <divclass="col-4 text-center">
      Time: &nbsp;
      <spanclass="lead">{{ formatTime(selectMembers.showTime) }}</span>
    </div>

    <divclass="col-4 text-center">
      Date: &nbsp;
      <spanclass="lead">{{ selectMembers.date | date: "fullDate" }}</span>
    </div>
  </div>

  <divclass="ticket-details mb-3 row g-0 justify-content-between">
    <divclass="col-4 text-center">
      Seats Selected: &nbsp;
      <spanclass="lead text-danger">{{ getSelectedSeats() }}</span>
    </div>

    <divclass="col-4 text-center">
      Amount: &nbsp;
      <spanclass="lead">{{ totalAmount }}</span>
    </div>

    <divclass="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">
      <mat-icon
        class="fs-sm-5 fs-lg-3 w-auto h-auto text-danger"
        aria-hidden="false">
```

```
        aria-label="Example home icon"
      >chair
    </mat-icon>
    - <span class="text-white">Booked</span>
  </div>
  <div class="col-4 text-center">
    <mat-icon
      class="fs-sm-5 fs-lg-3 w-auto h-auto text-white"
      aria-hidden="false"
      aria-label="Example home icon"
    >chair
    </mat-icon>
    - <span class="text-white">Avaliable</span>
  </div>
  <div class="col-4 text-center">
    <mat-icon
      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> -->

<div
  class="screen-layout position-relative w-100 bg-dark text-white p-sm-0"
>
  <mat-cardclass="bg-dark text-white text-center">
    <mat-listclass="bg-dark text-white">
      <ng-container
        *ngFor="let item of tempSeatColumns.reverse(); index as i"
      >
        <h3class="text-danger m-1"*ngIf="i == 7">
          <!-- EXECUTIVE &#8377;200.00 -->
          EXECUTIVE {{ generalPrice$ | async | currency: "INR" }}
        </h3>
        <h3class="text-danger m-1"*ngIf="i == 3">
          SILVER {{ silverPrice$ | async | currency: "INR" }}
        </h3>
        <h3class="text-danger m-1"*ngIf="i == 0">
          GOLD {{ goldPrice$ | async | currency: "INR" }}
        </h3>
        <mat-list-itemclass="justify-content-center py-1 h-auto px-sm-0">
          <!--<div class="col-1 text-info fs-3 px-sm-0">{{ item }}</div> -->
          <div
            class="
              row
```

```
col-12
g-0
mx-auto
justify-content-center
px-sm-0
text-center
"
>
<divclass="col-1 text-center text-info fs-3">
  {{ item }}
</div>
<divclass="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"
    ></div>
    <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>
</div>
</mat-list-item>
</ng-container>
</mat-list>
</mat-card>
</div>
```

```
<div
  class="
    screen
    col-10
    mx-auto
    py-3
    text-white
    bg-danger
    text-center
    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-templatematStepLabel>Select the Cinema Hall</ng-template>
        <mat-form-fieldclass="d-block w-100 mt-2">
          <mat-label>Cinema Hall Name</mat-label>
          <mat-selectclass="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-form-field>
      </mat-step>
    </mat-horizontal-stepper>
  </form>
</mat-card>
```

```
        </mat-option>
      </mat-select>
      <mat-error*ngIf="auditoriumErrors">{{ auditoriumErrors }}</mat-error>
    </mat-form-field>
  </div>
  <buttonmat-buttonmatStepperNexttype="button">Next</button>
</div>
</mat-step>

<mat-step
  [stepControl]="ticketsForm.get('showName')!"
  label="Select the Show Timing"
>
  <mat-form-fieldclass="d-block w-100 mt-2">
    <mat-labelclass="text-dark">Show Timing</mat-label>
    <mat-selectclass="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>
  </div>
  <buttonmat-buttonmatStepperPrevioustype="button">Back</button>
  <buttonmat-buttonmatStepperNexttype="button">Next</button>
</div>
</mat-step>

<mat-step
  [stepControl]="ticketsForm.get('date')!"
  label="Select the Date"
>
  <mat-form-fieldclass="d-block w-100 mt-2">
    <mat-labelclass="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
```



```
        matSuffix
        [for]="picker"
    ></mat-datepicker-toggle>
    <mat-datepicker#picker></mat-datepicker>
    <mat-error*ngIf="dateErrors">{{ dateErrors }}</mat-error>
</mat-form-field>
</div>
    <buttonmat-buttonmatStepperPrevious>Back</button>
    <buttonmat-buttonmatStepperNext>Next</button>
</div>
</mat-step>

