STUDENT REGISTRATION MANAGEMENT

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
1.0	11	03/04/2016

Note to the Author

*[This document is a template of a **Test Report** document for a project. The template includes instructions to the author, example text, and fields that should be replaced with the values specific to the project.*

- *Blue italicized text enclosed in square brackets ([text]) provides instructions to the document author, or describes the intent, assumptions and context for content included in this document.*
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When using this template for your project document, it is recommended that you follow these steps:
1. *Replace all text enclosed in angle brackets (e.g., <Project Name>) with the correct field values. These angle brackets appear in both the body of the document and in headers and footers.*
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3. *To add any new sections to the document, ensure that the appropriate header and body text styles are maintained. Styles used for the Section Headings are Heading 1, Heading 2 and Heading 3. Style used for boilerplate text is Body Text.*
4. *To update the Table of Contents, right-click and select "Update field" and choose the option- "Update entire table"*
5. *Before submission of the first draft of this document, delete this "Notes to the Author" page and all instructions to the author, which appear throughout the document as blue italicized text enclosed in square brackets.]*

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1.0 INTRODUCTION

1.1 PURPOSE

This Student Registration System Test Report provides a summary of the results of test performed as outlined within this document.

2.0 TEST PLAN

We performed the tests in two phases.
In first phase we checked the software if the functionalities and use cases mentioned in SRS matched to what was provided.
In second phase we did system testing and discovered overall software bugs.

3.0 TEST ASSESSMENT

We performed various tests and several bugs were found.
We first tested the software with normal input and checked the outputs. The software worked fine.
We then tested the software with error prone inputs and we found that software was not programmed to handle such cases.
We then performed tests for checking security of software.

4.0 TEST RESULTS

After performing the testing we found that the software is complete in the sense that it provides the basic functionalities for a "Student Registration". But we felt that the UI was not very intuitive, there were several minor bugs.
Regarding the security of the software, it is vulnerable to semantic URL attacks. Though it was SQL injection proof and we were not able to perform any XSS attacks.

4.1 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.]*	Comment
1	03/04/2016		Fail	Medium	Access unauthorized pages causes HTTP error. And not HTTP 403 -- forbidden		If a student attempts to access other user's functionalities like accessing faculty's home page.
2	03/04/2016		Fail	High	Logout --> press backspace.. last page is displayed with some of the functionalities working.		
3	03/04/2016		Fail	Very High	Semantic URL attack. Information passed in get requests can be modified to access other people's data.		Parameters sent with url can be changed to get unauthorized access.
4	03/04/2016		Fail	Medium	Empty deletes are possible. (leave the form blank and press delete)		Leave the form blank and press delete button.
5	03/04/2016		Fail	Medium	Empty update causes HTTP 500 error. (leave the form blank and press update)		Leave the form blank and press update button.
6	03/04/2016			Medium	A new student can be added even when his branch is not specified.		Leave the branch blank and press add button.

7	03/04/2016				High	A new student can be added even when he was already present in database.		Though it does not add or update database.
8	03/04/2016			Fail	Medium	When adding a new student/faculty, empty semester field causes HTTP 500		
9	03/04/2016				Medium	Staff can update non existing users.		Database is not affected.
10	03/04/2016			Fail	Medium	Empty name is allowed when updating student/faculty info.		With this nameless student/faculty is possible.
11	03/04/2016			Fail	Medium	When staff tries to update password, the menu bar disappears.		Staff clicks on "change password".
12	03/04/2016			Fail	Medium	When invalid input is entered and add/update button is pressed it doesn't shows any error instead -- http 500		When creating a new course.
13	03/04/2016			Fail	Medium	staff can be added without any id		
14	03/04/2016			Fail	Medium	If a staff attempts to add an existing staff, there is no error shown.		Infact an positive message is shown.
15	03/04/2016				High	A faculty can't alter an application status.		If a faculty mistakenly approves/disapproves an application he must be able to change.
16	03/04/2016			Fail	Medium	Same elective can be taken twice.		A student can choose same elective when selecting courses.
17	03/04/2016			Fail	Medium	Student can update his course list with wrong means.		Student submits -> presses backspace -> submits again.

