**CHAPTER FIVE**

SYSTEM TESTING

The aim of the system testing process was to determine all defects in our project. The program was subjected to a set of test inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not.

Our Project went through two levels of testing.

1.Unit testing

2.Integration testing

1. **UNIT TESTING**

Unit testing is undertaken when a module has been created and successfully reviewed. In order to test a single module, we need to provide a complete environment. i.e. besides the module we would require

The procedures belonging to other modules that the module under test calls

Non local data structures that module accesses

A procedure to call the functions of the module under test with appropriate parameters

Unit testing was done on each and every module that is described under module description of chapter 4

1. Test for the Super admin module

Testing user login form-This form is used to sign in the different level of administrators of the system. In this we enter the username and password if both are correct the user will get redirected to the specific dashboard based on their role otherwise if any of data is wrong it will get redirected back to the login page and again ask for username and password again.

* School addition – In this section the super admin can verify the function responsible for creating the school module is working as intended.
* Department addition – In this section the super admin can also verify the function responsible for creating the department module is properly functioning.
* Program addition – In this section the super admin can verify the function (method) responsible for creating and adding a particular program module is working as intended.
* Sub admins addition - In this section the super admin can verify and add sub admins (school, department and lecturer admins) into system database, that will help in reducing the overall burden on the super admin. It contains add, edit and delete buttons if user click add button data will be added to admin database, if user click edit button data will be edited and modified into admin database and if he/she clicks delete button the sub admin data will be deleted from the system.
* Student addition - In this section the super admin can verify student details from student academic info and then only add student details to main grading system database it contains add, edit and delete buttons if user click add button data will be added to student database, if user click edit button data will be edited and modified student data inside the database and if he clicks delete button the student data will be deleted from the system.
* System utility settings - Admin can handle other system settings like gallery images, review and slider images.

1. Test for the Sub admins module

* School Admin
* Department addition – In this section the school admin can also verify the function responsible for creating the department module is properly functioning.
* Program addition – In this section the school admin can verify the function (method) responsible for creating and adding a particular program module is working as intended.
* Student addition - In this section the school admin can verify student details from student academic info and then only add student details to main grading system database it contains add, edit and delete buttons if user click add button data will be added to student database, if user click edit button data will be edited and modified student data inside the database and if he clicks delete button the student data will be deleted from the system.
* Department Admin
* Program addition – In this section the department admin can verify the function (method) responsible for creating and adding a particular program module is working as intended.
* Student addition - In this section the department admin can verify student details from student academic info and then only add student details to main grading system database it contains add, edit and delete buttons if user click add button data will be added to student database, if user click edit button data will be edited and modify student data inside the database and if he clicks delete button the student data will be deleted from the system.
* Lecturer addition - In this section the department admin can verify lecturer info and then only add lecturer details to main grading system database it contains add, edit and delete buttons if user click add button data will be added to student database, if user click edit button data will be edited and modify lecturer data inside the database and if he clicks delete button the student data will be deleted from the system.
* Lecturer Admin
* Grades addition – In this section the lecturer admin can verify the function (method) responsible for adding a particular student grade module is working as intended.
* Learning materials addition - In this section the lecturer admin can verify notes and upload notes into main grading system database. It contains add, edit and delete buttons if user click add button data will be added to notes database, if user click edit button data will be edited and modify notes data inside the database and if he clicks delete button the notes uploaded will be deleted from the system.

**INTEGRATION TESTING**

In this type of testing we test various integration of the project module by providing the input. The primary objective is to test the module interfaces in order to ensure that no errors are occurring when one module invokes the other module.

* CONCLUSION & FUTURE SCOPE

This system provides a computerized version of university grading system which will benefit the students as well as the staff of the university.

It makes entire process online where student can access their grades, staff can generate student data and process student grades. It also has a facility for student login where student can login and can see views of books issued by their respective lecturers. It has a facility of lecturer’s login where lecturers can add lecture notes and also give necessary suggestion to the improve of the system and also add student grades.

There is a future scope of this facility that many more features such as online lectures video tutorials can be added by teachers as well as online assignments submission facility , a feature Of group chat where students can discuss various issues with regards to their studies which can be added to this project thus making it more interactive more user friendly and project which fulfills each users need in the best way possible

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