MyMoviePlan

This document contains the following.

- Description
- Sprint planning and tasks achieved
- Core concepts used in the project
- Flowchart of the application
- Links to the GitHub repository

Description

Create a dynamic and responsive web application for booking movie tickets online for different genres and languages.

Background of the problem statement:

NMS Cinemas is a chain of single screen theatres that screen movie shows of different genres and languages at very genuine prices. It was established in 2004 in Pune, India. Recently, the business analysts noticed a decline in sales since 2010. They found out that the online booking of movie tickets from apps, such as BookMyShow and Paytm were gaining more profit by eliminating middlemen from the equation. As a result, the team decided to hire a Full Stack developer to develop an online movie ticket booking web application with a rich and user-friendly interface.

You are hired as the Full Stack Java developer and are asked to develop the web application. The management team has provided you with the requirements and their business model so that you can easily arrange different components of the application.

Features of the application:

- 1. Registration
- 2. Login
- 3. Payment gateway
- 4. Searching
- 5. Filtering
- 6. Sorting
- 7. Dynamic data
- 8. Responsive and compatible with different devices

Recommended technologies:

- 1. Database management: MySQL and Oracle
- 2. Backend logic: Java programming, NodeJS
- 3. Frontend development: JSP, Angular, Bootstrap, HTML/CSS, and Javascript
- 4. Automation and testing technologies: Selenium, Jasmine, and TestNG
- 5. DevOps and production technologies: Git, GitHub, Jenkins, Docker, Kubernetes, and AWS

Project development guidelines:

- The project will be delivered within four sprints with every sprint delivering a minimal viable product.
- It is mandatory to perform proper sprint planning with user stories to develop all the components of the project.
- The learner can use any technology from the above-mentioned technologies for different layers of the project.
- The web application should be responsive and should fetch or send data dynamically without hardcoded values.
- The learner must maintain the version of the application over GitHub and every new change should be sent to the repository.
- The learner must implement a CI/CD pipeline using Jenkins.
- The learner should also deploy and host the application on an AWS EC2 instance.
- The learner should also implement automation testing before the application enters the CI/CD pipeline.
- The learner should use Git branching to do basic automation testing of the application in it separately.
- The learner should make a rich frontend of the application, which is user- friendly and easy for the user to navigate through the application.
- There will be two portals in the application, namely admin and user portal.

Admin Portal:

It deals with all the backend data generation and product information. The admin user should be able to:

- Add or remove different genres to or from the application to build a rich product line
- Edit movie details like name, ticket price, language, description, and show timings to keep it aligned to the current prices
- Enable or disable the movie shows from the application

User Portal:

It deals with the user activities. The end-user should be able to:

- Sign-in to the application to maintain a record of activities
- Search for movie tickets based on the search keyword
- Apply filters and sort results based on different genres
- Add all the selected movie tickets to a cart and customize the purchase at the end
- Experience a seamless payment process
- Receive a booking summary page once the payment is complete

Pushing the code to GitHub Repository:

• Open Git Bash and navigate to the folder where you have created your files.

cd MyMoviePlan MyMoviePlan

- O Initialize the repository using the below command git init
- Add all the files to your git repository using the below command git add.
- O Commit the changes using the below command git commit -m "Initial commit"
- O Add the URL for the remote repository where your local repository will be pushed git remote add origin https://github.com/Mahendra1272/ MyMoviePlan .git
- O Push the files to the folder you initially created using below command git push -u origin master

Links to the GitHub repository:

https://github.com/Mahendra1272/MyMoviePlan.git

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I. Sprint 1: Admin Login/Registration

- 1. Admin will only have login page, registration of admin will be hardcoded at the backend with the permission of production head. JWT authentication will be used for login verification.
- 2. Admin successful login will route to admin home page where all the desired amin functionalities will be added.
- 3. Admin home will have options to:
 - i. Add or remove any movie ticket from the application to build a rich product line.
 - ii. Edit movie ticket details like title, main actors, director's name, movie summary and movie poster to keep the product information updated with the current prices.
 - iii. View all the orders placed by all the users and their details, admin can manually change the status of any order available from placed to watched.
- 4. Admin can view all the details by applying filter as desired.

5. If Admin tries to visit any URL specifically designed for user, forbidden page will get loaded.

II. Sprint 2: User Login/Registration

- 1. User will have login and registration options, already registered users can login through there username and password and new users can register and create their username and password for further use. JWT authentication will be used for login verification.
- 2. Details entered by all users will be saved in the database, and password will be stored in encrypted format to maintain security.
- 3. After successful user login users will be able to:
 - i. View all the movie tickets available updated by admin on their home page.
 - ii. Click on view details tab to view more details of the movie ticket.
 - iii. Users can either click buy now or add to cart as desired both will lead them to payment details page.
 - iv. User can also view all the cart details by clicking on cart tab on navbar.
 - v. User can also view all the order details made by their ID by clicking on My-Orders tab on their navbar.
- 4. A logout functionality to logout current user.

III. Sprint 3: Searching/sorting/filtering options and dynamic data in user and admin portals.

- 1. User will be able to Search for products based on the search keywords & apply filters and sort results based on different categories.
- 2. Users should view the dynamic data of updated pricing on their site.
- 3. Admin will also be provided with searching/sorting function to apply CRUD operations over users list and available admin list.

