



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology

Summer 2022-23

Section: D

SOFTWARE QUALITY AND TESTING

eSkooly

Online School Management System

Report submitted

By

SN	Student Name	Student ID
1	MD. HASIBUR RAHMAN	20-42180-1
2	SAIFULLAH	19-41367-3
3	JUBAER AHMAD NABIL	18-38837-3

Under the supervision of

ISRAT JAHAN MOURI

Assistant Professor

Department of Computer Science

Faculty of Science & Technology

American International University-Bangladesh

Software Test Plan

for

eSkooly

Version 2.0 approved

Prepared by,

Group-8

MD. HASIBUR RAHMAN

SAIFULLAH

JUBAER AHMAD NABIL

American International University-Bangladesh

27th August, 2023

Checked By Industry Personnel

Name:

Designation:

Company:

Sign:

Date:

Table of Contents

Revision History	3
1. TEST PLAN IDENTIFIER:RS-MTP01.3	4
2. REFERENCES.....	4
3. INTRODUCTION.....	4
Background to the Problem.....	4
Solution to the Problem.....	4
4. REQUEIREMNT SPECIFICATION	5
4.1 System Features	5
4.2 System Quality Attributes.....	7
5. FEATURES NOT TO BE TESTED.....	8
6. TESTING APPROACH	8
6.1 Testing Levels	8
6.2 Test Tools.....	9
6.3 Meetings.....	11
7. TEST CASES/TEST ITEMS	12
8. ITEMS PASS/FAIL CITERIA	38
9. TESTING SCHEDULE.....	38

Revision History

Revision	Date	Updated by	Update Comments
0.1	2023.08.21	Md. Hasibur Rahman	First Draft
0.2	2023.08.22	Saifullah	Second Draft
0.4	2023.08.24	Saifullah	Fourth Draft
0.5	2023.08.29	Jubaer Ahmad Nabil	Fifth Draft
0.6	2023.08.26	Md. Hasibur Rahman	Sixth Draft

1. TEST PLAN IDENTIFIER: [RS-MTP01.3](#)

2. REFERENCES

- <https://www.eskooly.com/>
- Software Engineering Course Slide
- Software Quality and Testing Course Slides
- Selenium Testing Files Provided by Course Teacher

3. INTRODUCTION

Background to the Problem

1) The use of student management systems has become an essential necessity in contemporary education, as it streamlines and automates various administrative tasks performed within educational institutions, including schools, colleges, and universities. This technology enables the expeditious collection of all the necessary data for managerial purposes. The main objective is to create software that can effectively oversee and handle multiple modules. What is the underlying cause of this issue? Why is it crucial to consider this problem?

2) The selected website is eSkooly. The system possesses the capability to effectively and efficiently handle and store pertinent information about students, faculty members, and teachers dynamically. The proposed technique offers a comprehensive approach to effectively oversee many aspects of student and university administration. The application facilitates the investigation of internal activities occurring within educational institutions, such as schools and colleges, which students may not be cognizant of.

Solution to the Problem

The activities of students and teachers are provided by our system. With the use of this system, users may handle things like student information, grade data, registration, class schedules, notes, and payments. We are making sure that student data is secure. Our main offerings include:

- Result and Academic Transcript
- Accounts
- Online Admission
- Messaging System
- Students/Parents Login
- Student Manager

3) There exists a profound inclination inside our organization to provide exceptional service of the highest quality. Given that our utmost concern is to guarantee customer pleasure, we allocate special focus to our training, operational management, professional skill, and recruitment divisions.

Given that our utmost concern is to guarantee customer pleasure, we allocate particular focus to our training, operational management, professional skill, and recruitment divisions.

4) Our organization, eSkooly, has the capability to save and effectively handle data pertaining to students, instructors, and teachers. The cloud-based eSkooly application was developed by Arena Phone Bd Ltd. The product has a Short Message Service (SMS) functionality and mobile applications. Educational institutions are granted complimentary access to utilize eSkooly. The utilization of this system enables personnel to effectively fulfill their routine responsibilities while simultaneously monitoring various institutional activities. Furthermore, parents are kept informed of the progress and development of their offspring.

4. REQUIREMENT SPECIFICATION

4.1 System Features

1. Software Features

Functional Requirements

1.1 The user login into the software with their username and password.

1.2 If the login successful the main home page in this software will be displayed.

1.3 If the user forgets the username and password so they can be reset password using their valid email address and phone number.

1.4 If the user input 3 times wrong password, the system will block the user account login for half one hour.

Priority level: High

Precondition: User have valid username and password.

Cross-references: None

2. Admin

Functional Requirements

- 2.1 Monitoring user information by maintaining accurate database of all ID.
- 2.2 If the user is valid based on his/her information then “activate” card otherwise “reject” and report to the user.
- 2.3 Admin will able to see the payment status. If paid then allow to request otherwise report to the user for payment. After reporting 2 times if user doesn’t pay then admin can deactivate the user ID.

Priority level: High

Precondition: Admin must have the rights to access the whole system.

Cross-references: 1.1, 1.2, 3.1

3. Accounts

Functional Requirements

- 3.1 The payment transaction will be done using user ID.
- 3.2 The payment slip can be gotten from the account department using ID.
- 3.3 Then the payment information will show in the portal.

Priority level: High

Precondition: Payment system must be pay using user ID.

Cross-references: 2.1, 2.2, 2.3

4. Search

Functional Requirements

- 5.1 User can search for what service he/she expecting.
- 5.2 System gives user review of their expecting service.

5.3 User can also search for the information (Admission, Cost and Other details).

Priority level: Medium

Precondition: Must be in logged in condition

Cross-references: 5.1, 6.2

4.2 System Quality Attributes

There are some quality attributes that are very important to ensure the quality of a software.

