

1. Unit Test Set:

Test Set 1: Seat Allocation

- Feature: The ability for the system to allocate seats to users
- Test Case: The user selects a show, and the system assigns a seat to the user based on their preferences, such as location or price.
- Test Criteria: The test will be considered successful if the system assigns the correct seat to the user based on their preferences.

Test Set 2: Email Notification

- Feature: The ability for the system to send email notifications to users
- Test Case: The user purchases a ticket, and the system sends a confirmation email to the user.
- Test Criteria: The test will be considered successful if the system sends the email to the correct user and includes all the necessary details.

2. Functional Test Set:

Test Set 1: Payment Processing

- Feature: The ability for the system to process payments for ticket purchases
- Test Case: The user enters payment information, and the system processes the payment.
- Test Criteria: The test will be considered successful if the payment is processed successfully, and the system updates the ticket status to "purchased."

Test Set 2: Ticket Cancellation

- Feature: The ability for a user to cancel a ticket
- Test Case: The user requests to cancel a purchased ticket, and the system cancels the ticket and updates the seat map accordingly.
- Test Criteria: The test will be considered successful if the system cancels the ticket and updates the seat map without errors.

3. System Test Set:

Test Set 1: Load Testing

- Feature: The ability for the system to handle a large number of users.
- Test Case: A large number of simulated users attempt to purchase tickets at the same time.
- Test Criteria: The test will be considered successful if the system can handle the load without crashing or slowing down significantly.

Test Set 2: Show Cancellation

- Feature: The ability for the system to handle show cancellations
- Test Case: A show is cancelled, and the system updates the seat map, cancels all the tickets for the show, and sends email notifications to the users.
- Test Criteria: The test will be considered successful if the system updates the seat map and cancels all the tickets for the cancelled show, sends email notifications to the users, and handles the cancellation without errors.