

# Software Test Document

This chapter discusses about the Software Test Document which describes the plan for testing the developed software system against the software requirements as defined in the Software Requirement Specification. The purpose of these system tests is to make sure that the software system developed complies with the definition of the software requirements. It describes the basic tests approach undertaken along with the Test Plan which will include the following: features to be tested, testing tools and environment. It also includes the test specifications.

## 1 Introduction

### 1.1 System Overview

Movie business in India is a billion dollar industry, employing thousands of people, as such success or failure of a movie can have profound effect on the stake holders. It is therefore of prime interest of the stake holders to know how the movie will fare. This however, is not an easy work, since movies have been described as experience goods with very less shelf life; it is difficult to forecast demand for a movie. There are number of parameters that may influence success of a movie like time of its release, marketing gimmicks, lead actor, lead actress, director being some of the factors. Our system aims to develop a model that may help in forecasting the success of a movie in terms of - will the movie be hit flop or neutral, rank of the movie, its box office revenue prediction, regions where the movie will do good business, suggestion for the movies release date to increase profit thereby reducing certain level of uncertainty.

## 1.2 Test Approach

Test	Description
Functionality Testing	All the links in web pages, database connection, forms used in the web pages for submitting or getting information from user will be tested.
Usability testing	The system will be checked to see whether the web site is easy to use, clear instructions are provided, main menu is provided on each page. The content on each page is checked.
Interface testing	The system will be tested to see whether all the interactions between the servers(web, application and database) are executed properly.
Compatibility testing	The system will be run on different web browsers to check its compatibility
Performance testing	The system will be tested for its heavy load sustainability. This includes web load testing and stress testing.

## 2 Introduction

### 2.1 Features to be Tested

The software features which are to be tested include:

1. Content in the Excel sheet
2. Data Pre-processing
3. Database loading through SQL server
4. Admin login
5. Uploading of data through GUI by admin
6. Table selection
7. Data in SQL server
8. Script for uploading data in the database
9. Forecasting script
10. Handling of input

### 2.2 Features not to be Tested

1. **Data extraction**

Data extraction will not be tested, since data will be extracted from trusted sites like Wikipedia, Box-Office India and koimoi.com.

## **2.3 Testing Tools and Environment**

1. Microsoft Excel
2. Microsoft SQL Server 2012

## **3 Test Cases**

### **3.1 Data pre-processing testing TC1**

#### **3.1.1 Purpose**

To check whether the processed data conforms to the data format required to upload it to the database.

#### **3.1.2 Inputs**

Raw data extracted from websites like Wikipedia, Box-Office India and Koimoi.com copied in the excel workbook.

#### **3.1.3 Expected Output and Pass/Fail Criteria**

The data in the excel workbook should conform to the format required for uploading it to the database.

Criteria-

Pass - If the data in the excel workbook conforms to the format required for uploading it to the database

Fail - If the data in the excel workbook has errors or it does not conform to the format required for uploading it to the database

#### **3.1.4 Test Procedure**

Data collected is pre-processed by using the command button added in excel workbook (i.e. macro) which is coded using VBA programming. When the user clicks the command button following options will be provided for pre-processing.

1. The user has to enter the month in the specified format.
2. User can delete rows if required
3. Delete column
4. Column can be made blank.
5. Data entry
6. Rank entry
7. Set date format
8. Enter dates.

The user has to select from the options available to pre-process the data.

#### **3.1.5 Actual Output**

Data in the excel workbook is free from errors and is of the format required for uploading it to the database.

### **3.2 Testing admin login TC2**

#### **3.2.1 Purpose**

To test the admin login authentication.

#### **3.2.2 Inputs**

1. Username
2. Password

### **3.2.3 Expected Output and Pass/Fail Criteria**

The admin should enter username and password this entered username and password will be mapped with the username and password pair stored in the database. If there is a proper match then there will be successful login and the admin will be redirected to the upload page else an error message will be shown for the unsuccessful login attempt.

Criteria -

Pass - If the admin enters correct username and password and is redirected to the upload page or if user enters wrong username or password and error message is displayed

Fail - If the admin enters wrong username or password and error message is not shown.

