*Leave management system*

Test report

Version *1.0*

*04/04/2016*

VERSION HISTORY

[Provide information on how the development and distribution of the Test Report was controlled and tracked. Use the table below to provide the version number, the author implementing the version, the date of the version, the name of the person approving the version, the date that particular version was approved, and a brief description of the reason for creating the revised version.]

|  |  |  |
| --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Revision**  **Date** |
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# 1.0 Introduction

## 1.1 Purpose

This <Project Name>*eave Management System* Test Report provides a summary of the results of test performed as outlined within this document.

# 2.0 Test PLAN

SRS (Software Requirement Specifications) document is thoroughly analyzed and functionality of all the modules of software were tested individually, later integration and relationship between the modules were tested.

The various units and paths were also tested. The several other aspects like User Acceptance were also tested. Test data was chosen in various domains in order to find corresponding results for various test cases.

# 3.0 Test Assessment

# Following our test plan during module testing, we found a few mistakes in the functionality of the software and the user interface was working fine. Checked if the web pages are being directed properly during interface testing and a couple of errors were found. System testing is done based on the use cases mentioned in the SRS. User Acceptance testing is done based on the terms and functionalities given in SRS. Performance testing wasn’t possible because the software was run on ‘localhost’, but the structure of the database was efficient.

# 4.0 Test Results

Most of the errors are related to the functionality and inappropriately designed User Interface. Some errors were related to invalid inputs and unexpected outcomes of the software. The database was a little inconsistent in the sense that, duplicate users, leave types and leaves were allowed and left unhandled. Basic user requirement like option for “Forgot Password” wasn’t provided.

The color scheming is really bad. The redirecting to specific pages isn’t proper and failed in many cases. Many of the use cases in the Software Requirement Specification (SRS) weren’t implemented in the software. The duplicate leaves and leave type create many bugs and unexpected outcomes.

## Unit/Module/System Testing

Unit, module, and system integration testing activities were performed during the development of the system build or release.

## 4.2 System Testing

The table below summarizes the results of system testing:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Date Tested | Tester | Pass/Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Production Release? *[This column will be filled by the dev team.]* | Comments |
| S1 | 04/04/2016 | Sravan | Pass | High | Two leaves can exist with the same name. | <Yes> or <No> | It leads to a confusion for the students and other users. |
| S2 | 04/04/2016 | Raj Kumar | Fail | High | When there are two leaves with same name and an unchecked leave is checked, then it reflects on the already checked one | <Yes> or <No> | This creates a problem as different holidays may be given different number of leaves every year. |
| S3 | 04/04/2016 | Tejas | Fail | High | A leave created cannot be deleted. | <Yes> or <No> | It creates a problem as a leave may differ from time-to-time and may be needed to be deleted. |
| S4 | 04/04/2016 | Sravan | Fail |  |  | <Yes> or <No> |  |
| S5 | 04/04/2016 | Raj Kumar | Fail | Medium | For a user, profile is not working. | <Yes> or <No> | Profile and New leave have the same functioning for a user. |
| S6 | 04/04/2016 | Tejas | Fail | Medium | A user cannot update his leave request. | <Yes> or <No> | The attempt to update goes into a new leave request. |
| S7 | 04/04/2016 | Karthik | Fail | Medium | A user is unable to cancel his leave request. | <Yes> or <No> | Cancelling a leave request is crucial but the option is not provided. |
| S8 | 04/04/2016 | Tejas | Fail | High | A user type created cannot be deleted or modified. | <Yes> or <No> | A user type once created should have been able to be modified. |
| S9 | 04/04/2016 | Karthik | Fail | Low | An attachment can neither be added, removed nor viewed as mentioned in the SRS. | <Yes> or <No> | The SRS has use cases that an attachment can be added, removed or viewed. But the implementation is not present. |
| S10 | 04/04/2016 | Raj Kumar | Fail | Low | Send Email, Send notification and View Remaining Leaves are not implemented. | <Yes> or <No> | The SRS has Send Email, Send Notification and View Remaining Leaves but there are not implemented. |
| S11 |  |  |  |  |  | <Yes> or <No> |  |
| S12 |  |  |  |  |  | <Yes> or <No> |  |
| S13 |  |  |  |  |  | <Yes> or <No> |  |
| S14 |  |  |  |  |  | <Yes> or <No> |  |
| S15 |  |  |  |  |  | <Yes> or <No> |  |