IV. Sprint 4: Payment Gateway

- 1. User either can directly buy the selected movie ticket by clicking on buy now tab or can click on checkout tab in the cart.
- 2. After entering all payment details, a razorpay payment gateway will open up asking for payment details
- 3. Once clicked on pay now option user will be shown an order confirmation message.

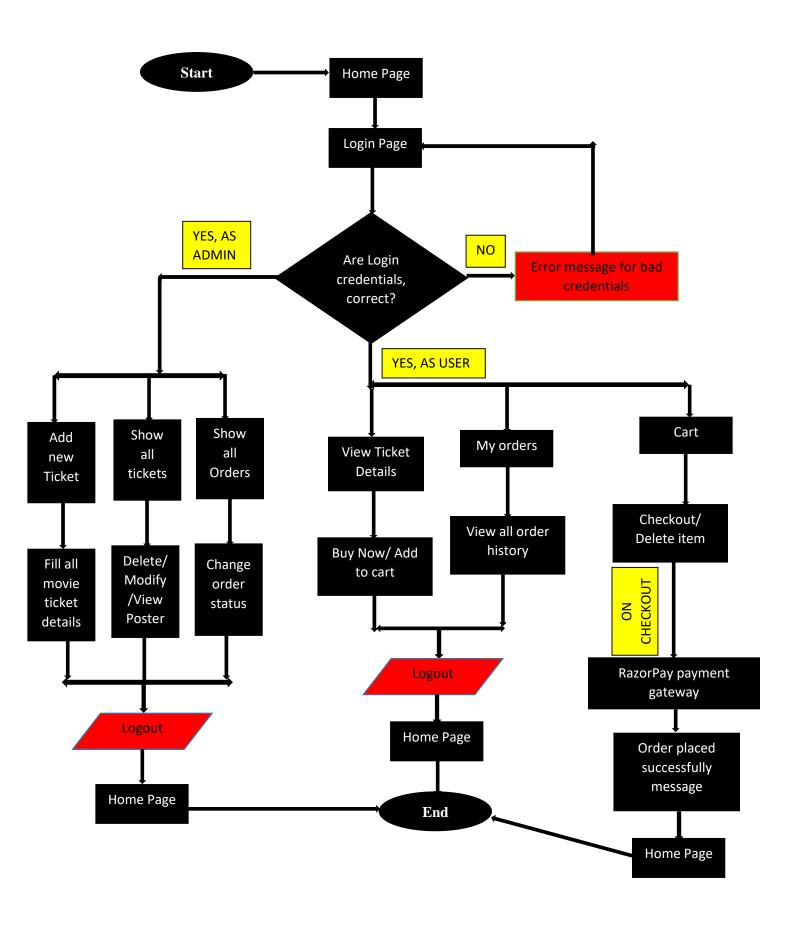
Functionalities

- 1. View trending Movies: The Home page of the application displays the popular movies.(Home Component)
- 2. Search: The user can search for movies by giving name as input.(search component)
- 3. View Details of a Particular movie : User can view the details of a particular movie(Movie Component)
- 4. Favourites: From the "Movie Component" Users can add and delete movies from their favourite list and view their favourite list in the "favourites Component"
- 5. Users can also add, edit and delete comments which they post for their favourite movies

Technologies used:

Database management: MySQL Backend logic: Java programming, SpringBoot Frontend development: Angular, Bootstrap, HTML/CSS, and Typescript

FlowChart



Source Code

Configuration

CorsConfiguration

```
package com.simplilearn.capstone2.configuration;
import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.stereotype.Component;
import org.springframework.web.servlet.config.annotation.CorsRegistry;
import org.springframework.web.servlet.config.annotation.WebMvcConfigurer;
@Configuration
@Component
public class CorsConfiguration {
       private static final String GET = "GET";
       private static final String POST = "POST";
       private static final String DELETE = "DELETE";
       private static final String PUT = "PUT";
       @Bean
       public WebMvcConfigurer corsConfigurer() {
```