### **3.2.4 Test Procedure**

Functional and Interface Testing will be employed for this test case.

1. Admin will enter the username and password
2. The admin will then click the Login button

### **3.2.5 Actual Output**

Admin logged in successfully and was re-directed to admin interface or if username or password is entered wrong then appropriate error message should be displayed..

## **3.3 Testing uploading of data through GUI by admin TC3**

### **3.3.1 Purpose**

To check whether admin is allowed to upload the data using web application.

### **3.3.2 Inputs**

The excel sheet with pre-processed data which needs to be uploaded.

1. Table name (Dropdown menu will be provided to select the table).
2. Path to reach the required excel sheet stored on the computer.
3. Clicking the upload button.

### **3.3.3 Expected Output and Pass/Fail Criteria**

After following the test procedure for this test case the data in the excel sheet should be stored properly in the SQL server database without any errors and successful upload message should be displayed.

Criteria -

Pass - If the excel sheet is successfully uploaded to the SQL server database.

Fail If there are some errors while uploading the excel sheet to the SQL server database.

### **3.3.4 Test Procedure**

A web application is created using visual studio where admin needs to login successfully after which he/she will be directed to the upload page. The admin must select the table in which he wants to upload the data and then browse for the excel sheet with data which he wants to upload and click the upload button.

### **3.3.5 Actual Output**

Data in the excel sheet was successfully uploaded to the SQL server database and successful upload message was displayed.

## **3.4 Testing table selection TC4**

### **3.4.1 Purpose**

To test whether the admin is allowed to select the proper table where he wants to insert/upload the data and to test whether the data is uploaded successfully to the selected table.

### **3.4.2 Inputs**

Dropdown menu containing names of the table - Movie verdict, Star data, Box-office data, Box-office all time, 100cr club, etc.

### **3.4.3 Expected Output and Pass/Fail Criteria**

Admin is allowed to select the table in which he wants to enter the data and uploading of data to that table takes place successfully without any errors.

Criteria -

Pass - If selection of the required table is allowed and data is uploaded to that particular table.

Fail - If selection is not allowed or there are some errors with uploading the data to that particular table.

#### **3.4.4 Test Procedure**

Dropdown menu containing names of the table -Movie verdict, Star data, Box-office data, Box-office all time, 100cr club, etc. will be provided to the admin. Admin must select the table to which he wants to upload the data, give the path to the excel sheet, click the upload-button, check whether the data is uploaded properly and completely to that selected table.

#### **3.4.5 Actual Output**

Admin could select the required table and data was uploaded successfully to the selected table in the database.

### **3.5 Testing script for uploading data in the database TC5**

#### **3.5.1 Purpose**

To check proper execution of the script created for uploading data in the database.

#### **3.5.2 Inputs**

Script for uploading data in the database

#### **3.5.3 Expected Output and Pass/Fail Criteria**

The script should be executed without any errors and data in the excel sheets should be uploaded to proper table created in the database.

Criteria -

Pass -If the script executes without any error.

Fail If there are errors while executing the script.

#### **3.5.4 Test Procedure**

This script is created to upload the data in the database through front end i.e. through web application. Interface testing will be employed for this test case.

1. The script will be compiled.
2. The script will be executed.

#### **3.5.5 Actual Output**

Script was successfully compiled and executed. The selected data was uploaded in the database.

### **3.6 Testing forecasting script(Movie verdict script) TC6**

#### **3.6.1 Purpose**

To check proper execution of the script created for forecasting results depending on users input and the data in the database.

#### **3.6.2 Inputs**

Script for forecasting calculating the following -

1. Projected contribution of input parameters
2. Forecasted verdict
3. Region where the movie will do good business.
4. Box office revenue prediction
5. Movie rating

Writing query for execution of the forecasting script giving different inputs for each input parameter Genre, Release month, Director, Actor and Actress.

#### **3.6.3 Expected Output and Pass/Fail Criteria**

Script should forecast desired output with very less error or no error.  
Criteria -

Pass Script is compiled and executed successfully and is able to forecast required output.