<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 available, 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 availableSeats$ | async"
        >
            <input
                type="radio"
                class="btn-check"
                formControlName="seats"
                [checked]="seat == selectedSeats"
                (change)="onSeatsChange(seat)"
                [id]="seat"
                [value]="seat"
            />
        </div>
    </div>
</mat-step>
</div>
```

```
<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>
<div>
  <button mat-button matStepperPrevious type="button">Back</button>
  <button
    mat-button
    matStepperNext
    [disabled]="selectedSeats! < 1"
    type="button"
  >
    next
  </button>
</div>
</mat-step>
<mat-step>
  <ng-template matStepLabel>Review</ng-template>
  <table class="table table-striped">
    <tr>
      <th scope="col">Auditorium</th>
      <td>{{ ticketsForm.get("auditoriumName")?.value! }}</td>
    </tr>
    <tr>
      <th scope="col">Show</th>
      <td>
        {{
          ticketsForm.get("showName")?.value! +
            " | Time: " +
            formatTime(selectMembers?.showTime!)
        }}
      </td>
    </tr>
    <tr>
      <th scope="col">Date</th>
      <td>{{ ticketsForm.get("date")?.value! | date: "fullDate" }}</td>
    </tr>
    <tr>
      <th scope="col">Seats</th>
```

```
        <td>{{ ticketsForm.get("seats")?.value! }}</td>
      </tr>
    </table>
    <div>
      <buttonmat-buttonmatStepperPrevious>Back</button>
      <buttonmat-buttoncolor="primary"[disabled]="!ticketsForm.valid">
        Proceed
      </button>
    </div>
  </mat-step>
</mat-horizontal-stepper>
</form>
</mat-card>
```

Show Form:

```
<divclass="wrapper">
  <h1class="text-center mb-3 p-2 rounded border border-2 shadow-sm">
    Add New Show
  </h1>
  <formclass="example-form p-4"[formGroup]="showForm">
    <mat-form-fieldclass="d-block w-100 text-dark"appearance="outline">
      <mat-label>Show Name</mat-label>
      <inputmatInputformControlName="name"list="show-name"/>
      <datalistid="show-name">
        <option*ngFor="let show of showNames"[value]="show">
          {{ show }}
        </option>
      </datalist>
      <mat-error*ngIf="nameErrors">
        {{ nameErrors }}
      </mat-error>
    </mat-form-field>

    <mat-form-fieldclass="d-block w-100 text-dark"appearance="outline">
      <mat-label>Show Timing</mat-label>
      <input
        type="time"
        matInput
        placeholder="1H 20M"
        formControlName="startTime"
      />
      <mat-error*ngIf="startTimeErrors"color="accent">
        >{{ startTimeErrors }}
      </mat-error>
    </mat-form-field>
  </form>
</div>
```

```
</mat-form-field>
</form>
<button mat-raised-button(click)="onCancel()" class="me-2">Cancel</button>
<button
  mat-raised-button
  (click)="onSubmit()"
  [disabled]="!showForm.valid"
  color="primary"
  class="ms-2"
>
  Submit
</button>
</div>
```

INDEX.HTML

```
<!DOCTYPEhtml>
<html lang="en">
  <head>
    <meta charset="utf-8"/>
    <title>My Movie Plan</title>
    <base href="/" />
    <meta name="viewport" content="width=device-width, initial-scale=1"/>
    <link rel="icon" type="image/x-icon" href="favicon.ico"/>

    <!-- Bootstrap Css -->
    <link
      href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/css/bootstrap.min.css"
      rel="stylesheet"
      integrity="sha384-+0n0xVW2eSR5OomGNYDnhzAbDsOXxcvSN1TPprVMTNDbiYZCxYbOO17+AMvyTG2x"
      crossorigin="anonymous"
    />

    <!-- Animated CSS -->
    <!--<link
      rel="stylesheet"
      href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/4.1.1/animate.min.css"
      crossorigin="anonymous"
    /> -->
    <link rel="preconnect" href="https://fonts.gstatic.com"/>
    <link
      href="https://fonts.googleapis.com/css2?family=Roboto:wght@300;400;500&display=swap"
      rel="stylesheet"
    />
  </head>
  <body>
```