return new WebMvcConfigurer() {

```
@Override
                       public void addCorsMappings(CorsRegistry registry) {
                               registry.addMapping("/**")
                               .allowedMethods(GET,PUT,POST,DELETE)
                               .allowedHeaders("*")
                               .allowedOriginPatterns("*")
                               .allowCredentials(true);
                       }
               };
       }
}
                                    <u>JwtAuthenticationEntryPoint</u>
package com.simplilearn.capstone2.configuration;
import java.io.IOException;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.springframework.security.core.AuthenticationException;
import org.springframework.security.web.AuthenticationEntryPoint;
import org.springframework.stereotype.Component;
@Component
public class JwtAuthenticationEntryPoint implements AuthenticationEntryPoint {
```

```
@Override
        public void commence(HttpServletRequest request, HttpServletResponse response,
                       AuthenticationException authException) throws IOException, ServletException {
               //sending msg that access is unauthorized
               response.sendError(HttpServletResponse.SC_UNAUTHORIZED,"Unauthorized");
       }
}
                                          JwtRequestFilter
package com.simplilearn.capstone2.configuration;
import java.io.IOException;
import javax.servlet.FilterChain;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.context.annotation.Lazy;
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 com.simplilearn.capstone2.service.JwtService;
import com.simplilearn.capstone2.util.JwtUtil;
import io.jsonwebtoken.ExpiredJwtException;
@Component
public class JwtRequestFilter extends OncePerRequestFilter {
        public static String CURRENT_USER = "";
        @Autowired
        private JwtUtil jwtutil;
        @Lazy
        @Autowired
        private JwtService jwtservice;
        @Override
        protected void doFilterInternal(HttpServletRequest request, HttpServletResponse response,
                       FilterChain filterChain)
                       throws ServletException, IOException {
               final String header = request.getHeader("Authorization");
               String jwtToken = null;
               String userName = null;
               if (header != null && header.startsWith("Bearer ")) {
                       jwtToken = header.substring(7);
```

```
try {
                               userName = jwtutil.getUserNameFromToken(jwtToken);
                               CURRENT_USER = userName;
                       } catch (IllegalArgumentException e) {
                               System.out.println("Unable to get JWT token");
                       } catch (ExpiredJwtException e) {
                               System.out.println("Jwt token is expired");
                       }
               } else {
                       System.out.println("Jwt token does not start with bearer");
               }
               if (userName != null && SecurityContextHolder.getContext().getAuthentication() == null)
{
                       UserDetails userDetails = jwtservice.loadUserByUsername(userName);
                       if (jwtutil.ValidateToken(jwtToken, userDetails)) {
                               Username Password Authentication Token\\
usernamePasswordAuthenticationToken =
                                              new
UsernamePasswordAuthenticationToken(userDetails,
                                                              null, userDetails.getAuthorities());
                               usernamePasswordAuthenticationToken.setDetails
```

