Use-Case Scenarios

Note:

Due to the limitations of the text editor used, **bolded** text has been utilized in place of a double underline for **operations**. A single-line underline is used to indicate objects.

Use-Case: Guest Login

<u>John</u> **selects** to continue as a guest. The <u>terminal</u> **prompts** him to enter his email address. John **enters** his email address into the terminal.

Use-Case: Registered User Login

<u>Jen</u> selects to login on the <u>terminal</u>. The <u>terminal</u> prompts <u>Jen</u> to enter her <u>Registered User</u> credentials. <u>Jen</u> enters her email address and password in the specified fields and the <u>terminal</u> passes the credentials to the <u>database</u> to <u>Jen</u> validate her <u>Registered User</u> account. The <u>terminal</u> displays a message indicating if the login attempt was successful or not.

Use-Case: Select a Theatre

<u>John</u> **selects** the 'Select a Theatre' option on the <u>terminal</u>. The <u>terminal</u> **retrieves** the list of available <u>theatres</u> from the <u>database</u> and **displays** them for <u>John</u>. <u>John</u> **selects** the desired <u>theatre</u> from the options and the <u>terminal</u> then **retrieves** the given <u>theatre</u> information from the <u>database</u> (i.e. available <u>movies</u> at the given time) and **displays** it.

Use-Case: View showings and available seats

After <u>John</u> has **selected** a <u>theatre</u> and a <u>movie</u>, a corresponding list of available <u>showtimes</u> is **pulled** from the <u>database</u> and **presented** on the <u>terminal</u> as a list. <u>John</u> **selects** the <u>showtime</u> he wants in the <u>terminal</u>. The corresponding <u>seats</u> are **pulled** from the <u>database</u> and **shown** on the <u>terminal</u> graphically, with indication to which ones are available. <u>John</u> **selects** the seat(s) he wants and **continues**.

Use-Case: Search for a Movie

<u>John</u> **inputs** the name of the movie he is searching for into the <u>terminal</u>. The <u>terminal</u> **retrieves** the list of <u>movies</u> that match the entered name from the <u>database</u> and **displays** them for <u>John</u>. <u>John</u> **selects** the desired <u>movie</u> from the options **displayed** on the terminal.

Use-Case: Buying a ticket

<u>John</u> wants to **purchase** a <u>movie ticket</u>, on the <u>terminal</u>, <u>John</u> **logs into** his <u>registered user account</u> by **providing** his email and the correct corresponding password.

<u>John</u> **browses** available <u>movies</u> and **searched** for <u>movies</u> until his desired movie has been found.

Then <u>John</u> **selects** their desired movie's showing and seat(s) from the <u>terminal</u>. The <u>terminal</u> will then **send** this section to the <u>database</u> to **verify** the seats are available. After they are **verified** the ticket order will be sent to the transaction system.

The <u>transaction system</u> **determines** the cost of the transaction. The <u>transaction system</u> **sends** this information to the <u>terminal</u>. The <u>terminal</u> then **presents** this payment cost to <u>John</u>. The <u>user</u> **enters** their payment information into the <u>terminal</u>. The <u>terminal</u> **sends** this information to the <u>transaction system</u> which then **verifies** the transaction. After verification the <u>transaction system</u> **sends** this verification to the <u>terminal</u>, which then **displays** the verification to <u>John</u>.

Use-Case: Cancel previously purchased ticket

John selects to 'cancel ticket purchase' on the <u>terminal</u>. The <u>terminal</u> accesses the <u>database</u> to <u>search</u> for previous <u>transactions</u> tied to <u>John's email</u> that are still active(movie <u>showing</u> has not yet happened). The <u>database</u> returns these <u>transaction</u> items to the <u>terminal</u>. If one or more <u>transactions</u> have been returned, the <u>terminal</u> <u>displays</u> the options to <u>John</u>, else it <u>displays</u> an error message, "No tickets available to cancel". <u>John</u> selects the <u>transaction</u> of purchased <u>tickets</u> he wishes to cancel from the displayed options on the <u>terminal</u>. The <u>terminal</u> then <u>checks</u> the <u>database</u> for if <u>John</u> is a <u>Registered User</u>. If <u>John</u> is registered, the <u>terminal</u>

compares the <u>movie showing date/time</u> to <u>showing date/time</u> of the <u>ticket</u> in question. If the difference in time is greater than 72 hours, the <u>terminal</u> alerts the <u>billing system</u> to refund <u>John's</u> account with a <u>movie credit</u> equal to 100% of the initial purchase cost. If however the difference in time is less than 72 hours, the <u>terminal</u> displays a message stating no refund will be given.