Fail Script is unable to forecast the required output or gives errors while compiling or executing

#### **3.6.4 Test Procedure**

As mentioned above in this test case various inputs will be taken from the user and the script will be tested. Interface testing will be employed for this test case.

1. The script will be compiled.
2. The script will be executed.

#### **3.6.5 Actual Output**

Script was successfully compiled, executed and required outputs are displayed.



### **3.7 Testing forecasting script(Release month suggestion script) TC7**

#### **3.7.1 Purpose**

To check proper execution of the script created for forecasting results depending on users input and the data in the database.

#### **3.7.2 Inputs**

Script for forecasting calculating suggestion for release month. Writing query for execution of the forecasting script giving different inputs for each input parameter Genre, Release month, Director, Actor and Actress.

#### **3.7.3 Expected Output and Pass/Fail Criteria**

Script should forecast the release month.

Criteria -

Pass Script is compiled and executed successfully and is able to forecast release month.

Fail -Script is unable to forecast the release month or gives errors while compiling or executing.

#### **3.7.4 Test Procedure**

As mentioned above in this test case various inputs will be taken from the user and the script will be tested. Interface testing will be employed for this test case.

1. The script will be compiled
2. The script will be executed.

#### **3.7.5 Actual Output**

Script was successfully compiled, executed and required output is displayed.

### **3.8 Testing movie verdict page TC8**

#### **3.8.1 Purpose**

To check outputs are shown in proper format to the users.

### **3.8.2 Inputs**

User should enter the following:

1. Movie name
2. Genre
3. Release month
4. Director
5. Actor
6. Actress

And Click movie prediction button

Error message will be shown if any input field is empty.

### **3.8.3 Expected Output and Pass/Fail Criteria**

All input parameters are entered and redirected to Movie forecast page where following forecasted outputs should be shown:

1. Projected contribution of input parameters
2. Forecasted verdict
3. Region where the movie will do good business.
4. Box office revenue prediction
5. Movie rating

Criteria -

Pass - If on clicking the movie prediction button redirection to movie forecast page should take place and all the above mentioned outputs should be displayed.

Fail - If on clicking the movie prediction button redirection to movie forecast page does not take place or all the above mentioned outputs are not displayed.

### **3.8.4 Test Procedure**

User should enter all the mandatory input fields and click the movie prediction button. After this he will be redirected to movie forecast page and the above mentioned forecasted results will be displayed here.

### **3.8.5 Actual Output**

User enters all the input fields and is redirected to the movie forecast page where all the forecasted outputs are displayed.

### **3.9 Testing of reset form button TC9**

#### **3.9.1 Purpose**

To check if the form resets on clicking the reset button.

#### **3.9.2 Inputs**

User should enter the following:

1. Movie name
2. Genre
3. Release month
4. Director
5. Actor
6. Actress

And Click reset button

#### **3.9.3 Expected Output and Pass/Fail Criteria**

All input parameters are entered should be reset i.e. the form should be empty

Criteria -

Pass - If on clicking the reset button the form resets.

Fail - If on clicking the reset button the form does not reset.

#### **3.9.4 Test Procedure**

User should enter all the mandatory input fields and click the reset button. After this the input form should reset for the user.

#### **3.9.5 Actual Output**

On clicking the reset button input form resets successfully.

### **3.10 Testing of Movie details page TC10**

#### **3.10.1 Purpose**

To check if the form resets on clicking the reset button.

#### **3.10.2 Inputs**

User should enter the movie name and click search button

### **3.10.3 Expected Output and Pass/Fail Criteria**

If Movie details are shown if the movie is present in the database or error is displayed if movie is not present.

Criteria -

Pass -If Movie details are shown if the movie is present in the database or error is displayed if movie is not present

Fail If Movie details are not shown even when movie is present in the database or error is not displayed if movie is not present.

### **3.10.4 Test Procedure**

User should enter any movies name and click the search button. Movie details are shown if the movie is present in the database else error is displayed

### **3.10.5 Actual Output**

Movie details are shown if the movie is present in the database else error is displayed.