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

```
Security Context Holder.get Context (). set Authentication (username Password Authentication Token)\\
                       }
               }
               filterChain.doFilter(request, response);
       }
}
                                     WebSecurityConfiguration
package com.simplilearn.capstone2.configuration;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.context.annotation.Bean;
import org.springframework.context.annotation.Configuration;
import org.springframework.context.annotation.Lazy;
import org.springframework.http.HttpHeaders;
import org.springframework.security.authentication.AuthenticationManager;
import
org. spring framework. security. config. annotation. authentication. builders. Authentication Manager Builder;\\
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.configuration.EnableWebSecurity;
import
org.springframework.security.config.annotation.web.configuration.WebSecurityConfigurerAdapter;
```

```
import org.springframework.security.config.http.SessionCreationPolicy;
import org.springframework.security.core.userdetails.UserDetailsService;
import org.springframework.security.crypto.bcrypt.BCryptPasswordEncoder;
import org.springframework.security.crypto.password.PasswordEncoder;
import org.springframework.security.web.authentication.UsernamePasswordAuthenticationFilter;
import org.springframework.stereotype.Component;
import com.simplilearn.capstone2.service.JwtService;
@Configuration
@EnableWebSecurity
@EnableGlobalMethodSecurity(prePostEnabled = true)
@Component
public class WebSecurityConfiguration extends WebSecurityConfigurerAdapter {
       @Autowired
       private JwtAuthenticationEntryPoint jwtauthenticationentrypoint;
       //@Lazy
       @Autowired
       private JwtRequestFilter jwtrequestfilter;
       //@Lazy
       @Autowired
       private UserDetailsService jwtservice;
       @Bean
       @Override
       public AuthenticationManager authenticationManagerBean() throws Exception {
```

```
return super.authenticationManagerBean();
       }
       @Override
       protected void configure(HttpSecurity httpsecurity) throws Exception {
               httpsecurity.cors();
               httpsecurity.csrf().disable().authorizeRequests()
       .antMatchers("/authenticate","/registerNewUser","/movieticket/showall","getTicketById/{ticket
Id}","/getTicketDetails/{isSingleTicketCheckout},{ticketId}")
               .permitAll().antMatchers(HttpHeaders.ALLOW)
                               .permitAll().anyRequest().authenticated()
                               .and()
                               .exceptionHandling()
       .authenticationEntryPoint(jwtauthenticationentrypoint).and().sessionManagement()
                               .sessionCreationPolicy(SessionCreationPolicy.STATELESS);
               httpsecurity.addFilterBefore(jwtrequestfilter,
UsernamePasswordAuthenticationFilter.class);
       }
       @Bean
       public PasswordEncoder passwordEncoder() {
               return new BCryptPasswordEncoder();
       }
       @Autowired
       public void configureGlobal(AuthenticationManagerBuilder authenticatnManagerBuilder)
throws Exception {
```

```
authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. user Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder. User Details Service (jwtservice). password Encoder (password Encoder) authenticatn Manager Builder (password Encoder) authenticatn Manager Build
());
                          }
}
                                                                                                                                             Controller
                                                                                                                                                     CartController
package com.simplilearn.capstone2.controller;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.access.prepost.PreAuthorize;
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.RestController;
import com.simplilearn.capstone2.entity.Cart;
import com.simplilearn.capstone2.service.CartService;
@RestController
public class CartController {
                           @Autowired
                           private CartService cartService;
                           @PreAuthorize("hasRole('User')")
```

```
@GetMapping({"/addToCart/{ticketId}"})
        public Cart addToCart(@PathVariable(name="ticketId")Integer ticketId) {
               return cartService.addToCart(ticketId);
       }
        @PreAuthorize("hasRole('User')")
        @DeleteMapping({"/deleteCartItem/{cartId}"})
        public void deleteCartItem(@PathVariable (name="cartId")Integer cartId) {
               cartService.deleteCartItem(cartId);
       }
        @PreAuthorize("hasRole('User')")
        @GetMapping({"/getCartDetails"})
        public List<Cart> getCartDetails() {
               return cartService.getCartDetails();
       }
}
                                            <u>JwtController</u>
package com.simplilearn.capstone2.controller;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.CrossOrigin;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
import org.springframework.web.bind.annotation.RestController;
import com.simplilearn.capstone2.entity.JwtRequest;
import com.simplilearn.capstone2.entity.JwtResponse;
```

```
import com.simplilearn.capstone2.service.JwtService;
@RestController
@CrossOrigin
public class JwtController {
       @Autowired
       private JwtService jwtservice;
        @PostMapping({"/authenticate"})
        public JwtResponse CreateJwtToken(@RequestBody JwtRequest jwtrequest)throws Exception {
               return jwtservice.createJwtToken(jwtrequest);
       }
}
                                       MovieTicketController
package com.simplilearn.capstone2.controller;
import java.io.IOException;
import java.util.HashSet;
import java.util.List;
import java.util.Set;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.http.MediaType;
import org.springframework.http.ResponseEntity;
import org.springframework.security.access.prepost.PreAuthorize;
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.RequestPart;
import org.springframework.web.bind.annotation.RestController;
import org.springframework.web.multipart.MultipartFile;
import com.simplilearn.capstone2.dao.MovieTicketDao;
import com.simplilearn.capstone2.entity.MovieTickets;
import com.simplilearn.capstone2.entity.Posters;
import com.simplilearn.capstone2.service.MovieTicketService;
@RestController
@CrossOrigin
public class MovieTicketController {
       @Autowired
       private MovieTicketService mtService;
//
       @Autowired
//
       private MovieTicketDao mtDao;
       @PreAuthorize("hasRole('Admin')")
       @PostMapping(value = { "/movieticket/add" }, consumes = {
MediaType.MULTIPART_FORM_DATA_VALUE })
       public MovieTickets addNewTicket(@RequestPart("movieticket") MovieTickets mt,
                      @RequestPart("posters") MultipartFile[] file) {
               // return mtService.addNewTicket(mt);
```

```
try {
                        Set<Posters> posters = uploadPoster(file);
                        mt.setMoviePoster(posters);
                        return mtService.addNewTicket(mt);
                } catch (Exception e) {
                        System.out.println(e.getMessage());
                        return null;
                }
        }
        // for processing these uploaded images
        public Set<Posters> uploadPoster(MultipartFile[] multipartFiles) throws IOException {
                Set<Posters> posters = new HashSet<>();
                for (MultipartFile file: multipartFiles) {
                        Posters p = new Posters(file.getOriginalFilename(), file.getContentType(),
file.getBytes());
                        posters.add(p);
                }
                return posters;
        }
       // @PreAuthorize("hasRole('Admin')")
        @GetMapping({ "/movieticket/showall" })
        public List<MovieTickets> getAllTickets() {
                return mtService.getAllTickets();
        }
```

```
@PreAuthorize("hasRole('Admin')")
        @DeleteMapping({ "/deleteticket/{ticketId}" })
        public void deleteTicket(@PathVariable("ticketId") Integer ticketId) {
               mtService.deleteTicket(ticketId);
        }
        @GetMapping("getTicketById/{ticketId}")
        public MovieTickets getTicketById(@PathVariable Integer ticketId) {
               return mtService.getTicketsById(ticketId);
        }
        @PreAuthorize("hasRole('User')")
        @GetMapping({ "/getTicketDetails/{isSingleTicketCheckout}/{ticketId}" })
        public List<MovieTickets> getTicketDetails(@PathVariable(name = "isSingleTicketCheckout")
boolean isSingleTicketCheckout,
                       @PathVariable(name = "ticketId")Integer ticketId) {
               return mtService.getTicketDetails(isSingleTicketCheckout, ticketId);
       }
}
                                        OrderDetailController
package com.simplilearn.capstone2.controller;
import java.util.List;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.access.prepost.PreAuthorize;
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.RestController;
import com.simplilearn.capstone2.entity.OrderDetail;
import com.simplilearn.capstone2.entity.OrderInput;
import com.simplilearn.capstone2.entity.TransactionDetails;
import com.simplilearn.capstone2.service.OrderDetailService;
@RestController
public class OrderDetailController {
       @Autowired
       private OrderDetailService orderDetailService;
       @PreAuthorize("hasRole('User')")
       @PostMapping({"/place/order/{isSingleTicketCheckout}"})
       public void placeOrder(@PathVariable (name="isSingleTicketCheckout") boolean
isSingleTicketCheckout,
                       @RequestBody OrderInput orderInput) {
               orderDetailService.placeOrder(orderInput,isSingleTicketCheckout);
       }
       @PreAuthorize("hasRole('User')")
       @GetMapping({"/getOrderDetails"})
       public List<OrderDetail> getOrderDetails() {
```

```
}
       @PreAuthorize("hasRole('Admin')")
       @GetMapping({"/getAllOrderDetails/{status}"})
       public List<OrderDetail> getAllOrderDetails(@PathVariable(name = "status")String status){
               return orderDetailService.getAllOrderDetails(status);
       }
       @PreAuthorize("hasRole('Admin')")
       @GetMapping({"/markOrderWatched/{orderId}"})
       public void markOrderWatched(@PathVariable(name = "orderId")Integer orderId ) {
               //this can be used for marked order as delivered in other cases.
               orderDetailService.markOrderAsWatched(orderId);
       }
       @PreAuthorize("hasRole('User')")
       @GetMapping({"/createTransaction/{amount}"})
       public TransactionDetails CreateTransaction(@PathVariable(name= "amount")Double amount) {
               return orderDetailService.createTransaction(amount);
       }
}
                                          RoleController
package com.simplilearn.capstone2.controller;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;
```