## User Acceptance Testing

The table below summarizes the test cases employed for user acceptance testing and the test results obtained for each test case:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Date Tested | Tester | Pass/Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Production Release? *[This column will be filled by the dev team.]* | Comments |
| U1 | 04/04/2016 | Sravan | Pass | Medium | Numbers are not right aligned. | <Yes> or <No> | This creates a problem to quickly check the count. |
| U2 | 04/04/2016 | Raj Kumar | Fail | Low | The shading of rows is only up to a certain rows (8) up scrolling in every page. | <Yes> or <No> | It does not give a good appeal |
| U3 | 04/04/2016 | Tejas | Fail | Medium | The tab opened is not highlighted | <Yes> or <No> | Remembering the tab opened is tough and often creates confusion. |
| U4 | 04/04/2016 | Raj Kumar | Pass | Low | When hovered for a leave type, beside reason, there is some shading extra on the right. | <Yes> or <No> | This gives a bad appeal as the uniformity of shading is lost. |
| u5 | 04/04/2016 | Karthik | Pass | Medium | For a user login page, the heading is ambiguous. | <Yes> or <No> | The heading shows only “Login” and doesn’t tell us which type of login it is. |
| U6 | 04/04/2016 | Sravan | Pass | Medium | The title of the page is in black in blue background which makes it difficult to recognize. | <Yes> or <No> | The colour contrast is insufficient and title is vaguely visible. |
| U7 | 04/04/2016 | Karthik | Pass | Low | The title of the page has a text and a link format together without any space. | <Yes> or <No> | In “Welcomeadmin”, “Welcome” is text type in black and “admin” is link type in white. |
| U8 | 04/04/2016 | Tejas | Pass | Low | The Date format in leave application flashes just for a moment | <Yes> or <No> | The Date format isn’t being displayed but just flashes once and then disappears. |
| U9 | 04/04/2016 | Sravan | Pass | Low | The user title link redirects to New Leave but redirecting to Leave History is more appropriate. | <Yes> or <No> | If the user title link redirecting to the Leave History is much appropriate. |
| U10 | 04/04/2016 | Tejas | Fail | Low | The inclusion of days of leave is unclear. | <Yes> or <No> | The inclusion of days of leave doesn’t not specify how it actually affects the leave. |
| U11 | 04/04/2016 | Sravan | Fail | High | Even if a particular day is not included in the days of leave, a leave can be applied with that day included. | <Yes> or <No> | If a day is not included in the days of leave, then a leave shouldn’t be considered for approval if that day is included in leave application. |
| U12 | 04/04/2016 | Karthik | Fail | Low | In selecting dates, “Ok” should’ve been used instead of “Close” | <Yes> or <No> | “Close” indicates closure of the process indicating denial of request, but here it is used for consideration of request. |
| U13 | 04/04/2016 | Raj Kumar | Fail | Medium | Hyperlink to “LMS” doesn’t redirect to anything. | <Yes> or <No> | The Heading “LMS” doesn’t redirect to any home page. |
| U14 | 04/04/2016 | Tejas | Fail | Low | In creation of a user, the email format is not properly verified. | <Yes> or <No> | The email “1@2” is also taken as accepted. |
| U15 | 04/04/2016 | Sravan | Pass | Low | In the reason for the leave, only a single digit it also accepted as a reason. | <Yes> or <No> | The reason for leave should have at least one phrase but it accepts a single number also. |
| U17 | 04/04/2016 | Karthik | Pass | Low | Two users can login from the same browser | <Yes> or <No> | When two different users try to logn from the same browser, one of the login request should be denied. |
| U18 | 04/04/2016 | Tejas | Fail | Low | The readme is not applicable for any other operating system other than Windows | <Yes> or <No> | The readme fails to work in operating systems like IOS and Ubuntu. |
| U19 |  |  |  |  |  | <Yes> or <No> |  |

## Regression Testing

The table below summarizes the test cases employed for regression testing and the test results obtained for each test case:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Date Tested | Tester | Pass/Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Production Release? *[This column will be filled by the dev team.]* | Comments |
|  |  |  |  |  |  | <Yes> or <No> |  |
|  |  |  |  |  |  | <Yes> or <No> |  |
|  |  |  |  |  |  | <Yes> or <No> |  |

## Performance Testing

The table below summarizes the test cases employed for performance testing and the test results obtained for each test case:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Date Tested | Tester | Pass/Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Production Release? *[This column will be filled by the dev team.]* | Comments |
| P1 |  | Tejas | Fail | Low | The number of leaves for student cannot be scaled | <Yes> or <No> | Scalability cannot be done n case of number of leaves for student. |
| P2 |  | Karthik | Pass |  | Maintenance can be done to the better | <Yes> or <No> | Maintenance can be done to improve the sofware. |
| P3 |  | Sravan | Pass | Low | The software is not reliable when overlapping dates are used. | <Yes> or <No> | Apar from overlapping dates and duplicates, the software is reliable to an extent. |
| P4 |  | Raj Kumar | Pass |  | On the local server, the software is responding well. |  | The responsiveness is good on the local host. |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

