CONTROLLER: package com.movieplan.controller; public class checkoutController { } 1.1 BOOKING SEATS package com.movieplan.controller; import java.util.Date; import java.util.HashMap; import java.util.List; import java.util.Map; import org.springframework.beans.factory.annotation.Autowired; import org.springframework.http.HttpStatus; import org.springframework.http.ResponseEntity; import org.springframework.web.bind.annotation.CrossOrigin; import org.springframework.web.bind.annotation.GetMapping; import org.springframework.web.bind.annotation.PathVariable; import org.springframework.web.bind.annotation.PostMapping; import org.springframework.web.bind.annotation.RequestBody; import org.springframework.web.bind.annotation.RequestMapping; import org.springframework.web.bind.annotation.RestController; import com.movieplan.model.BookSeatsRequest; import com.movieplan.model.BookedSeats; import com.movieplan.model.Movie; import com.movieplan.model.Theater; import com.movieplan.repository.bookedSeatsRepository; import com.movieplan.repository.theaterRepository; @RestController @CrossOrigin @RequestMapping("/bookedseats") public class bookedSeatsController { @Autowired

private bookedSeatsRepository bsRepo;

```
@Autowired
   private theaterRepository tRepo;
   @PostMapping("/getbydatetimetheaterid/{theaterId}")
   public ResponseEntity<Map<String, Object>> getBookSeatsByDateTime(@PathVariable
long theaterId,
                   @RequestBody BookSeatsRequest request) {
           Theater theater = tRepo.getOne(theaterId);
           Date date = request.getDate();
           String time = request.getTime();
           List<BookedSeats> bookedSeats = bsRepo.getBookSeatsByDateTime(theater,
date, time);
           Map<String,Object> map = new HashMap<>();
           map.put("response",bookedSeats);
           return ResponseEntity.status(HttpStatus.OK)
               .body(map);
   }
   @PostMapping("/postbydatetimetheaterid/{theaterId}")
   public ResponseEntity<Map<String, Object>> postBookSeatsByDateTime(@PathVariable
long theaterId,
                   @RequestBody BookSeatsRequest request) {
           Theater theater = tRepo.getOne(theaterId);
           Date date = request.getDate();
           String time = request.getTime();
           for(String seat:request.getSeats()) {
                  BookedSeats bookedSeats = new BookedSeats();
                  bookedSeats.setId(0);
                  bookedSeats.setDate(date);
                  bookedSeats.setSeat(seat);
                  bookedSeats.setTime(time);
                  bookedSeats.setTheater(theater);
                  bsRepo.save(bookedSeats);
           }
           Map<String,Object> map = new HashMap<>();
           map.put("text","booked seats successfully");
           return ResponseEntity.status(HttpStatus.OK)
               .body(map);
   }
```

}

1.2 USER CONTROLLER:

package com.movieplan.controller;

import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired; import org.springframework.web.bind.annotation.CrossOrigin; import org.springframework.web.bind.annotation.GetMapping; import org.springframework.web.bind.annotation.PathVariable; import org.springframework.web.bind.annotation.PostMapping; import org.springframework.web.bind.annotation.RequestBody; import org.springframework.web.bind.annotation.RequestMapping; import org.springframework.web.bind.annotation.RequestParam; import org.springframework.web.bind.annotation.RestController;

import com.movieplan.model.Movie; import com.movieplan.model.User; import com.movieplan.model.authUser; import com.movieplan.repository.movieRepository; import com.movieplan.repository.userRepository;

@RestController

@CrossOrigin

@RequestMapping("/user")

public class userController {

@Autowired

private userRepository uRepo;

```
@PostMapping("/authenticate")
public User authenticate(@RequestBody authUser authuser) {
       String email = authuser.getEmail();
       String password = authuser.getPassword();
       User theUser = uRepo.findByEmail(email);
       String Userpassword = theUser.getPassword();
       if(Userpassword.equals(password)) {
               System.out.println("login succesful");
       } else {
               throw new RuntimeException("password or email is incorrect");
       }
       return theUser;
}
@PostMapping("/signup")
public User add(@RequestBody User theUser) {
       theUser.setId(0);
       uRepo.save(theUser);
       return theUser;
}
```