return orderDetailService.getOrderDetails();

```
import org.springframework.web.bind.annotation.RestController;
import com.simplilearn.capstone2.entity.Role;
import com.simplilearn.capstone2.service.RoleService;
@RestController
public class RoleController {
        @Autowired
        private RoleService roleservice;
        @PostMapping({"/createNewRole"})
        public Role createNewRole(@RequestBody Role role) {
               return roleservice.createNewRole(role);
       }
}
                                          UserController
package com.simplilearn.capstone2.controller;
import javax.annotation.PostConstruct;
import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.security.access.prepost.PreAuthorize;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PostMapping;
```

import com.simplilearn.capstone2.entity.User;

import org.springframework.web.bind.annotation.RequestBody;

import org.springframework.web.bind.annotation.RestController;

```
import com.simplilearn.capstone2.service.UserService;
```

```
@RestController
public class UserController {
       @Autowired
       private UserService userservice;
       @PostConstruct//will run each the program starts
        public void initRolesAndUsers() {
               userservice.initRolesAndUser();
       }
        @PostMapping({"/registerNewUser"})
        public User RegisterNewUser(@RequestBody User user) {
               return userservice.RegisterNewUser(user);
       }
        @GetMapping({"/forAdmin"})
       @PreAuthorize("hasRole('Admin')") //this will give access only to users having role of Admin
        public String forAdmin() {
               return "This URL is only accessible to admin";
       }
        @GetMapping({"/forUser"})
       @PreAuthorize("hasRole('User')")
       public String forUser() {
               return "This URL is only accessible to User";
       }
```

```
}
```