```
    href="https://fonts.googleapis.com/icon?family=Material+Icons"
    rel="stylesheet"
  />
  <linkrel="preconnect"href="https://fonts.gstatic.com"/>
  <link
    href="https://fonts.googleapis.com/css2?family=Roboto:wght@300;400;500&display=swap"
    rel="stylesheet"
  />
  <link
    href="https://fonts.googleapis.com/icon?family=Material+Icons"
    rel="stylesheet"
  />
  <linkrel="preconnect"href="https://fonts.gstatic.com"/>
  <link
    href="https://fonts.googleapis.com/css2?family=Roboto:wght@300;400;500&display=swap"
    rel="stylesheet"
  />
  <link
    href="https://fonts.googleapis.com/icon?family=Material+Icons"
    rel="stylesheet"
  />
</head>
<bodyclass="mat-typography">
  <app-root></app-root>

  <script
    src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/js/bootstrap.bundle.min.js"
    integrity="sha384-gtEjrD/SeCtmISkJKNUaakMoLD0//ElJ19smozuHV6z3Iehds+3U1b9Bn9Plx0x4"
    crossorigin="anonymous"
  ></script>

  <scripttype="text/javascript">
    constmyCarousel = document.querySelector("#movies-carousel");
    if (myCarousel) {
      constcarousel = newbootstrap.Carousel(myCarousel, {
        interval:2000,
        wrap:false,
      });
    }
  </script>
</body>
</html>
```

SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

Developed by: -JYOTI NANDINI

```
FROM node:current-alpine3.11 as build-stage

# 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') {
    //   steps {
    //     sh "mvn clean"
    //   }
    // }
    // stage('package') {
    //   steps {
    //     sh "mvn package"
    //   }
    // }
  }
}
```

```
// stage('docker build') {
//   steps {
//     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(SpringBoot)

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 PasswordEncoderpasswordEncoder;

@Override
public void run(String... args) throws Exception {

//      final UserEntitysuper_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 AuditoriumEntityfindAuditoriumById(@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 AuditoriumEntitysaveAuditorium(@RequestBody final AuditoriumEntity
auditorium) {
        return this.auditorium.save(auditorium);
    }

    @PutMapping("update")
    @PreAuthorize("hasAuthority('UPDATE')")
    public AuditoriumEntityupdateAuditorium(@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}")
```

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```
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()
```

SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

Developed by: -JYOTI NANDINI

```
.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 MovieShowsEntityfindMovieShowById(@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 MovieShowsEntitysaveMovieShow(@PathVariable final int auditorium_id,
                                      @PathVariable final int show_id,
                                      @RequestBody final
MovieShowsEntitymovieShow) {
    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')")
```

SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

Developed by: -JYOTI NANDINI

```
public MovieShowsEntityupdateMovieShow(@PathVariable final int auditorium_id,
                                       @PathVariable final int show_id,
                                       @RequestBody final
MovieShowsEntitymovieShow) {
    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 MovieShowsEntitymovieShow = 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 BookingEntityfindBookingById(@PathVariable final int auditorium_id,
                                   @PathVariable final int show_id,
                                   @PathVariable final int movie_show_id,
                                   @PathVariable final int booking_id) {
    final MovieShowsEntitymovieShow = 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 BookingEntitysaveBooking(@PathVariable final int auditorium_id,
                                   @PathVariable final int show_id,
                                   @PathVariable final int movie_show_id,
                                   @RequestBody final BookingEntity booking) {
        final MovieShowsEntitymoveShow = this.findMovieShowById(auditorium_id,
show_id, movie_show_id);
        booking.setUserId(this.service.getLoggedInUser().getId());
        //        booking.setUserId(this.service.findByMobile("8099531318").get().getId());
        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 BookingEntityupdateBooking(@PathVariable final int auditorium_id,
                                     @PathVariable final int show_id,
                                     @PathVariable final int movie_show_id,
                                     @RequestBody final BookingEntity booking) {
        final MovieShowsEntitymoveShow = 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 TicketDetailsgetMovieDetails(@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 findByIdByDetailsId(@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.*;
```


SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

Developed by: -JYOTI NANDINI

```
@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 MovieEntitysaveMovie(@RequestBody final MovieEntity movie) {
        return movieRepository.save(movie);
    }

    @PutMapping("update")
    @PreAuthorize("hasAuthority('UPDATE')")
    public MovieEntityupdateMovie(@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 MovieShowsEntityfindMovieShowById(@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 BookedSeatsbookedSeats(@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:

```
package com.MyMoviePlan.controller;

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("/{show_id}/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 MovieShowsEntityfindMovieShowById(@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 MovieShowsEntitysaveMovieShow(@PathVariable final int show_id,
                                      @RequestBody final
MovieShowsEntitymovieShow) {
    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 MovieShowsEntityupdateMovieShow(@PathVariable final int show_id,
                                         @RequestBody final
MovieShowsEntitymovieShow) {
```

```
        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 MovieShowsEntitymovieShow = 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 BookingEntityfindBookingById(@PathVariable final int show_id,
                                         @PathVariable final int movie_show_id,
                                         @PathVariable final int booking_id) {
        final MovieShowsEntitymovieShow = 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 BookingEntitysaveBooking(@PathVariable final int show_id,
                                    @PathVariable final int movie_show_id,
                                    @RequestBody final BookingEntity booking) {
        final MovieShowsEntitymoveShow = this.findMovieShowById(show_id,
movie_show_id);
        //        booking.setUserId(this.service.getLoggedInUser().getId());
        booking.setUserId(this.service.findByMobile("8099531318").get().getId());
        booking.setMovieShow(moveShow);
        return this.booking.save(booking);
    }

    @PutMapping("{show_id}/movie-show/{movie show id}/booking/update")
```

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```
@PreAuthorize("hasAuthority('UPDATE')")
public BookingEntityupdateBooking(@PathVariable final int show_id,
                                   @PathVariable final int movie_show_id,
                                   @RequestBody final BookingEntity booking) {
    final MovieShowsEntitymoveShow = this.findMovieShowById(show_id,
movie_show_id);
    booking.setMovieShow(moveShow);
    return this.booking.save(booking);
}

@DeleteMapping("{show_id}/movie-
show/{movie_show_id}/booking/delete/{booking_id}")
@PreAuthorize("hasAuthority('READ')")
public void deleteBookingById(@PathVariable final int show_id,
                              @PathVariable final int movie_show_id,
                              @PathVariable final int booking_id) {
    final BookingEntity booking = this.findBookingById(show_id, movie_show_id,
booking_id);
    this.booking.deleteById(booking.getId());
}
}
```

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 UserEntityuser() {
    return service.getLoggedInUser()
.setPassword(null);
}

@GetMapping("all")
@PreAuthorize("hasAuthority('WRITE')")
public List<UserEntity>allUsers() {
    return service.findAll();
}

@PutMapping("update/{username}")
@PreAuthorize("hasAuthority('READ')")
public UserEntityupdateUser(@RequestBody final UserEntityuserEntity,
                             @PathVariable final String username) {

    return service.update(userEntity, username);
}

@PostMapping("sign-up")
public HttpResponsesignUp(@RequestBody final UserEntityuserEntity) {

    return service.register(userEntity);
}

@PutMapping("change-password")
@PreAuthorize("hasAuthority('READ')")
public HttpResponsechangePassword(@RequestBody final Credentials credentials) {

    return service.changePassword(credentials);
}

@PutMapping("forgot-password")
public HttpResponseforgotPassword(@RequestBody final Credentials credentials) {
    return service.forgotPassword(credentials);
}

@DeleteMapping("delete/{username}")
@PreAuthorize("hasAuthority('DELETE')")
public HttpResponsedelete(@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 {

    @Id
    @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 {

    @Id
    @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
```

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```
@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 AuditoriumEntitysetId(int id) {
    this.id = id;
    return this;
}

public AuditoriumEntitysetName(String name) {
    this.name = name;
    return this;
}

public AuditoriumEntitysetImage(String image) {
    this.image = image;
    return this;
}

public AuditoriumEntitysetEmail(String email) {
    this.email = email;
    return this;
}

public AuditoriumEntitysetCustomerCare(String customerCareNo) {
    this.customerCareNo = customerCareNo;
    return this;
}
```

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```
    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 lombok.NoArgsConstructor;

import javax.persistence.*;
import java.io.Serializable;

@Entity
@Data
@AllArgsConstructor
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "booking_details")
public class BookingDetailsEntity implements Serializable {

    @Id
    @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 {

    @Id
    @GeneratedValue(strategy = GenerationType.IDENTITY)
    private int id;

    private double amount;