}

1.3 THEATHRE CONTROLLER:

package com.movieplan.controller;

import java.util.HashMap; import java.util.List; import java.util.Map; import java.util.Optional;

import org.springframework.beans.factory.annotation.Autowired; import org.springframework.http.HttpStatus; import org.springframework.http.ResponseEntity; import org.springframework.web.bind.annotation.CrossOrigin; import org.springframework.web.bind.annotation.DeleteMapping; import org.springframework.web.bind.annotation.GetMapping; import org.springframework.web.bind.annotation.PathVariable; import org.springframework.web.bind.annotation.PostMapping; import org.springframework.web.bind.annotation.PutMapping; import org.springframework.web.bind.annotation.RequestBody; import org.springframework.web.bind.annotation.RequestMapping; import org.springframework.web.bind.annotation.RequestMapping; import org.springframework.web.bind.annotation.RestController;

import com.movieplan.model.Movie; import com.movieplan.model.Theater; import com.movieplan.repository.movieRepository; import com.movieplan.repository.theaterRepository;

@RestController
@CrossOrigin
@RequestMapping("/theater")
public class theaterController {

@Autowired private theaterRepository tRepo;

@Autowired private movieRepository mRepo;

@GetMapping("/{theaterId}")
public Optional<Theater> getMovie(@PathVariable long theaterId) {

Optional<Theater> theTheater = tRepo.findById(theaterId);

```
return theTheater;
       }
       @GetMapping("/")
       public List<Theater> getAllMovies() {
               List<Theater> theTheaters = tRepo.findAll();
               return theTheaters;
       }
       @GetMapping("/bymovie/{movield}")
       public ResponseEntity<Map<String, Object>>
getAllTheatersByMovieId(@PathVariable long movieId) {
               Movie movie = mRepo.getOne(movield);
               System.out.println(movie);
               List<Theater> theTheaters = tRepo.getTheatersByMovie(movie);
               System.out.println(theTheaters);
               for(Theater theater:theTheaters){
                      System.out.println(theater);
               Map<String,Object> map = new HashMap<>();
               map.put("text",theTheaters);
               return ResponseEntity.status(HttpStatus.OK)
                   .body(map);
       }
       @PostMapping("/{movield}")
       public ResponseEntity<Map<String, Object>> add(@RequestBody Theater
theTheater, @PathVariable long movield) {
               theTheater.setId(0);
               Movie movie = mRepo.getOne(movieId);
               theTheater.setMovie(movie);
               tRepo.save(theTheater);
               Map<String,Object> map = new HashMap<>();
               map.put("text", "Successfully added");
               return ResponseEntity.status(HttpStatus.OK)
                   .body(map);
       }
       @PutMapping("/{theaterId}/{movieId}")
```

public ResponseEntity<Map<String, Object>> editMovie(@PathVariable long

theaterId, @PathVariable long movield, @RequestBody Theater theTheater) { Theater the Theater 1 = new Theater(); Movie movie = mRepo.getOne(movield); theTheater1.setTheatreName(theTheater.getTheatreName()); theTheater1.setTheatreAddress(theTheater.getTheatreAddress()); theTheater1.setMovie(movie); theTheater1.setId(theaterId); Theater resTheter = tRepo.save(theTheater1); Map<String,Object> map = new HashMap<>(); map.put("text","Successfully edited"); return ResponseEntity.status(HttpStatus.OK) .body(map); } @DeleteMapping("/{theaterId}") public ResponseEntity<Map<String, Object>> delete(@PathVariable long theaterId) { tRepo.deleteById(theaterId); Map<String,Object> map = new HashMap<>(); map.put("text","Deleted Theater Id"+ theaterId); return ResponseEntity.status(HttpStatus.OK) .body(map); } 1.4 SHOW CONTROLLER: package com.movieplan.controller; import java.util.HashMap; import java.util.List; import java.util.Map; import org.springframework.beans.factory.annotation.Autowired; import org.springframework.http.HttpStatus;

