# Quality Assurance Plan

# Project Overview:

Implement a poster program providing thematic access to theater, cinema, and exhibition events.

Authorized event owners can register in the system.

The system can sell tickets, display information about available seats, and transmit information to the event owner.

Development based on the principle of "test management" in the NUnit environment.

# Sprint 1: Requirements and Planning

**Tasks:**

**Requirement Analysis**: Gather and document detailed requirements.

**Test Plan Creation**: Develop a comprehensive test plan.

**Environment Setup**: Set up development and test environments, including NUnit framework.

**Test Case Design**: Outline initial test cases based on requirements.

# Sprint 2: Core Development and Unit Testing

**Tasks:**

**Develop Registration Module**:

**Task**: Implement user registration and authorization.

**Test**: Write and run unit tests in NUnit for the registration module.

**Develop Event Management Module**:

**Task**: Implement event creation and management for authorized users.

**Test**: Write and run unit tests in NUnit for event management.

Develop Ticketing Module:

**Task**: Implement ticket sales and seat availability display.

**Test**: Write and run unit tests in NUnit for the ticketing module.

# Sprint 3: Integration Testing

**Tasks:**

**Integration of Modules**:

**Task**: Integrate Registration, Event Management, and Ticketing modules.

**Test**: Perform integration testing to ensure seamless interaction between modules.

**Database Testing**:

**Task**: Validate database interactions and data integrity.

**Test**: Use NUnit to verify database operations.

# Sprint 4: System Testing

**Tasks**:

**System Testing**:

**Task**: Perform end-to-end testing of the entire system.

**Test**: Develop and execute system test cases covering all user scenarios.

**Load Testing**:

**Task**: Simulate high user load and identify performance bottlenecks.

**Test**: Use NUnit extensions for load testing.

# Sprint 5: User Acceptance Testing (UAT) and Bug Fixing

**Tasks**:

**User Acceptance Testing (UAT)**:

**Task**: Engage a group of end-users to test the system.

**Test**: Collect feedback and identify issues.

**Bug Fixing**:

**Task**: Address issues identified during UAT.

**Test**: Re-run affected test cases to ensure fixes are effective.

# Sprint 6: Final Review and Deployment

**Tasks**:

**Final Review**:

**Task**: Conduct a final review of the system.

**Test**: Ensure all test cases have passed.

Deployment:

**Task**: Deploy the system to the production environment.

**Test**: Monitor deployment and conduct a smoke test to ensure system stability.