

## **Verification Test Plan: Swift Wave Movie Ticketing System**

### **1. Test Plan Introduction**

- Validate that the theater ticketing system aligns with its design criteria and meets operational needs by executing a comprehensive series of testing cases. This plan covers key operations like ticket booking, user account management, film listing, payment, databases, and the suggestion system.

### **2. Test Granularities**

#### **2.1 Unit Testing**

- To test individual units or components in isolation. Unit testing ensures that each component functions correctly and meets its design specifications.

#### **2.2 Integration Testing**

- To test the interactions and interfaces between various components/modules. Integration testing ensures that the various components interact seamlessly and that data is accurately exchanged between them.

#### **2.3 System Testing**

- To evaluate the entire system's behavior in a real-world environment. System testing ensures that the system as a whole meets the specified requirements and performs as intended.

### **3. Test Sets and Test Cases**

We will test a large number of cases that focus on validating certain activities or functions, usually in the context of a system's overall functionality (ex: validates the complete user registration functionality, ensuring smooth and secure user registration). In addition, we will be making sure the entire product satisfies the standards and operates as intended in the intended setting (ex: checks that the system correctly identifies and displays movie titles based on the search criteria by running the movie search function through a test). Additionally to guarantee that every part of a class's object within the code carries out its designated function when used alone (ex: displaying movie title correctly).

Test case examples:

- Verifies that, upon clicking on a movie's thumbnail, the navigation process functions as intended. (unit)
- Validates the seat selection process and navigation. (unit)
- Assesses various login scenarios when typing in the wrong password, right username or right password and right username. (unit/functional)
- Focuses on handling data, validating input data, and guaranteeing successful transactions during the payment process. (functional)
- Checks that the system correctly displays movie titles based on the search criteria by running the movie search function through a test. (functional)

- Tests the entire ticket purchasing process, including choosing a movie, a seat, and making a payment. (system)
- Ensures a seamless and safe user registration process by validating the entire user registration functionality. (system)
- Evaluates the functionality and appearance of the system across various browsers whether on phone or PC. (system)