

## SWA Class Diagram Description-BEM Theatre System

### Overview:

The SWA Diagram essentially illustrates the thought process and architecture for a movie ticketing platform, which shows the steps the user would take to complete a purchase of a ticket on this platform, with the options of creating an account on our platform or checking out as a guest. The diagram highlights the use of User interface components, databases, and external systems utilized to complete the user's purchase. This is all shown through the connected arrows on the diagram, the solid arrows defined as data flows, and the dotted arrows defined as database queries.

#### 1. Movie Selection

- a. Purpose: Allows the user to choose a movie of their choice from the options available according to locations and times
- b. Data Source: Component is connected to the Database *Movies*, which obtains the theater locations and the movies available at those locations with times as well

#### 2. Movie Time and BEM Theater Page

- a. Purpose: allows the user to see the showtimes and theaters where the selected movie is available.
- b. Data Source: Component also pulls from the *Movies* database, which double-checks that the location and times are correct with the ones being presented to the user

#### 3. Seat Selection Page

- a. Purpose: Allows user to select available seats
- b. Data Source: Component utilizes the database *Theaters*, this database holds information such as the available seats and the layout of the theaters, which is presented to the users

#### 4. Login Page/Account Sign-Up

- a. Purpose: Allows users to sign up/ensures that the user entering their login can be verified
- b. Data Source: Component is connected to the *User Information* database, which holds
  - i. User's name, account status, payment info, purchase history, rewards, and username/password
- c. This information is then sent to the Payment Information Page to ensure the ticket is purchased by the correct guest with all the correct information.

#### 5. Payment Information Page

- a. Purpose: The System will process the user's payment for their selected seats
- b. Data Source: utilizes the cost of seats based on the seats selected, then continues to connect the card details with the specific Bank belonging to the card, and finally confirms the user and their information through *User Information*.

#### **6. Bank Information**

- a. Purpose: Allows for the Bank to confirm the payment is completely processed.
- b. Data Source: utilizes the *User Database* and the *Payment Page*. These databases will retrieve payment information and rewards, and they will also allow for the transaction data to be sent over.

#### **7. Ticket Details/Confirmation Page**

- a. Purpose: Component will illustrate the final booking details of the user's selected movie
- b. Data Source: Component is connected to the *Payment Page*, which sends over the ticket information to the *Ticket Delivery* component.

#### **8. Ticket Delivery**

- a. Purpose: Send the user a digital ticket via email, which can be found in *User Information*.