| 18 | 03/04/2016 | | | Medium | There is no option to update a response. If a student submits, he can't change the course list. | | There must be a "correct" way to update the response. |
| 19 | 03/04/2016 | | | High | User can log in again by opening the login page in separate tab | | |

4.3   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
1	03/04/2016			Low	When changing password, empty old/new password causes "invalid" error.		It should show corresponding "password field is empty."
2	03/04/2016			Low	In Login, if role is set to None, error message should not be "invalid username or password"		It should show "login role is not valid."
3	03/04/2016			Low	UI for staff page is not intuitive. The home page is empty. If staff clicks on any button. There is no highlight as to what option has loaded.		

4	03/04/2016			Medium	The previous response message remains when a new user is added unsuccessfully. (ex. delete a record->add a user with empty roll number)		There is no point in showing previous response message for the new operation.
5	03/04/2016			Medium	Staff can't see full list of users or courses.		He may be interested in seeing full list of students for further references.
6	03/04/2016			Low	When deleting a student, name/branch/semester fields are unnecessarily asked.		Only the roll number should be asked.
7	03/04/2016			Low	Font of staff's menu bar changes when 'staff' button is clicked adding new faculty		The font should be consistent.
8	03/04/2016			Low	Form for adding faculty is not intuitive. Username, name, branch and semester are asked. There is no help or nowhere is it mentioned what does branch and semester represents for a faculty.		
9	03/04/2016			Low	The instructor input should be a drop down rather than plain text input.		
10	03/04/2016			Low	Position of table in approved students and		

					disapproved students is not same		
11	03/04/2016			Low	Position of buttons in navigation panel changes when home is clicked.		It should be consistent.
12	03/04/2016			Low	In faculty's student view, there is no margin for table and student info.		
13	03/04/2016			Low	Home page is does not provide any valuable information or functionality		
14	03/04/2016			Low	There is no way back from faculty's student view to faculty's page.		No back button is provided for the same.
15	03/04/2016			Low	Student info is listed as { name, roll, discipline:branch, Semester:number }... inconsistent.		
16	03/04/2016			Medium	Credit for elective courses are not displayed nor the instructor's name is		Instructor should be shown the credits for the courses he has taken under.
17	03/04/2016				The response messages on manipulating data by staff causes the whole page to shift down		

4.3 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>	

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

4.4 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 will be filled by the dev team.]*	Comments
						<Yes> or <No>	

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

4.3 <TYPE OF TEST>

The table below summarizes the test cases employed for <type of test (e.g., unit/ module/ interface 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 will be filled by*	Comments

						the dev team.]	
						<Yes> or <No>	

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

5.0 VARIANCES

Because the code could not be run on any of the test machines the testing was done on the developer's laptop itself and hence the unavailability of all the testing tools which led to manual testing of the software. The software has been tested on numerous test cases but not all that were planned.

6.0 TEST INSTANCES

1. The software does not have a proper error handling. Errors shown do not match the actual error that was tested.
2. The user interface provided a lot of hindrance as it did not show complete information in many cases.
3. GET requests are prone to semantic URL attacks or parameter tampering in many cases. Hence POST requests should be used where critical information is displayed.

6.1 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.]

6.2 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. UI and usability should be improved.
2. Few functionalities like "student list" should be added.

APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

Document Name	Version	Description
Software Requirements Specification 2.0.pdf	2.0	This document is to provide a comprehensive description of the intended objective and environment for an online academic registration portal.

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
[Insert Term]	*[Provide definition of the term used in this document.]*
[Insert Term]	*[Provide definition of the term used in this document.]*
[Insert Term]	*[Provide definition of the term used in this document.]*