

Verification Test Plan

This test plan lays out the verification tests for the theater ticketing software system. The tests are designed to cover three granularities discussed in class: unit, functional, and system. The goal of these tests is to ensure that the software meets the requirements and works as expected.

Test Set 1: Ticket Purchase Functionality

- Case 1: Verify that the website instance allows the client to send a request to view available tickets, and that the Ticket Handler class contains the information that the client requested
- Case 2: Verify that when a ticket is purchased on the client side, the request is sent to the server. The request, which includes the client's ticket selection and purchase information + a purchaseID, should be initiated from the OnlineClient Class, then be passed on to the TickerHandler. This test case does NOT verify if the server updates the records or if the payment method is valid.
- Case 3: Test the ability to cancel or refund the ticket purchase. Checking for the correct amount of refund, and checking for errors.

Target feature: Ticket Purchase Functionality

Test Vectors: Input valid credentials, input invalid credentials

Coverage: This test set covers the target feature of ticket purchase functionality by testing the basic functionality of a ticket through various tasks. These tasks include how the user interacts with the ticket and what they decide to do with it.

Test Set 2: Login Functionality

- Case 1: Verify that when the client logs in, the username and password they enter is accurate.
- Case 2: Verify that the system can handle large traffic loads during peak booking periods. Software functionality should be as intended even with high user interactions.
- Case 3: Verify that a user that does not have an existing account, can create one by first entering/submitting a username and password (that meets specific requirements)

Target feature: Login functionality

Test Vectors: Input valid credentials, input invalid credentials

Coverage: This test set covers the target feature of login functionality by testing the basic functionality of logging in with valid credentials and the error handling when invalid credentials are entered. It also measures the functionality of the system under conditions of high user load.