    @Column(name = "total_seats")
    private int totalSeats;

    @Column(name = "booked_on")
    @Temporal(TemporalType.DATE)
    private Date bookedOn;

    @Column(name = "date_of_booking")
```

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```
@Temporal(TemporalType.DATE)
private Date dateOfBooking;

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

@ToString.Exclude
@EqualsAndHashCode.Exclude
@ElementCollection
@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;

@JsonIgnore
@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 BookingEntitysetAmount(double amount) {
this.amount = amount;
        return this;
    }

    public BookingEntitysetTotalSeats(int totalSeats) {
this.totalSeats = totalSeats;
        return this;
    }

    public BookingEntitysetStatus(Date bookedOn) {
this.bookedOn = bookedOn;
        return this;
    }

    public BookingEntitysetDateOfBooking(Date dateOfBooking) {
this.dateOfBooking = dateOfBooking;
        return this;
    }

    public BookingEntitysetSeatNumbers(List<String>seatNumbers) {
this.seatNumbers = seatNumbers;
        return this;
    }

    public BookingEntitysetPayment(PaymentEntity payment) {
this.payment = payment;
        return this;
    }

    public BookingEntitysetUserId(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
```


SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

Developed by: -JYOTI NANDINI

```
@NoArgsConstructor
@EqualsAndHashCode
@Table(name = "movies")
public class MovieEntity implements Serializable {

    @Id
    @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;
```

SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

Developed by: -JYOTI NANDINI

```
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 MovieEntitysetId(int id) {
    this.id = id;
    return this;
}

public MovieEntitysetName(String name) {
    this.name = name;
    return this;
}

public MovieEntitysetImage(String image) {
this.image = image;
    return this;
}

public MovieEntitysetBgImage(String bgImage) {
this.bgImage = bgImage;
    return this;
}

public MovieEntitysetStory(String story) {
this.story = story;
    return this;
}

public MovieEntitysetYear(String year) {
this.year = year;
    return this;
}

public MovieEntitysetDuration(String duration) {
this.duration = duration;
```

```
        return this;
    }

    public MovieEntitysetCaption(String caption) {
this.caption = caption;
        return this;
    }

    public MovieEntitysetAddedOn(Date addedOn) {
this.addedOn = addedOn;
        return this;
    }

    public MovieEntitysetRelease(Date release) {
this.release = release;
        return this;
    }

    public MovieEntitysetLanguages(String language) {
this.language = language;
        return this;
    }

    public MovieEntitysetGenres(List<String> genres) {
this.genres = genres;
        return this;
    }

    public MovieEntitysetCasts(List<ActorEntity> casts) {
this.casts = casts;
        return this;
    }

    public MovieEntitysetCrews(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;
```

SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

Developed by: -JYOTI NANDINI

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

    @Id
    @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)
    // @JoinColumn(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 MovieShowsEntitysetId(int id) {
        this.id = id;
        return this;
    }

    public MovieShowsEntitysetStart(Date start) {
this.start = start;
        return this;
    }

    public MovieShowsEntitysetEnd(Date end) {
this.end = end;
        return this;
    }

    public MovieShowsEntitysetShow>ShowEntity show) {
this.show = show;
        return this;
    }

    public MovieShowsEntitysetMovieId(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 PaymentEntitysetId(int id) {
    this.id = id;
    return this;
}

public PaymentEntitysetAmount(double amount) {
this.amount = amount;
    return this;
}

public PaymentEntitysetPaymentDate(Date paymentDate) {
this.paymentDate = paymentDate;
    return this;
}

public PaymentEntitysetCardNumber(String cardNumber) {
this.cardNumber = cardNumber;
    return this;
}

public PaymentEntitysetCardExpiryMonth(String cardExpiryMonth) {
this.cardExpiryMonth = cardExpiryMonth;
    return this;
}
```

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```
    public PaymentEntitysetCardExpiryYear(String cardExpiryYear) {
this.cardExpiryYear = cardExpiryYear;
        return this;
    }

    public PaymentEntitysetCardCVV(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 ShowEntitysetId(int id) {
        this.id = id;
        return this;
    }

    public ShowEntitysetName(String name) {
```



```
        this.name = name;
        return this;
    }

    public ShowEntitysetStartTime(String startTime) {
this.startTime = startTime;
        return this;
    }

    public ShowEntitysetAuditorium(AuditoriumEntity auditorium) {
this.auditorium = auditorium;
        return this;
    }

    public ShowEntitysetMovieShows(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 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 UserRoleuserRole;

public UserEntity(String name, String email, String mobile, String gender,
String password, Boolean terms,
                    Boolean isAccountNonExpired, Boolean isAccountNonLocked,
                    Boolean isCredentialsNonExpired, Boolean isEnabled,
UserRoleuserRole) {
    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 UserEntitysetId(String id) {
    this.id = id;
    return this;
}

public UserEntitysetName(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.ResponseEntityExceptionHandler;

import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

@ControllerAdvice
public class GlobalExceptionHandler extends ResponseEntityExceptionHandler {
```