import org.springframework.http.ResponseEntity; import org.springframework.web.bind.annotation.CrossOrigin; import org.springframework.web.bind.annotation.DeleteMapping; import org.springframework.web.bind.annotation.GetMapping; import org.springframework.web.bind.annotation.PathVariable; import org.springframework.web.bind.annotation.PostMapping; import org.springframework.web.bind.annotation.PutMapping; import org.springframework.web.bind.annotation.RequestBody; import org.springframework.web.bind.annotation.RequestMapping; import org.springframework.web.bind.annotation.RequestParam; import org.springframework.web.bind.annotation.RestController;

```
import com.movieplan.model.MovieShow;
import com.movieplan.repository.showRepository;
@RestController
@RequestMapping("/movieshow")
@CrossOrigin(origins = "http://localhost:4200")
public class showController {
       @Autowired
       private showRepository sRepo;
       @GetMapping("/{showId}")
       public MovieShow getMovie(@PathVariable long showId) {
               MovieShow show = sRepo.getOne(showId);
               return show;
       }
/*
       @PutMapping("/{showId}")
       public Show editMovie(@PathVariable long movield,
                      @RequestBody Show theMovie) {
               Show movie = sRepo.getOne(movield);
               if(theMovie.getLanguage() != null) {
                      movie.setLanguage(theMovie.getLanguage());
               if(theMovie.getDuration() != null) {
                      movie.setDuration(theMovie.getDuration());
               if(theMovie.getName() != null) {
                      movie.setName(theMovie.getName());
```

```
if(theMovie.getReleaseDate() != null) {
                      movie.setReleaseDate(theMovie.getReleaseDate());
               if(theMovie.getCensorCertificate() != null) {
                      movie.setCensorCertificate(theMovie.getCensorCertificate());
               Show resMovie = movieService.updateMovie(movie);
               return resMovie;
       }
       @PostMapping("/{showId}")
       public Show addShow() {
               Show show = sRepo.getOne(null)
       }*/
       @DeleteMapping("/{showId}")
       public ResponseEntity<Map<String, Object>> delete(@PathVariable long
showId) {
               MovieShow show = sRepo.getOne(showId);
               sRepo.deleteById(showId);
               Map<String,Object> map = new HashMap<>();
               map.put("text","Deleted Movie Id"+ showId);
               map.put("obj", show);
               return ResponseEntity.status(HttpStatus.OK)
                   .body(map);
       }
       @GetMapping("/")
       public List<MovieShow> getAllShows() {
               List<MovieShow> theShows = sRepo.findAll();
               return the Shows;
       }
}
```

```
1.5 MOVIE CONTROLLER:
     package com.movieplan.controller;
   import java.util.HashMap;
   import java.util.List;
   import java.util.Map;
   import java.util.Optional;
   import org.springframework.beans.factory.annotation.Autowired;
   import org.springframework.http.HttpStatus;
   import org.springframework.http.ResponseEntity;
   import org.springframework.web.bind.annotation.CrossOrigin;
   import org.springframework.web.bind.annotation.DeleteMapping;
   import org.springframework.web.bind.annotation.GetMapping;
   import org.springframework.web.bind.annotation.PathVariable;
   import org.springframework.web.bind.annotation.PostMapping;
   import org.springframework.web.bind.annotation.PutMapping;
   import org.springframework.web.bind.annotation.RequestBody;
   import org.springframework.web.bind.annotation.RequestMapping;
   import org.springframework.web.bind.annotation.RestController;
   import com.movieplan.model.Movie;
   import com.movieplan.repository.movieRepository;
   @RestController
   @CrossOrigin
   @RequestMapping("/movies")
   public class movieController {
           @Autowired
           private movieRepository mRepo;
           @GetMapping("/{movield}")
           public Optional<Movie> getMovie(@PathVariable long movieId) {
                  Optional<Movie> theMovie = mRepo.findById(movieId);
                  if (theMovie == null) {
                          throw new RuntimeException("Employee id not found - " +
   movield);
                  }
```

```
return the Movie;
}
@GetMapping("/")
public List<Movie> getAllMovies() {
       List<Movie> theMovies = mRepo.findAll();
       return the Movies;
}
@GetMapping("/active/")
public List<Movie> getAllActiveMovies() {
       List<Movie> theMovies = mRepo.getMoviesByTheater();
       return the Movies;
}
@PostMapping("/")
public Movie add(@RequestBody Movie theMovie) {
       theMovie.setId(0);
       Movie theResMovie = mRepo.save(theMovie);
       return theResMovie;
}
@PutMapping("/{movield}")
public Movie editMovie(@PathVariable long movield,
               @RequestBody Movie theMovie) {
       theMovie.setId(movieId);
       Movie resMovie = mRepo.save(theMovie);
       return resMovie;
}
@DeleteMapping("/{movield}")
```

