

Test Plan Document

Video Rental System

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Chapter 1

Test Plan Outline

1.1 Introduction

- **Purpose:** This document outlines the test plan for the video rental site system to ensure that it meets the requirements and specifications.
- **Scope:** The testing effort will cover the functional and non-functional requirements of the video rental site system.
- **Overview:** The video rental site system is an online platform for renting movies.

1.2 References

- **Software Requirement Specification**
- **Use Case Diagram**
- **Class Diagram**

1.3 Test Strategy

- **Objectives:** The primary objectives of the testing effort are to ensure the system functionality, reliability, usability, performance, and security.
- **Approaches:** The testing approach will include manual testing.
- **Priorities:** The testing priorities will be based on the criticality and impact of the features and functionalities.
- **Techniques:** The testing techniques will include white-box testing.

1.4 Test Techniques

- **Hardware Requirements:** The testing environment will require a desktop or laptop computer with internet connectivity.
- **Software Requirements:** The testing environment will require a modern web browser such as Chrome or Firefox.

- **Network Requirements:** The testing environment will require a stable and secure internet connection.
- **Test Data Requirements:** The testing environment will require sample movie content for testing purposes.

1.5 Test Execution

- **Test Execution Plan:** The testing effort will be executed according to the test plan, and any deviations will be documented.
- **Test Execution Schedule:** The testing effort will be scheduled to minimize disruption to the production environment.
- **Test Execution Progress Tracking:** The testing progress will be tracked manually.

1.6 Suspension Criteria And Resumption Requirements

- **General Input**
 - Customer ID
 - Password
 - General Output
 - Customer email
 - Retrieved customer object from the database.
- **Scenarios**
 - Customer logs in successfully.
 - Customer ID doesn't match with any entry in the database.
 - The Customer ID matches in the dataset but the password does not match with Member ID.
 - User tries to enter Staff ID in Customer Login, see if compatibility issues arise with any of the required packages.

Note: Testing should be clearly shown. If the percentage of failed tests exceeds a specific threshold during testing, testing should be halted at that point.

Chapter 2

Compliance Report for the Front End GUI Interface

2.1 HomePage

- **Working Properly**
 - View Movie Details by clicking View Movie Button after logging in: **PASSED**
 - Clicked Rent Movie after viewing Movie after logging in: **PASSED**

2.2 Login Method

- **Login Webpage working properly**

2.2.1 Customer

- No User account details entered and login is clicked:
PASSED: doesn't get accepted and the same page will get refreshed and displayed
- Wrong Username or Password:
PASSED: It doesn't get accepted and the same page will get refreshed and displayed)
- Wrong user type entered with correct username and password:
PASSED :It doesn't get accepted and the same page will get refreshed and displayed)
- Correct user type, username and password entered:
PASSED: leads to the user page

2.2.2 Staff

- No User account details entered and login is clicked:
PASSED : doesn't get accepted and the same page will get refreshed and displayed
- Wrong Username or Password:
PASSED : It doesn't get accepted and the same page will get refreshed and displayed)
- Wrong user type entered with correct username and password:
PASSED: It doesn't get accepted and the same page will get refreshed and displayed)]

- Correct user type, username and password entered:
PASSED : leads to the Staff page

2.2.3 Admin

- No User account details entered and login is clicked:
PASSED : asks the user to fill the required field
- Wrong Username or Password:
PASSED : **ERROR message**
- Wrong user type entered with correct username and password:
PASSED : **ERROR message**
- Correct user type, username and password entered:
PASSED : leads to the Admin page

2.3 Sign-Up Interface

- Sign-Up Page working correctly

2.3.1 Customer

- Skipped filling a form column (username, password, repeat password, email):
FAILED
- Filled an already taken username:
PASSED : So the same page will get refreshed and displayed and no new account will be created or formed
- Filled an already taken email id:
FAILED
- Filled email in incorrect format:
PASSED : Alert to include an @
- Entry in repeat password does not match password entry:
PASSED : So the same page will get refreshed and displayed and no new account will be created or formed
- Filled in unique username and valid email, and with matching password and repeat password entries:
PASSED

2.4 Add a Movie

- Working of all Entry text Items:
PASSED
- Correct Submission with filling of all mandatory entries:
PASSED
- Submission without filling mandatory entries:
PASSED
- Image URL not provided:
PASSED

- Description not provided:
[PASSED](#)
- Genre not provided:
[PASSED](#)
- Rating not provided:
[PASSED](#)
- Rating is not a number between 0 to 10:
[PASSED](#)
- Price entered is not a number:
[PASSED](#)
- Price of the item entered is negative:
[PASSED](#)

2.5 Edit a Movie

- Working of all Buttons:
[PASSED](#)
- Correct Modifications with filling of all mandatory entries:
[PASSED](#)
- Editing Entries for different fields:
[PASSED](#)