<u>Dao</u>

```
CartDao
package com.simplilearn.capstone2.dao;
import java.util.List;
import org.springframework.data.repository.CrudRepository;
import org.springframework.stereotype.Repository;
import com.simplilearn.capstone2.entity.Cart;
import com.simplilearn.capstone2.entity.User;
@Repository
public interface CartDao extends CrudRepository<Cart, Integer>{
       public List<Cart> findByUser(User user);
}
                                          MovieTicketDao
package com.simplilearn.capstone2.dao;
import org.springframework.data.repository.CrudRepository;
import org.springframework.stereotype.Repository;
import com.simplilearn.capstone2.entity.MovieTickets;
@Repository
```

```
public interface MovieTicketDao extends CrudRepository<MovieTickets, Integer> {
}
                                           OrderDetailDao
package com.simplilearn.capstone2.dao;
import java.util.List;
import org.springframework.data.repository.CrudRepository;
import org.springframework.stereotype.Repository;
import com.simplilearn.capstone2.entity.OrderDetail;
import com.simplilearn.capstone2.entity.User;
@Repository
public interface OrderDetailDao extends CrudRepository<OrderDetail, Integer> {
        public List<OrderDetail> findByUser(User user);
       //this will take object of user and will return the list of orderdetail
       //in this method findBy is mandatory followed by variable name in OrderDetail class i.e is user in
this case.
        public List<OrderDetail> findByOrderStatus(String status);
}
                                               RoleDao
package com.simplilearn.capstone2.dao;
import org.springframework.data.repository.CrudRepository;
import org.springframework.stereotype.Repository;
```

```
import com.simplilearn.capstone2.entity.Role;
@Repository
public interface RoleDao extends CrudRepository<Role, String>{
}
                                              <u>UserDao</u>
package com.simplilearn.capstone2.dao;
import org.springframework.data.repository.CrudRepository;
import org.springframework.stereotype.Repository;
import com.simplilearn.capstone2.entity.User;
@Repository
public interface UserDao extends CrudRepository<User, String> {
}
                                             Entity
                                                Cart
package com.simplilearn.capstone2.entity;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.ld;
import javax.persistence.OneToOne;
import javax.persistence.Table;
```

```
@Entity
@Table
public class Cart {
        @Id
        @GeneratedValue(strategy = GenerationType.AUTO)
        private Integer cartId;
        @OneToOne
        private MovieTickets movieTicket;
        @OneToOne
        private User user;
        public Cart() {
       }
        public Cart(MovieTickets movieTicket, User user) {
               super();
               this.movieTicket = movieTicket;
               this.user = user;
        }
        public Integer getCartId() {
               return cartId;
        }
        public void setCartId(Integer cartId) {
               this.cartId = cartId;
```

```
}
        public MovieTickets getMovieTicket() {
               return movieTicket;
        }
        public void setMovieTicket(MovieTickets movieTicket) {
               this.movieTicket = movieTicket;
       }
        public User getUser() {
               return user;
        }
        public void setUser(User user) {
               this.user = user;
       }
}
                                              <u>JwtRequest</u>
package com.simplilearn.capstone2.entity;
public class JwtRequest {
        private String userName;
        private String userPassword;
        public String getUserName() {
               return userName;
        }
        public void setUserName(String userName) {
               this.userName = userName;
       }
        public String getUserPassword() {
```

```
return userPassword;
        }
        public void setUserPassword(String userPassword) {
               this.userPassword = userPassword;
       }
}
                                             JwtResponse
package com.simplilearn.capstone2.entity;
public class JwtResponse {
        private User user;
        private String jwtToken;
        public JwtResponse(User user, String jwtToken) {
               super();
               this.user = user;
               this.jwtToken = jwtToken;
       }
        public User getUser() {
               return user;
        }
        public void setUser(User user) {
               this.user = user;
        }
        public String getJwtToken() {
               return jwtToken;
```

```
}
       public void setJwtToken(String jwtToken) {
               this.jwtToken = jwtToken;
       }
}
                                            MovieTickets
package com.simplilearn.capstone2.entity;
import java.util.Set;
import javax.persistence.CascadeType;
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.JoinTable;
import javax.persistence.ManyToMany;
@Entity
public class MovieTickets {
       @ld
       @GeneratedValue(strategy = GenerationType.AUTO)
       private int ticketId;
       private String movieName;
```

```
private String genre;
        private String actors;
        private String director;
        private String language;
        private String description;
        private double actualPrice;
        private double discountedPrice;
        @ManyToMany(fetch = FetchType.EAGER, cascade = CascadeType.ALL)
        @JoinTable(name = "ticket_posters", joinColumns = { @JoinColumn(name = "ticket_id") },
inverseJoinColumns = {
                       @JoinColumn(name = "poster_id") })
        private Set<Posters> moviePoster;
        public Set<Posters> getMoviePoster() {
               return moviePoster;
        }
        public void setMoviePoster(Set<Posters> moviePoster) {
               this.moviePoster = moviePoster;
        }
        public String getLanguage() {
               return language;
        }
        public void setLanguage(String language) {
               this.language = language;
```

```
}
public String getDirector() {
        return director;
}
public void setDirector(String director) {
        this.director = director;
}
public int getTicketId() {
        return ticketId;
}
public void setTicketId(int ticketId) {
        this.ticketId = ticketId;
}
public String getMovieName() {
        return movieName;
}
public void setMovieName(String movieName) {
        this.movieName = movieName;
}
public String getGenre() {
        return genre;
}
```

```
public void setGenre(String genre) {
        this.genre = genre;
}
public String getActors() {
        return actors;
}
public void setActors(String actors) {
        this.actors = actors;
}
public String getDescription() {
        return description;
}
public void setDescription(String description) {
        this.description = description;
}
public double getActualPrice() {
        return actualPrice;
}
public void setActualPrice(double actualPrice) {
        this.actualPrice = actualPrice;
}
```

```
public double getDiscountedPrice() {
                return discountedPrice;
        }
        public void setDiscountedPrice(double discountedPrice) {
                this.discountedPrice = discountedPrice;
        }
        public MovieTickets(int ticketId, String movieName, String genre, String actors, String director,
                        String description, String language, double actualPrice, double discountedPrice)
{
                super();
                this.ticketId = ticketId;
                this.movieName = movieName;
                this.genre = genre;
                this.actors = actors;
                this.director = director;
                this.language = language;
                this.description = description;
                this.actualPrice = actualPrice;
                this.discountedPrice = discountedPrice;
        }
        public MovieTickets() {
                super();
                // TODO Auto-generated constructor stub
        }
```

