Software Testing Document

CSE-258 Project Group 8

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# Introduction

# This document is a high-level overview defining our testing strategy for the Library website application. Its objective is to ensure quality of the code and the reliability on the application that will enable us to implement the new upgraded version of the website. It portrays a snapshot of the project as of the end of the planning phase. This document will address the different standards that will apply to the unit, integration and system testing of the specified application. We will utilize testing criteria under the white box, black box, and system-testing paradigm.

# Test Objective

# The objective our test plan is to find and report as many bugs as possible to improve the integrity of our program. Although exhaustive testing is not possible, we will exercise a range of tests that will cover all the possible situations to achieve our goal. There will be three key functions used to manage our application: change data, navigate, traceability.

1. **TEST TOOLS**

Apart from the manual testing SELENIUM IDE is also used for systematic chain method of checking. This includes automated testing which enables us to determine the possibilities of error with a higher probability of finding a bug.

1. **ITEM PASS/FAIL CRITERIA**

The item passes testing successfully if and only if the navigation through the complete webpage is done and after the verifications that all the features like the slide show and such applications are reliable and are working at considerable speed in accordance to the speed of internet connection used.

1. **TEST APPROACH**

The testing is mainly done towards the testing of the functionality of the website rather than testing the stability of the software. The stability of the software is held pending and a task which is to be covered at later stages of development as that would require access to more physical hardware requirements which are not at our disposal for this version of testing

1. **TEST ENVIRONMENT**

The testing is done on a small scale environment on local servers(i.e. Laptops) of the various team members. This way we have ensured compatibility of the software developed on different machine. This ensures validity and verification of the developed software.

1. **TEST DELIVERABLES**

The testing document along with the various test cases are the deliverables of this testing phase. In this phase we have also tested other features like update in files to be directly displayed onto the website. All of these features are manually tested and a report of the same is included in this document.

Test Case 1:

Status:

Passed the navigation test successfully without any errors or interruptions

| Index | | |
| --- | --- | --- |
| Open | /sree/cse258-iiti-group-8-master/index.php |  |
| Click | link=Home |  |
| clickAndWait | link=Search |  |
| clickAndWait | link=Home |  |
| clickAndWait | link=Search |  |
| clickAndWait | link=eResources |  |
| clickAndWait | link=Librarians |  |
| clickAndWait | link=eResources |  |
| clickAndWait | link=Search |  |
| clickAndWait | link=Home |  |
| Click | css=#next > img |  |
| Click | css=#prev > img |  |
| Click | css=#prev > img |  |
| Click | id=pausei |  |
| Click | css=#next > img |  |
| Click | id=pausei |  |
| Click | id=pausei |  |

Test Case 2:

Status:

Passed the navigation test successfully without any errors or interruptions

| test2 | | |
| --- | --- | --- |
| clickAndWait | link=Home |  |
| clickAndWait | link=eResources |  |
| clickAndWait | link=eResources |  |
| clickAndWait | link=Librarians |  |
| clickAndWait | link=Search |  |
| clickAndWait | link=Home |  |
| Click | css=#prev > img |  |
| Click | id=pausei |  |
| Click | css=#next > img |  |
| Click | css=#next > img |  |
| Click | id=pausei |  |
| Click | css=img |  |
| Click | css=img |  |
| clickAndWait | link=Librarians |  |
| clickAndWait | css=img |  |
| Open | /sree/cse258-iiti-group-8-master/index.php |  |
| Click | link=Home |  |
| clickAndWait | link=Search |  |
| clickAndWait | link=Home |  |
| clickAndWait | link=Search |  |
| clickAndWait | link=eResources |  |
| clickAndWait | link=Librarians |  |
| clickAndWait | link=eResources |  |
| clickAndWait | link=Search |  |
| clickAndWait | link=Home |  |
| Click | css=#next > img |  |
| Click | css=#prev > img |  |
| Click | css=#prev > img |  |
| Click | id=pausei |  |
| Click | css=#next > img |  |
| Click | id=pausei |  |
| Click | id=pausei |  |

Manual test:

Content testing: Passed

The content testing included the process of changing the various content of the given said files from which the respective content are read. In this way we ensure the functionality of content management for the developed software(webpage)

Dynamicity test: Passed

The given webpage is tested for various sizes of screen of different quality greyscale systems that have ensure dynamic viewing of the given website. This has increased the visibility and presentability of the user interface. This ensure dynamic viewing and relative positioning of features and not just rigid structure. This increase the adaptability of the software

1. **REMAINING TEST TASKS**

The product is currently tested and hosted up by the local server. This gives us the testing of the basic code but not of the efficiency with the data handling and the reliability when the same is hosted up on the internet. We are unable to do hosting on the web as we need a host sever and a host name both of which has to be bought. This part of data trafficking testing would be done tentatively just before upgrading the website on the IIT-Indore web server were the current library website is hosted.

1. **GLOSSARY**

Test Case: A particular instance or different methods that are followed so as test the software created for proper functioning.

USER: Any particular viewer of the website.

FILE: A text file that is specifically linked to each webpage that contains the details and content to be displayed.

1. **REFERENCE**

Pressman, Roger S. Software Engineering - A Practitioner's Approach. Fifth edition. The McGraw-Hill companies, Inc.