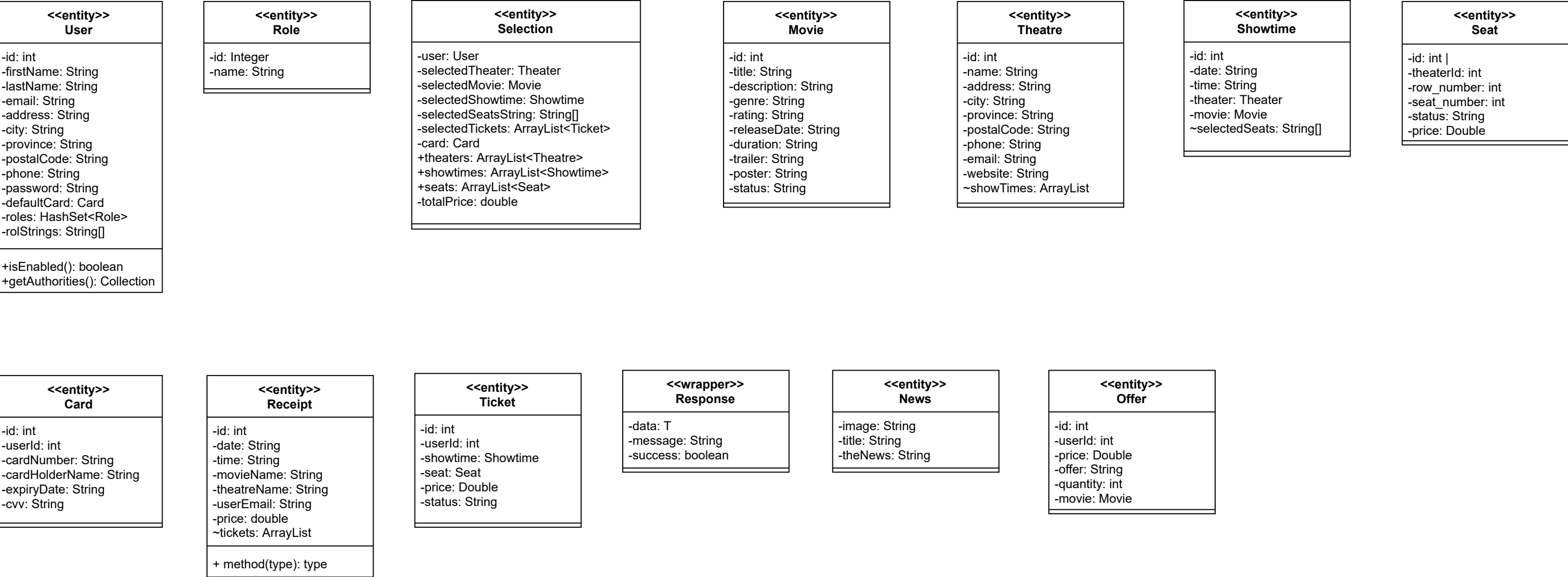


# Model Class Diagram without Relationships, and with Attributes and Behaviour

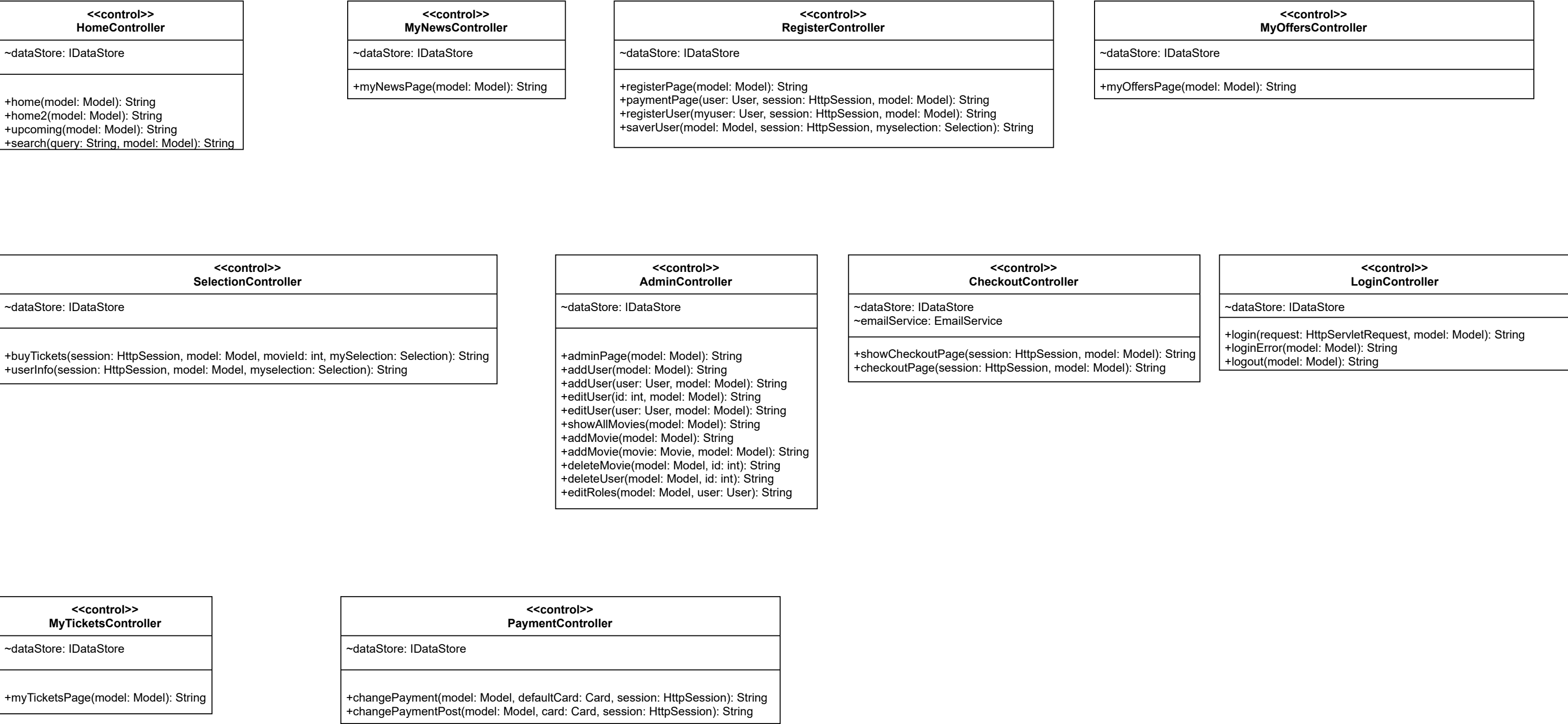
Movie Ticket Reservation App

Group 5

Prepared by: Chinwe Ajieh



# Controller Class Diagram without Relationships, and with Attributes and Behaviour



# Data Control Class Diagram without Relationships, and with Attributes and Behaviour

<<interface>> IDataStore
<div><div>-getStatement(): Statement</div><div>-getPreparedStatement(query: String): PreparedStatement</div><div>-checkSQLInjection(str: String): boolean</div><div>+registerUser(user: User): Response</div><div>+addUser(user: User): Response</div><div>-checkEmailExists(email: String): boolean</div><div>+loginUser(email: String, password: String): Response</div><div>+logoutUser(user: User): boolean</div><div>+getAllMovies(): Response&gt;</div><div>+getAllShowingMovies(): Response&gt;</div><div>+getUpcomingMovies(): Response&gt;</div><div>+getTheatersByMovie(movie: Movie): Response&gt;</div><div>+getShowtimesByMovieAndTheater(movie: Movie, theater: Theater): Response&gt;</div><div>+getSeatsByShowtime(showtime: Showtime): Response&gt;</div><div>+getUserByEmail(email: String): User</div><div>-getUserRoles(user: User): Set</div><div>+getMovie(movieId: int): Response</div><div>+getShowtimes(movieId: int, theaterId: int): Response&gt;</div><div>+getAllTheaters(movieId: int): Response&gt;</div><div>+getShowtime(showtimeId: int): Response</div><div>+getSeats(movieId: int, showtimeId: int): Response&gt;</div><div>+getSeat(seatId: int): Response</div><div>+addTickets(tickets: ArrayList, userId: int): Response&gt;</div><div>+getTicketsByUserEmail(name: String): Response&gt;</div><div>+getMoviesNews(): Response&gt;</div><div>+getDefaultCard(user: User): Response</div><div>+isEmailInUse(email: String): boolean</div><div>+checkSeats(selectedShowtimeId: int, selectedSeatsString: String[]): boolean</div><div>+ifSeatsExceedsTenPercentage(movieId: int, theaterId: int, showtimeId: int, selectedSeatsString: String[]): boolean</div><div>+updateUserPayment(userId: int, card: Card): Response</div><div>+searchMovies(query: String): Response&gt;</div><div>+processPayment(selection: Selection): Response</div><div>+addMovie(movie: Movie): Response</div><div>+deleteMovie(id: int): Response</div><div>+deleteUser(id: int): Response</div><div>+getAllUsers(): Response&gt;</div><div>+getDefaultCard(id: int): Response</div><div>+editRoles(user: User): Response</div><div>+getAllRoles(): ArrayList</div><div>+getUser(id: int): Response</div><div>+updateUser(user: User): Response</div><div>+getOffers(): Response&gt;</div></div>

<<control>> DataStore
<div><div>-env: Environment</div></div>
<div><div>-getStatement(): Statement</div><div>-getPreparedStatement(query: String): PreparedStatement</div><div>-checkSQLInjection(str: String): boolean</div><div>+registerUser(user: User): Response</div><div>+addUser(user: User): Response</div><div>-checkEmailExists(email: String): boolean</div><div>+loginUser(email: String, password: String): Response</div><div>+logoutUser(user: User): boolean</div><div>+getAllMovies(): Response&gt;</div><div>+getAllShowingMovies(): Response&gt;</div><div>+getUpcomingMovies(): Response&gt;</div><div>+getTheatersByMovie(movie: Movie): Response&gt;</div><div>+getShowtimesByMovieAndTheater(movie: Movie, theater: Theater): Response&gt;</div><div>+getSeatsByShowtime(showtime: Showtime): Response&gt;</div><div>+getUserByEmail(email: String): User</div><div>-getUserRoles(user: User): Set</div><div>+getMovie(movieId: int): Response</div><div>+getShowtimes(movieId: int, theaterId: int): Response&gt;</div><div>+getAllTheaters(movieId: int): Response&gt;</div><div>+getShowtime(showtimeId: int): Response</div><div>+getSeats(movieId: int, showtimeId: int): Response&gt;</div><div>+getSeat(seatId: int): Response</div><div>+addTickets(tickets: ArrayList, userId: int): Response&gt;</div><div>+getTicketsByUserEmail(name: String): Response&gt;</div><div>+getMoviesNews(): Response&gt;</div><div>+getDefaultCard(user: User): Response</div><div>+isEmailInUse(email: String): boolean</div><div>+checkSeats(selectedShowtimeId: int, selectedSeatsString: String[]): boolean</div><div>+ifSeatsExceedsTenPercentage(movieId: int, theaterId: int, showtimeId: int, selectedSeatsString: String[]): boolean</div><div>+updateUserPayment(userId: int, card: Card): Response</div><div>+searchMovies(query: String): Response&gt;</div><div>+processPayment(selection: Selection): Response</div><div>+addMovie(movie: Movie): Response</div><div>+deleteMovie(id: int): Response</div><div>+deleteUser(id: int): Response</div><div>+getAllUsers(): Response&gt;</div><div>+getDefaultCard(id: int): Response</div><div>+editRoles(user: User): Response</div><div>+getAllRoles(): ArrayList</div><div>+getUser(id: int): Response</div><div>+updateUser(user: User): Response</div><div>+getOffers(): Response&gt;</div></div>

**View Class Diagram without Relationships, and  
with Attributes and Behaviour**