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```
@ExceptionHandler(Exception.class)
public ResponseEntity<HttpServletResponse>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;
    }

    final HttpStatushttpStatus = HttpStatus.valueOf(statusCode);

    final HttpServletResponsehttpResponse =
        new HttpServletResponse(statusCode, httpStatus.getReasonPhrase(),
exceptionMessage);
    return new ResponseEntity<HttpServletResponse>(httpResponse, httpStatus);
}
}
```

Movie Notfound:

```
package com.MyMoviePlan.exception;

public class MovieNotFoundException extends RuntimeException {

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

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;
```

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```
import io.jsonwebtoken.JwtException;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.HttpStatus;
import
org.springframework.security.authentication.UsernamePasswordAuthenticationToken;
import org.springframework.security.core.context.SecurityContextHolder;
import org.springframework.security.core.userdetails.UserDetails;
import
org.springframework.security.web.authentication.WebAuthenticationDetailsSource;
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 ApplicationUserService 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(
```

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```
new
WebAuthenticationDetailsSource().buildDetails(request)
    );

SecurityContextHolder.getContext().setAuthentication(authenticationToken);
    }
}

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 HttpServletResponse httpResponse =
        new HttpServletResponse(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;  
    }  
}
```

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```
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;
```

```
}
```

UserPermissions:

```
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;
}
```

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_showsms WHERE
ms.show_start > CURRENT_DATE", nativeQuery = true)
    List<MovieShowsEntity> findAllUpComing();

    @Query(value = "SELECT DISTINCT ON(ms.movie_id) * FROM movie_showsms 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_showsms WHERE
ms.show_end >= CURRENT_DATE", nativeQuery = true)
    List<MovieShowsEntity> findAllNowPlayingAndUpComing();

    @Query(value = "SELECT DISTINCT ON(ms.movie_id) * FROM movie_showsms WHERE
ms.show_end < CURRENT_DATE", nativeQuery = true)
    List<MovieShowsEntity> findAllNotPlaying();
}
```

SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

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```
//      @Query("FROM MovieShowsEntityms LEFT JOIN ms.bookings b WHERE ms.id = ?1
AND b.dateOfBooking = ?2")
//      @Query(value = "SELECT * FROM movie_showsms INNER JOIN bookings b ON
ms.id = :id and b.date_of_booking = ':dateOfBooking'", nativeQuery = true)
//      Optional<MovieShowsEntity>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_showsms 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_showsms 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_showsms INNER JOIN bookings b ON b.id =
:bookingId", nativeQuery = true)
//      MovieShowsEntityfindByBookingId(@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.DaoAuthenticationProvider;
```

SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

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```
import
org.springframework.security.config.annotation.authentication.builders.AuthenticationManagerBuilder;
import
org.springframework.security.config.annotation.method.configuration.EnableGlobalMethodSecurity;
import org.springframework.security.config.annotation.web.builders.HttpSecurity;
import org.springframework.security.config.annotation.web.builders.WebSecurity;
import
org.springframework.security.config.annotation.web.configuration.EnableWebSecurity;
import
org.springframework.security.config.annotation.web.configuration.WebSecurityConfigurerAdapter;
import org.springframework.security.config.http.SessionCreationPolicy;
import org.springframework.security.crypto.password.PasswordEncoder;
import
org.springframework.security.web.authentication.UsernamePasswordAuthenticationFilter;

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);
```


SourceCode:Simplilearn -Capstone Project (MyMoviePlan)

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```
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;  
  
@AllArgsConstructor  
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.UsernameNotFoundException;
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;
```

```
public class ServletInitializer extends SpringBootServletInitializer {  
  
    @Override  
    protected SpringApplicationBuilderconfigure(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() {  
    }  
  
}
```

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