*Fee Management System*

Test report

Version *1.0*

*04/04/2016*

VERSION HISTORY

|  |  |  |
| --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Revision**  **Date** |
| 1.0 | *Team 4* | *04/04/2016* |

## 

## 

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# 1.0 Introduction

## 1.1 Purpose

This ‘Fee Management System Test Report’ provides a summary of the results of test performed as outlined within this document.

# 2.0 Test PLAN

The following sequence(in order) was followed while conducting the testing for the project

* Basic testing
* System Testing
* User Acceptance Testing
* Performance Testing

Basic Testing: The testing started with a basic walkthrough over the project searching for the loose ends and broken links.

System testing: In this category, we devised a set of test cases and served them to the software. Some passed and some failed and the results were carefully and duly noted down for further analysis.

User Acceptance Testing: The system was viewed from the perspective of the user and its capability to be served to the end users was tested.

Performance Testing: The system was judged under various parameters such as security, consistency and reliability

# 3.0 Test Assessment

Barring some minor issues, every major fault in the system has been identified by the test cases devised by the testing team.

The software developed by the team seems to be little bit fragile as it seems to produce erroneous input on putting some tedious test cases. For instance,if an admin adds a student without caring for type of input credentials, the system accepts it as if it were right.

The backend of the system has taken care of minor details.But column names have not selected according to the context.e.g.they have used ‘sem\_id’ name for ‘semester fee transaction id’ and thus not clear and creates confusion.

# 4.0 Test Results

While testing according to the test plan the system was feeded with many test cases whose results are stated in respective following tables.Some test cases got passed but some of the test cases failed also.Some of the major failed test cases are as follows:

1. The complaint section is not working properly,as when a student lodges his complaint multiple times the complaint is getting registered but when admin tries to view the recent complaints it shows the data of first complaint lodged by the respective student.
2. DD Approval: According to SRS the system should have some provision for DD approval by admin but it’s lacking.
3. Fee Payment: Deadline for fee payment is not considered while it was mentioned in the SRS Document.For eg. it should accept fees if paid on time,if not then it should charge some fine.Apart from that on payment page it should mention the amount before paying to assure the user that he is paying the correct amount.

## 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? | Comments |
| ST001 | 1.04.2016 | Ganesh | Fail | Medium | Home Page ‘Contact’ | <Yes> or <No> | Expected-contact info.  Observed-No contact info. is shown |
| ST002 | 30.03.2016 | Varun | Fail | Medium | No DD approval |  | Not according to SRS |
| ST003 | 27.03.2016 | Varun | Fail | High | NO Phd, Mtech or Day Scholar/Hosteller specified anywhere |  | Not according to SRS |
| ST004 | 1.04.2016 | Varun/Ganesh | Fail | High | Admin - NO payment related issues late registration change etc. |  | Not according to SRS |
| ST005 | 1.04.2016 | Ganesh | Pass | NIL | Login-input Non existing user credentials |  | Showed popup required message |
| ST006 | 1.04.2016 | Varun | Fail | High | Search Query for particular student is not implemented |  | Not according to SRS |
| ST007 | 4.04.2016 | Varun | Pass | NIL | Student Entry |  | Empty slot detected |
| ST008 | 30.03.2016 | Varun | Fail | High | Required field not specified. |  | Invalid entry and empty drop down list not detected |
| ST009 | 29.03.2016 | Varun | Fail | Low | Spelling mistake in fee payment |  | Fees - Fee,  mode - Mode,  Cataory - Catagory |
| ST010 | 29.03.2016 | Ayush | Fail | High | Admin logs out and then another user logs in then session doesn’t end for admin |  | Other user can access previous user’s data |