}

MovieTickets

```
package com.simplilearn.capstone2.entity;
import java.util.Set;
import javax.persistence.CascadeType;
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.JoinTable;
import javax.persistence.ManyToMany;
@Entity
public class MovieTickets {
        @Id
        @GeneratedValue(strategy = GenerationType.AUTO)
        private int ticketId;
        private String movieName;
        private String genre;
        private String actors;
        private String director;
        private String language;
        private String description;
        private double actualPrice;
        private double discountedPrice;
```

```
@ManyToMany(fetch = FetchType.EAGER, cascade = CascadeType.ALL)
       @JoinTable(name = "ticket_posters", joinColumns = { @JoinColumn(name = "ticket_id") },
inverseJoinColumns = {
                       @JoinColumn(name = "poster_id") })
       private Set<Posters> moviePoster;
       public Set<Posters> getMoviePoster() {
               return moviePoster;
       }
       public void setMoviePoster(Set<Posters> moviePoster) {
               this.moviePoster = moviePoster;
       }
       public String getLanguage() {
               return language;
       }
       public void setLanguage(String language) {
               this.language = language;
       }
       public String getDirector() {
               return director;
       }
       public void setDirector(String director) {
```

```
this.director = director;
}
public int getTicketId() {
        return ticketId;
}
public void setTicketId(int ticketId) {
        this.ticketId = ticketId;
}
public String getMovieName() {
        return movieName;
}
public void setMovieName(String movieName) {
        this.movieName = movieName;
}
public String getGenre() {
        return genre;
}
public void setGenre(String genre) {
        this.genre = genre;
}
public String getActors() {
        return actors;
```

```
}
public void setActors(String actors) {
        this.actors = actors;
}
public String getDescription() {
        return description;
}
public void setDescription(String description) {
        this.description = description;
}
public double getActualPrice() {
        return actualPrice;
}
public void setActualPrice(double actualPrice) {
        this.actualPrice = actualPrice;
}
public double getDiscountedPrice() {
        return discountedPrice;
}
public void setDiscountedPrice(double discountedPrice) {
        this.discountedPrice = discountedPrice;
}
```

```
public MovieTickets(int ticketId, String movieName, String genre, String actors, String director,
                        String description, String language, double actualPrice, double discountedPrice)
{
                super();
                this.ticketId = ticketId;
                this.movieName = movieName;
                this.genre = genre;
                this.actors = actors;
                this.director = director;
                this.language = language;
                this.description = description;
                this.actualPrice = actualPrice;
                this.discountedPrice = discountedPrice;
        }
        public MovieTickets() {
                super();
                // TODO Auto-generated constructor stub
       }
}
                                              OrderDetail
package com.simplilearn.capstone2.entity;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.ld;
```

```
import javax.persistence.OneToOne;
@Entity
public class OrderDetail {
        @Id
        @GeneratedValue(strategy = GenerationType.AUTO)
        private Integer orderId;
        private String orderFullname;
        private String orderFullAddress;
        private String orderContactNumber;
        private String orderAlternateNumber;
        private String orderStatus;
        private double orderAmount;
        @OneToOne
        private MovieTickets movieTicket;
        @OneToOne
        private User user;
        private String transactionId;
        public String getTransactionId() {
               return transactionId;
        }
        public void setTransactionId(String transactionId) {
               this.transactionId = transactionId;
        }
        public OrderDetail() {
```

```
}
public MovieTickets getMovieTicket() {
        return movieTicket;
}
public void setMovieTicket(MovieTickets movieTicket) {
        this.movieTicket = movieTicket;
}
public User getUser() {
        return user;
}
public void setUser(User user) {
        this.user = user;
}
public Integer getOrderId() {
        return orderId;
}
public void setOrderId(Integer orderId) {
        this.orderId = orderId;
}
public String getOrderFullname() {
        return orderFullname;
}
public void setOrderFullname(String orderFullname) {
        this.orderFullname = orderFullname;
}
public String getOrderFullAddress() {
        return orderFullAddress;
}
```

```
public void setOrderFullAddress(String orderFullAddress) {
       this.orderFullAddress = orderFullAddress;
}
public String getOrderContactNumber() {
       return orderContactNumber;
}
public void setOrderContactNumber(String orderContactNumber) {
       this.orderContactNumber = orderContactNumber;
}
public String getOrderAlternateNumber() {
       return orderAlternateNumber;
}
public void setOrderAlternateNumber(String orderAlternateNumber) {
       this.orderAlternateNumber = orderAlternateNumber;
}
public String getOrderStatus() {
       return orderStatus;
}
public void setOrderStatus(String orderStatus) {
       this.orderStatus = orderStatus;
}
public double getOrderAmount() {
       return orderAmount;
}
public void setOrderAmount(double orderAmount) {
       this.orderAmount = orderAmount;
}
public OrderDetail( String orderFullname, String orderFullAddress, String orderContactNumber,
```

```
String orderAlternateNumber, String orderStatus, double orderAmount,
MovieTickets movieTicket, User user,
                       String transactionId) {
               super();
               this.orderFullname = orderFullname;
               this.orderFullAddress = orderFullAddress;
               this.orderContactNumber = orderContactNumber;
               this.orderAlternateNumber = orderAlternateNumber;
               this.orderStatus = orderStatus;
               this.orderAmount = orderAmount;
               this.movieTicket = movieTicket;
               this.user = user;
               this.transactionId = transactionId;
       }
}
                                             OrderInput
package com.simplilearn.capstone2.entity;
import java.util.List;
public class OrderInput {
```