2. MODEL:

}

2.1 SEATS:

package com.movieplan.model;

import java.util.Date; import java.util.List;

public class BookSeatsRequest {

private String time;

private Date date;

private List<String> seats;

public BookSeatsRequest() {
 super();

}

```
public String getTime() {
                return time;
        }
        public void setTime(String time) {
                this.time = time;
        }
        public Date getDate() {
                return date;
        }
        public void setDate(Date date) {
                this.date = date;
        }
        public List<String> getSeats() {
                return seats;
        }
        public void setSeats(List<String> seats) {
                this.seats = seats;
        }
        }
2.2 MOVIE PLAN:
    package com.movieplan.model;
   import java.util.Date;
```

```
import javax.persistence.CascadeType;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.FetchType;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.ld;
import javax.persistence.JoinColumn;
import javax.persistence.ManyToOne;
@Entity
public class BookedSeats {
    @ld
    @GeneratedValue(strategy=GenerationType.IDENTITY)
    @Column
   private long id;
    @Column
    private String seat;
    @Column
    private Date date;
    @Column
    private String time;
    @ManyToOne(cascade= {CascadeType.MERGE,
                    CascadeType.DETACH, CascadeType.REFRESH}, fetch =
FetchType.EAGER)
    @JoinColumn(name="theater")
   private Theater theater;
   public BookedSeats() {
           super();
   }
   public long getId() {
           return id;
   }
   public void setId(long id) {
           this.id = id;
   }
    public String getSeat() {
           return seat;
```

```
}
       public void setSeat(String seat) {
                this.seat = seat;
       }
       public Date getDate() {
                return date;
       }
       public void setDate(Date date) {
                this.date = date;
       }
       public String getTime() {
                return time;
       }
       public void setTime(String time) {
                this.time = time;
       }
       public Theater getTheater() {
                return theater;
       }
       public void setTheater(Theater theater) {
                this.theater = theater;
       }
   }
2.3 USER:
    package com.movieplan.model;
    import javax.persistence.Column;
    import javax.persistence.Entity;
    import javax.persistence.GeneratedValue;
   import javax.persistence.GenerationType;
    import javax.persistence.ld;
    import javax.persistence.Table;
    @Entity
    @Table(name="user")
```

```
public class User {
    @ld
    @GeneratedValue(strategy=GenerationType.IDENTITY)
    @Column(name="id")
   private Integer id;
    @Column(nullable = false, unique = true, length = 45)
   private String email;
   @Column(nullable = false, length = 64)
   private String password;
    @Column(nullable = false, length = 20)
   private String firstName;
    @Column(nullable = false, length = 20)
   private String lastName;
    @Column(nullable = false, length = 20)
   private String role;
   public User() {
            super();
   }
   public Integer getId() {
            return id;
   }
   public void setId(Integer id) {
            this.id = id;
   }
   public String getEmail() {
            return email;
   }
   public void setEmail(String email) {
            this.email = email;
   }
   public String getPassword() {
            return password;
   }
   public void setPassword(String password) {
            this.password = password;
   }
```

```
public String getFirstName() {
               return firstName;
       }
       public void setFirstName(String firstName) {
               this.firstName = firstName;
       }
       public String getLastName() {
               return lastName;
       }
       public void setLastName(String lastName) {
               this.lastName = lastName;
       }
       public String getRole() {
               return role;
       }
       public void setRole(String role) {
               this.role = role;
       }
   }
2.4 THEATHE:
    package com.movieplan.model;
   import java.util.List;
   import javax.persistence.CascadeType;
   import javax.persistence.Column;
   import javax.persistence.Entity;
   import javax.persistence.FetchType;
   import javax.persistence.GeneratedValue;
   import javax.persistence.GenerationType;
   import javax.persistence.ld;
   import javax.persistence.JoinColumn;
   import javax.persistence.ManyToOne;
    import javax.persistence.OneToMany;
```

```
@Entity
public class Theater {
   @ld
   @GeneratedValue(strategy=GenerationType.IDENTITY)
   @Column(name="id")
   private long id;
   @Column
   private String theatreName;
   @Column
   private String theatreAddress;
   @ManyToOne(cascade= {CascadeType.MERGE,
                   CascadeType.DETACH, CascadeType.REFRESH}, fetch =
FetchType.EAGER)
   @JoinColumn(name="movie")
   private Movie movie;
   @OneToMany(mappedBy = "theater")
 private List<BookedSeats> seats;
   @Column
   private Integer theatreSeatCapacity;
   public Theater() {
           super();
   }
   public long getId() {
           return id;
   }
   public void setId(long id) {
           this.id = id;
   }
   public Movie getMovie() {
           return movie;
   }
   public void setMovie(Movie movie) {
           this.movie = movie;
```