## 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 | Title | Tester | Pass/Fail | Severity of Defect [Low/ Medium/ High] | Summary of Defect | Closed prior to Production Release? | Comments |
| UAT001 | 02.04.2016 | Functional Correctness and completeness (Complaint) | Akshay | Fail | High | If one student lodges more than one complaint then the view button shows up the first complaint details | <Yes> or <No> | Should be resolved to get the data of recent complaints of same student. |
| UAT002 | 02.04.2016 | Functional Correctness and completeness (Room no,CPI) | Ayush | Fail | Low | No Room no,CPI attributes for student on the portal |  | NIL |
| UAT003 | 02.04.2016 | Data Integrity | Akshay | Fail | Medium | In the update fee structure section if we enter very large value then it’s retaining the previous value,hence data is lost while storing. |  | Fees can’t be a large number. |
| UAT004 | 02.04.2016 | Data Integrity | Akshay/Ganesh | Fail | High | If a user lodges complaint more than once then the complaint data is lost(doesn’t show) |  | Needs to be resolved in order to solve fee related issues. |
| UAT005 | 02.04.2016 | Data Conversion | Akshay | Pass | NIL | NIL |  | No data conversions are involved. |
| UAT006 | 03.04.2016 | Competitive Edge | Akshay | Fail | Low | Complaint section is not functioning properly. |  | Except complaint rest all are working fine so can survive in competition. |
| UAT007 | 03.04.2016 | Usability | Ayush | Fail | Medium | While adding new student if we email id is invalid it pops up but also erases the other valid data entered. |  | User experience is average |
| UAT008 | 03.04.2016 | Availability | Akshay | Pass | NIL | NIL |  | It works well on localhost but on server it can’t log-in more than 3 users at one point. |
| UAT009 | 04.04.2016 | Confidentiality | Akshay | Pass | NIL | NIL |  | Student is not able to see other student’s data,hence making it confidential |
| UAT010 | 04.04.2016 | Installability | Akshay | Pass | NIL | NIL |  | Software is easily installable. |
| UAT011 | 04.04.2016 | Upgradability | Ganesh | Pass | NIL | NIL |  | Software can be easily upgraded |
| UAT012 | 04.04.2016 | Documentation | Akshay | Pass | NIL | NIL |  | Documentation is fine. |
| UAT013 | 29.03.2016 | Contradiction | Varun | Fail | Low | Confliction between UG and PG display in 1st year |  | There should be no PG in 1st year list |
| UAT014 | 03.04.2016 | Fee Payment | Ayush | Fail | Medium | Late registration fine is not charged. |  | Late registration- fine not imposed on the student |
| UAT015 | 4.04.2016 | Detection of user errors | Ayush | Fail | High | Fee Structure Updation |  | Negative entries not detected |

## 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? | Comments |
| PT001 | 02.04.2016 | Akshay | Pass | NIL | Performance |  | It’s performing the required task |
| PT002 | 02.04.2016 | Akshay | Pass | NIL | Start-up time |  | Start-up time is average |
| PT003 | 02.04.2016 | Ayush | Pass | No Defect | Results |  | It’s computing the expected results. |
| PT004 | 02.04.2016 | Ayush | Fail | Medium | The system is not capable to handle more than 3 users at a time so it can’t be scalable at the present moment. |  | NIL |
| PT005 | 02.04.2016 | Ayush | Pass | NIL | Maintainability |  | Except sql filename “suthar” rest all other names are fine,hence can be maintained. |
| PT006 | 02.04.2016 | Akshay | Pass | NIL | Robustness |  | No loopholes were found. |
| PT007 | 02.04.2016 | Ganesh | Fail | Medium | Backup & Recovery |  | Software is not backing up the previous datasets hence can’t be recovered. |
| PT008 | 02.04.2016 | Ganesh | Pass | NIL | Reliability |  | The software is pretty consistent. |

# 5.0 Variances

Team members manually created test cases as compared to the scripts and software being used in the industries but were sufficient enough to test all the boundary cases as well as major drawbacks in the system. Even though the testing was planned, divided and executed in phases by all the team members involved,we first focused on ‘validation’ and then on ‘verification’.

# 6.0 Test Instances

1. The system is showing the erroneous output when admin is trying to see the recent complaints of respective user.
2. Payment page should mention the amount before paying to assure the user that he is paying the correct amount.
3. Contact’ button on the main page is not functioning indicating that it is dead .

## 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. Design by contract should be followed for both student and admin actors.

-ST002,ST003,ST004,ST006

1. Backend functionality needs to be rechecked as we got some imperfections as mentioned above.

-UAT001,UAT004

1. Proper verification of input credentials should be implemented.

-ST001,ST008,UAT003,UAT015.

**APPENDIX A: REFERENCES**

The following table summarizes the documents referenced in this document.

|  |  |  |
| --- | --- | --- |
| **Document Name** | **Version** | **Description** |
| *SRS Document* | *Version 1.1* | It is a description of a software system to be developed. It lays out functional and nonfunctional requirements, and may include a set of use cases that describe user interactions that the software must provide. |

**APPENDIX B: KEY TERMS**

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

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Admin | Administration of the Organization |
| Server | Computer system used as the central repository of data that are shared by users in a network |
| User | Two category of users - student and admin |
| DD | Demand draft |