If <u>John</u> is not a <u>Registered User</u>, the <u>terminal</u> **compares** the <u>movie showing date/time</u> to <u>showing date/time</u> of the <u>ticket</u> in question. If the difference in time is greater than 72 hours, the <u>terminal</u> **alerts** the <u>billing system</u> to refund <u>John's</u> account with a <u>movie credit</u> equal to only 85% of the <u>initial purchase cost(taking a 15% administration fee)</u>. If, however, the difference in time is less than 72 hours, the ticket the <u>terminal</u> **displays a message** stating no refund will be given.

The <u>terminal</u> performs the appropriate refund action based on the user type and the time of cancellation, and **displays** a message to <u>John</u> signifying successful cancellation of the transaction, as well as **sends** a confirmation of cancellation email to John via email.

Use-Case: Receive Movie Announcement

The <u>Theatre Company</u> **creates** an announcement for a <u>movie</u>. The <u>Theatre Company</u> **sends** the announcement through their <u>email provider</u> to all <u>registered users</u>. <u>John</u>, a <u>registered user</u>, **receives** an email with the announcement. After some time, the <u>Theatre Company</u> **posts** the announcement to the terminal for the public.

Use-Case: Email Ticket/Receipt

The <u>transaction system</u> **assesses** the payment made by <u>John</u> as complete. The <u>transaction system</u> **notifies** the <u>terminal</u>, and the <u>terminal</u> **generates** a copy of the <u>ticket(s)</u> purchased and <u>transaction</u> receipt for the purchase. The <u>terminal</u> then <u>retrieves</u> <u>John's</u> email address. The terminal then <u>sends</u> a copy of the <u>transaction</u> receipt to <u>John's</u> email address. The <u>transaction</u> is <u>stored</u> for transaction history purposes in the <u>database</u>.

Use-Case: Pay Annual Fee

Each <u>registered user account</u> must provide payment for an <u>annual fee</u> to receive membership benefits. Upon registering for an <u>account</u>, the <u>user</u> is **prompted** to make a payment for the <u>annual fee</u>. The <u>terminal</u> **determines** the cost of this <u>transaction</u> then **presents** this cost to the user. Since the <u>user</u>'s payment information is **saved** in the registration process, the <u>terminal</u> will **prompt** the <u>user</u> to agree to the billing and subscription of the <u>annual fee</u>. Upon user approval, the <u>terminal</u> **sends** the transaction information to the <u>transaction</u> system which then **verifies** the <u>transaction</u>. The user is **notified** of the transaction's status.

The <u>annual fee</u> reoccurs once every year automatically, billed to the payment information the <u>user</u> registered with.

If the payment method becomes invalid due to expiration, the <u>registered</u> <u>user account</u> will not be deleted, but the account will not receive the associated benefits until a payment is made or the payment method is updated.

Use-Case: Register a User

A <u>user</u> who does not have a registered account with the <u>theatre</u> wants to become a <u>registered user</u>, on the homepage of the <u>terminal</u>, he selects "**Register for an account**", the terminal then **initiates** the registration process.

The user is **prompted** to **enter** his email, password, name, address, and payment information in sequence, once the information **entered** are deemed valid, a <u>registered user account</u> is **created**, the information of the <u>registered user account</u> is **added** to the <u>registered user database</u>.

The <u>user</u> is then prompted to make a <u>transaction</u> for the <u>annual</u>

membership fee, once **payment is made** by the <u>user</u>, the <u>transaction</u> is complete, and the <u>user</u>'s status changes to paid.

The user is then **shown** a completion message.

Use-Case: Send and Receive Data

After a <u>user performs</u> an operation at the <u>terminal</u>, the <u>terminal</u> **sends** a request to the <u>database</u>. The <u>database</u> **creates**, **updates**, **deletes**, or **queries** data based on the request it **received** from the <u>terminal</u>. The <u>database</u> **sends** back any requested data to the <u>terminal</u>.