2.6 Search a Movie

- Search movie by Movie ID:
[PASSED](#)
- Search movie by genre:
[PASSED](#)
- Search movie by title:
[PASSED](#)
- Search for incorrect movie id/genre/title:
[PASSED](#)

2.7 Purchase a Movie

- Display of Movie Title:
[PASSED](#)
- Display of Movie Cover Image, Genre and Description:
[PASSED](#)
- Display of Movie Price, Rating and Quantity in appropriate format:
[PASSED](#)
- Purchasing Movie with quantity in stock and sufficient funds in profile:
[PASSED](#)

2.8 Admin Dashboard

- Working of all buttons: **PASSED**
- Add Movie: **PASSED**
- View list of all Customers: **PASSED**
- View list of all Staff: **PASSED**
- View and verify Orders of Selected User: **PASSED**
- View and verify Deadlines of Selected User: **FAILED**
- Delete selected User: **PASSED**
- Perform Audit and Verify PDF generation: **FAILED**

2.9 View Profile

- Edit Profile button: **FAILED**
- Change user name with new unique username: **FAILED**
- Change user name with already taken username: **FAILED**
- Add “About me” to profile and verify display of description on profile: **FAILED**
- Add positive amount of funds to profile: **FAILED**
- Add non-numeric/negative/zero amount of funds to profile: **FAILED**
- Try to login with old username after changing username: **FAILED**

2.10 Staff Dashboard

- View list of all Customers: **PASSED**
- Add Movie: **PASSED**
- View list of all Deadlines/Orders of Selected Customer: **PASSED**

2.11 Customer Dashboard

- Display and verify list of Recommended Movies: **FAILED**
- Working of all buttons: **PASSED**
- View list of all orders: **PASSED**
- Generate and verify receipt for selected order: **PASSED**
- Return and verify status of a given movie order: **FAILED**
- View and verify list of upcoming deadlines: **PASSED**
- Search and Rent Movies: **FAILED**
(Refer Previous Sections)

Chapter 3

Compliance Report for Backend Classes and Database Management

3.1 Testing the User class

3.1.1 Testing the getName() function

1. Retrieve and verify the name of the user: [PASSED](#)

3.1.2 Testing the getCategory() function

1. Retrieve the category of the user from among Customer, Staff and Admin: [PASSED](#)

3.1.3 Testing the setName() function

1. Set the name of the user to a valid string: [PASSED](#)
2. Set the name of the user to an invalid string: [FAILED](#)

3.1.4 Testing the checkPassword() function

1. For the entered username, the entered password matches the password hash in the database after hashing: [PASSED](#)
2. Username is present, but password is incorrect : [PASSED](#)

3.2 Testing the Movie Class

3.2.1 Testing the Constructor

Implicitly tested in other sections

3.2.2 Testing the getID() function

1. Retrieve and verify the ID of a Movie object: [PASSED](#)

3.2.3 Testing the getName() function

1. Retrieve and verify the Name of the Movie object: [PASSED](#)

3.2.4 Testing the getPrice() function

1. Retrieve and verify the price of a Movie object: [PASSED](#)

3.2.5 Testing the getDescription() function

1. Retrieve the description of a Movie object: [PASSED](#)

3.3 Testing the Order Class

3.3.1 Testing the Constructor

Implicitly tested in other sections

3.3.2 Testing the getID() function

1. Retrieve and verify the ID of a Movie object: [PASSED](#)

3.3.3 Testing the getUserId() function

1. Retrieve and verify the UserId of the renting user: [PASSED](#)

3.3.4 Testing the getMovieId() function

1. Retrieve and verify the Id of rented Movie: [PASSED](#)

3.3.5 Testing the getStatus() function

1. Retrieve and verify the return status of the rented movie - Yes or No.: [PASSED](#)

3.3.6 Testing the viewPurchaseDate() function

1. Retrieve and verify the purchase date of the rental movie.: [PASSED](#)

3.3.7 Testing the getDeadline() function

1. Retrieve and verify the deadline date of the rental movie: [FAILED](#)

Chapter 4

Test Summary

4.1 Summary

- **Summary of Testing:** A summary of the testing effort, including the number of test cases executed, passed, and failed. Test
- **Results:** A detailed report of the testing results, including the test cases, pass/fail status, and defects identified and resolved.
- **Test Metrics:** Metrics such as defect density and test coverage will be used to evaluate the effectiveness of the testing effort.
- **Test Conclusion:** A conclusion will be drawn based on the testing results and metrics.

4.2 Test Deliverables

- This Test plan outline document

4.3 Remaining Test Tasks

Recommendation System: This includes testing the suggestion list for a customer which is desired to show movies based on the purchase/rent history of the customer. **A learning model shall be applied to generate suggestions in the movie feed of the Customers.**

4.4 Planning Risks and Contingencies

Areas of higher possibility of breach in the Site Framework and database are:

- Sign-Up Page
- Cart Page
- CheckOut Page

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