}

```
public String getTheatreName() {
               return theatreName;
       }
       public void setTheatreName(String theatreName) {
               this.theatreName = theatreName;
       }
       public String getTheatreAddress() {
               return theatreAddress;
       }
       public void setTheatreAddress(String theatreAddress) {
               this.theatreAddress = theatreAddress;
       }
       public Integer getTheatreSeatCapacity() {
               return theatreSeatCapacity;
       }
       public void setTheatreSeatCapacity(Integer theatreSeatCapacity) {
               this.theatreSeatCapacity = theatreSeatCapacity;
       }
    }
2.5 MOVIE PLAN:
              package com.movieplan.model;
import java.util.List;
import javax.persistence.CascadeType;
import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
```

```
import javax.persistence.ld;
import javax.persistence.ManyToOne;
import javax.persistence.OneToMany;
import org.hibernate.annotations.Fetch;
import org.hibernate.annotations.FetchMode;
@Entity
public class Movie {
       @ld
       @GeneratedValue(strategy=GenerationType.IDENTITY)
       @Column
       private long id;
       @Column
       private String name;
       @Column
       private String duration;
       @Column
       private String language;
       @Column
       private String genre;
       @Column
       private String banner;
       @OneToMany(mappedBy = "movie")
  private List<Theater> theater;
       public String getBanner() {
```

return banner;

```
}
public void setBanner(String banner) {
        this.banner = banner;
}
public Movie() {
        super();
}
public long getId() {
        return id;
}
public void setId(long id) {
        this.id = id;
}
public String getName() {
        return name;
}
public void setName(String name) {
        this.name = name;
}
public String getDuration() {
        return duration;
}
```

```
public void setDuration(String duration) {
                   this.duration = duration;
           }
           public String getLanguage() {
                   return language;
           }
           public void setLanguage(String language) {
                   this.language = language;
           }
           public String getGenre() {
                   return genre;
           }
           public void setGenre(String genre) {
                   this.genre = genre;
           }
   }
3. REPOSITORY:
   package com.movieplan.repository;
   import org.springframework.data.jpa.repository.JpaRepository;
   import com.movieplan.model.MovieShow;
   public interface showRepository extends JpaRepository<MovieShow, Long>{
```

```
package com.movieplan.repository;
import java.util.List;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import com.movieplan.model.Movie;
public interface movieRepository extends JpaRepository<Movie, Long>{
       @Query("SELECT distinct m FROM Movie m join Theater t on t.movie = m")
       List<Movie> getMoviesByTheater();
}
package com.movieplan.repository;
import org.springframework.data.jpa.repository.JpaRepository;
import com.movieplan.model.BookingHistory;
public interface bookingHistoryRepository extends JpaRepository<BookingHistory, Long>{
package com.movieplan.repository;
import java.util.Date;
import java.util.List;
import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.data.jpa.repository.Query;
import com.movieplan.model.BookedSeats;
import com.movieplan.model.Theater;
public interface bookedSeatsRepository extends JpaRepository<BookedSeats, Long>{
       @Query("SELECT distinct bs FROM BookedSeats bs where bs.theater=?1 and bs.date=?2
and bs.time=?3")
       List<BookedSeats> getBookSeatsByDateTime(Theater theater, Date date, String time);
}
```

4. MOVIE PLANNER