## Unit testing

The table below summarizes the test cases employed for unit testing and the test results obtained for each test case:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Date Tested | Tester | Pass/Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Production Release? *[This column will be filled by the dev team.]* | Comments |
| UT1 | 04/04/2016 | Raj Kumar | Pass | Low | Takes only numbers in name of leaves, users and abbreviation. | <Yes> or <No> | Leave name and Abbreviation should have at least one name/word in it. |
| UT2 | 04/04/2016 | Karthik | Fail | Medium | For user type creation in email id, only ‘@’ char is checked but ‘.’ is not checked (sravan*@*gmail*.*com) | <Yes> or <No> | In an email, it is essential to check both ‘@’ as well as ‘.’ as such a format is required. |
| UT3 | 04/04/2016 | Tejas | Fail | High | If a user requests different leaves with overlapping dates, such leaves can also be accepted. | <Yes> or <No> | If a user applies more than 1 leave with overlapping dates, only one of them should be accepted. |
| UT4 | 04/04/2016 | Sravan | Fail | Medium | Single day leaves are not granted. | <Yes> or <No> | The admin is unable to accept leave for 1 day. |
| UT5 | 04/04/2016 | Raj Kumar | Fail | Low | The term “Statistics” in the heading is irrelevant. | <Yes> or <No> | The term “Statistics” has no use or need in the page. |
| UT6 | 04/04/2016 | Tejas | Fail | Medium | The password for user login is not case-sensitive | <Yes> or <No> | The password for any should be case sensitive but here it is not. |
| UT7 | 04/04/2016 | Karthik | Fail | Medium | If user name is not checking for case-sensitiveness. | <Yes> or <No> | He user name can also be entered in incorrect case but features are hampered a little. |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

*[If the test case failed, list the corresponding Test Incident ID in the Comments column.]*

# 5.0 Variances

After testing the web pages individually, while testing the relationship between the modules some unexpected primary errors are found. And the test environment was hosted on ‘localhost’, performance when run on a publicly hosted server might slow the software and hamper its performance.

# 6.0 Test Instances

***Unexpected results:***

1. If a user requests different leaves with overlapping dates, such leaves can also be accepted.
2. Profile and New leave have the same functioning for a user.
3. Two leaves can exist with the same name and attributes.
4. Cancelling, modifying or deleting leave request, leave types or users is not possible.
5. The SRS wasn’t complete and did not have all the various sequences and use cases and so the implementation of the above was not clearly understood.
6. The colour scheming was really bad and difficult to see.
7. The readme did not specify the installation of the software in operating systems other than Windows. It is not user friendly.

## Resolved Test Incidents

*[Identify all resolved test incidents and summarize their resolutions. Reference may be made to Test Incident Reports that describe in detail the unexpected results, problems, or defects reported during testing, along with their documented resolutions, which may be included as an appendix to this document.]*

*[This will be filled by the dev team.]*

## Unresolved Test Incidents

[Identify all unresolved test incidents and provide a plan of action for their resolution. Reference may be made to Test Incident Reports that describe in detail the unexpected results, problems, or defects reported during testing, which may be included as an appendix to this document.]

*[This will be filled by the dev team.]*

# 7.0 Recommendations

1) User Interface of the software was to be worked on.

2) Functionalities of the software must be thoroughly checked again keeping in mind all the errors mentioned before.

3) Some runtime errors are extremely unaccepted and such scenarios must be handled efficiently.

4) Certain basic services in the software weren’t provided like option for “Forgot Password”.

5) The creation of duplicates is to be handled (S1 and S2).

6) The time interval for leaves is to be reconsidered (UT3).

7) Update of leave request and user type should be created (S6 and S7).

APPENDIX A: REFERENCES

[Insert the name, version number, description, and physical location of any documents referenced in this document. Add rows to the table as necessary.]

The following table summarizes the documents referenced in this document.

|  |  |  |
| --- | --- | --- |
| **Document Name** | **Version** | **Description** |
| *SRS* | *1.0* | Bugs were found in the software and few other functionalities had error in them. |

APPENDIX B: KEY TERMS

*[Insert terms and definitions used in this document. Add rows to the table as necessary.]*

The following table provides definitions for terms relevant to this document.

|  |  |
| --- | --- |
| **Term** | **Definition** |
| *Software* | *The program under test* |
| *SRS* | *Software Requirement Specification Document* |
| *Local host* | *Test environment on which the software is hosted* |