private String fullName;

```
private String fullAddress;
private String contactNumber;
private String alternateContactNumber;
private List<OrderTicketQuantity> orderTicketQuantity;
private String transactionId;
public String getTransactionId() {
       return transactionId;
}
public void setTransactionId(String transactionId) {
       this.transactionId = transactionId;
}
public String getFullName() {
       return fullName;
}
public void setFullName(String fullName) {
       this.fullName = fullName;
}
public String getFullAddress() {
       return fullAddress;
}
public void setFullAddress(String fullAddress) {
       this.fullAddress = fullAddress;
}
public String getContactNumber() {
       return contactNumber;
}
public void setContactNumber(String contactNumber) {
```

```
this.contactNumber = contactNumber;
       }
       public String getAlternateContactNumber() {
               return alternateContactNumber;
       }
       public void setAlternateContactNumber(String alternateContactNumber) {
               this.alternateContactNumber = alternateContactNumber;
       }
       public List<OrderTicketQuantity> getOrderTicketQuantity() {
               return orderTicketQuantity;
       }
       public void setOrderTicketQuantity(List<OrderTicketQuantity) {</pre>
               this.orderTicketQuantity = orderTicketQuantity;
       }
}
                                        OrderTicketQuantity
package com.simplilearn.capstone2.entity;
public class OrderTicketQuantity {
       private Integer ticketId;
       private Integer quantity;
       public Integer getTicketId() {
               return ticketId;
       }
       public void setTicketId(Integer ticketId) {
               this.ticketId = ticketId;
```

```
}
       public Integer getQuantity() {
               return quantity;
       }
       public void setQuantity(Integer quantity) {
               this.quantity = quantity;
       }
}
                                               Posters
package com.simplilearn.capstone2.entity;
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="movie_poster")
public class Posters {
       @ld
       @GeneratedValue(strategy = GenerationType.AUTO)
       private long posterId;
       private String name;
       private String type;
       @Column(length = 5000000)
```

```
private byte[] pic;
public Posters(String name, String type, byte[] pic) {
        super();
        this.name = name;
        this.type = type;
        this.pic = pic;
}
public Posters() {
        super();
        // TODO Auto-generated constructor stub
}
public long getPosterId() {
        return posterId;
}
public void setPosterId(long posterId) {
        this.posterId = posterId;
}
public String getName() {
        return name;
}
public void setName(String name) {
        this.name = name;
}
public String getType() {
        return type;
}
public void setType(String type) {
```

```
this.type = type;
        }
        public byte[] getPic() {
                return pic;
        }
        public void setPic(byte[] pic) {
                this.pic = pic;
       }
}
                                                <u>Posters</u>
package com.simplilearn.capstone2.entity;
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="movie_poster")
public class Posters {
        @ld
        @GeneratedValue(strategy = GenerationType.AUTO)
        private long posterId;
        private String name;
```

```
private String type;
@Column(length = 5000000)
private byte[] pic;
public Posters(String name, String type, byte[] pic) {
        super();
        this.name = name;
        this.type = type;
        this.pic = pic;
}
public Posters() {
        super();
        // TODO Auto-generated constructor stub
}
public long getPosterId() {
        return posterId;
}
public void setPosterId(long posterId) {
        this.posterId = posterId;
}
public String getName() {
        return name;
}
public void setName(String name) {
        this.name = name;
}
public String getType() {
        return type;
```

```
}
        public void setType(String type) {
                this.type = type;
        }
        public byte[] getPic() {
                return pic;
        }
        public void setPic(byte[] pic) {
                this.pic = pic;
        }
}
                                                   <u>Role</u>
package com.simplilearn.capstone2.entity;
import javax.persistence.Entity;
import javax.persistence.ld;
@Entity
public class Role {
        @Id
        private String roleName;
        private String roleDescription;
        public String getRoleName() {
                return roleName;
        }
```

```
public void setRoleName(String roleName) {
                this.roleName = roleName;
        }
        public String getRoleDescription() {
                return roleDescription;
        }
        public void setRoleDescription(String roleDescription) {
                this.roleDescription = roleDescription;
        }
}
                                           TransactionDetails
package com.simplilearn.capstone2.entity;
public class TransactionDetails {
        private String orderId;
        private String currency;
        private Integer amount;
        private String key;
        public TransactionDetails(String orderld, String currency, Integer amount, String key) {
                super();
                this.orderId = orderId;
                this.currency = currency;
                this.amount = amount;
                this.key = key;
```

```
}
public String getKey() {
        return key;
}
public void setKey(String key) {
        this.key = key;
}
public String getOrderId() {
        return orderId;
}
public void setOrderId(String orderId) {
        this.orderId = orderId;
}
public String getCurrency() {
        return currency;
}
public void setCurrency(String currency) {
        this.currency = currency;
}
public Integer getAmount() {
        return amount;
}
public void setAmount(Integer amount) {
```

```
this.amount = amount;
       }
}
                                                 <u>User</u>
package com.simplilearn.capstone2.entity;
import java.util.Set;
import javax.persistence.CascadeType;
import javax.persistence.Entity;
import javax.persistence.FetchType;
import javax.persistence.ld;
import javax.persistence.JoinColumn;
import javax.persistence.JoinTable;
import javax.persistence.ManyToMany;
import javax.persistence.Table;
@Entity
@Table(name="users")
public class User {
        @Id
        private String userName;
        private String fullName;
```

```
private String userpassword;
       // many uses may have many different roles
        * By itself create a third table named USER_ROLE that will have user and its
        * associated role details this third table will have user_id and associated
        * role_id
        */
       @ManyToMany(fetch = FetchType.EAGER, cascade = CascadeType.ALL)
       @JoinTable(name = "USER ROLE", joinColumns = { @JoinColumn(name = "USER ID") },
inverseJoinColumns = {
                       @JoinColumn(name = "ROLE_ID") })
       private Set<Role> role;
       public String getUserName() {
               return userName;
       }
       public void setUserName(String userName) {
               this.userName = userName;
       }
       public String getFullName() {
               return fullName;
       }
       public void setFullName(String fullName) {
               this.fullName = fullName;
       }
```

```
public String getUserpassword() {
        return userpassword;
}

public void setUserpassword(String userpassword) {
        this.userpassword = userpassword;
}

public Set<Role> getRole() {
        return role;
}

public void setRole(Set<Role> role) {
        this.role = role;
}
```

}

Output