Usability: Any skilled user should be able to register and login to the system.

Efficiency: Each and every functional need must be fulfilled.

Portability: This will be capable of running properly on all the devices. **Maintainability:**

If any issue locates or detect in the system then it will be possible to fixit.

Correctness: Mentioned all features will be completed according to the preferences of the patients.

Functionality: Will display available slot list, their details and it will also show if they are parking or not.

Accessibility: It's a web-based software so it will be accessible from anywhere on the Internet.

Readability: It's critical to rely on appointment software to properly and containing accurate scheduling demands. It is so important to check to see if the system is durable enough to sustain any situation. So, regular counting on parking slot.

Reliability: All features will perform in various working environments or devices.

Flexibility: Will flexible enough to modify in terms of any needs.

Integrity/Security: System integrity or security should be sufficient to prevent unauthorized access to system functions, information loss, and virus infection of software, as well as to protect the privacy of data entered into the system. Actually, Integrity comes with security

5. FEATURES NOT TO BE TESTED

The following is a list of the areas that will not be specifically addressed. All testing in these

- Areas will be indirect as a result of other testing efforts. For example:
- How to perform our application under low network that will not be tested.
- External functionality over the program is not supported by this system.
- Application to server testing should be avoided.
- Browser compatibility

6. TESTING APPROACH

6.1 Testing Levels

UNIT Test: The fundamental level of testing is the unit test. After creating each feature, a developer will verify that it functions as intended inside the component design. Because they are the ones who understand how these specific features functioned and because they are familiar with internal logic, program structure, etc., developers will perform this testing. In our application, the developer will conduct UNIT testing, and the development team leader will provide their approval. Before unit testing is accepted and handed off to the tester, the programmer must show the team leader proof of it (test case list, sample output, data printouts, defect information). The test person will also receive access to all unit test data.

Integration Test: The second level of testing is integration testing, the present level. The modules or features will be linked together one at a time. The leader of our development team will oversee this testing and determine whether or not the data transmission between these modules is accurate. At this level, we'll use strategies like the sandwich strategy, big bang approach, bottom-up integration, and top-down integration.

System Test: Our quality assurance team will carry out this testing level once the unit test and integration test have been completed. Our quality team will check the complete system against the customer's specification once our full program has been developed. These testing methods are known as black boxes. Various testing methods will have been used at this testing level. In addition to performing functional testing, our testing team also performs nonfunctional testing such as volume, load, and performance testing.

Acceptance Test: We will move on to the acceptance testing level once our entire application has been completed and the first three levels have been tested. At this stage, the test team leader will work with the end user to evaluate our product. In essence, we will check the software's usability and functionality. We will ensure that our system satisfies all user requirements after this testing phase.

6.2 Test Tools

The 'Selenium IDE' – testing tool has been used to build test cases and test our website.

Selenium IDE has been used because it supports automated testing. We will perform manual testing initially, and then we will perform automation testing. The most crucial tool for automation testing is Selenium. Selenium is an open-source, free framework for assessing web applications across a variety of platforms and browsers. Scripts for Selenium tests can be written in a variety of programming languages, including Java, C#, Python, and others. However, we'll be automating our testing using Java. Below are a few screenshots of selenium.

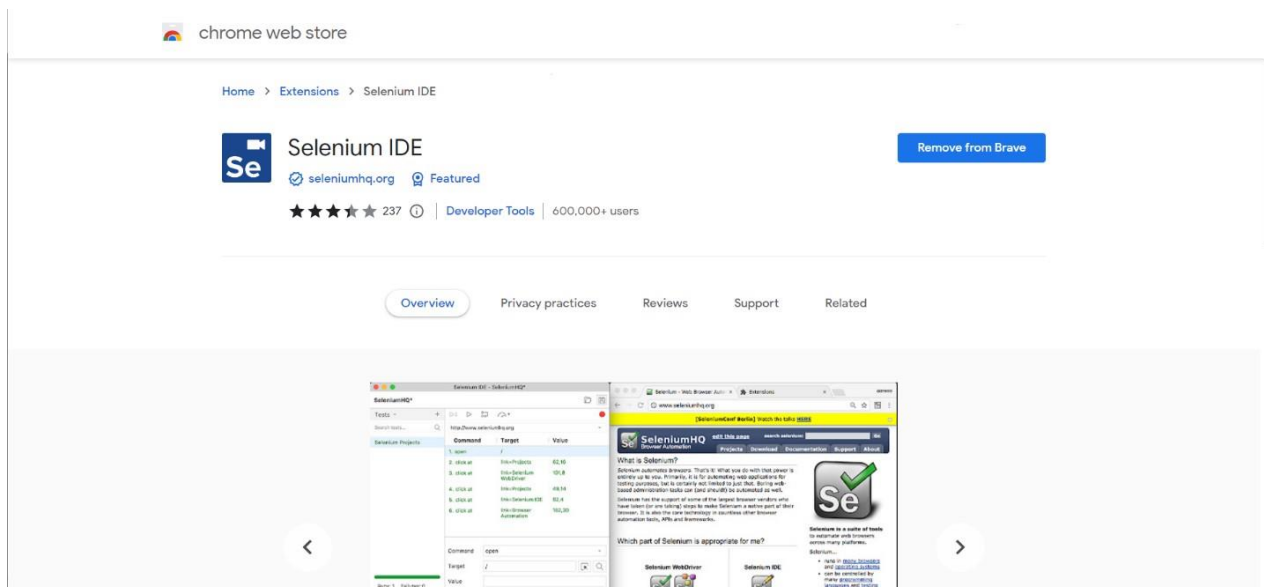


Fig-1

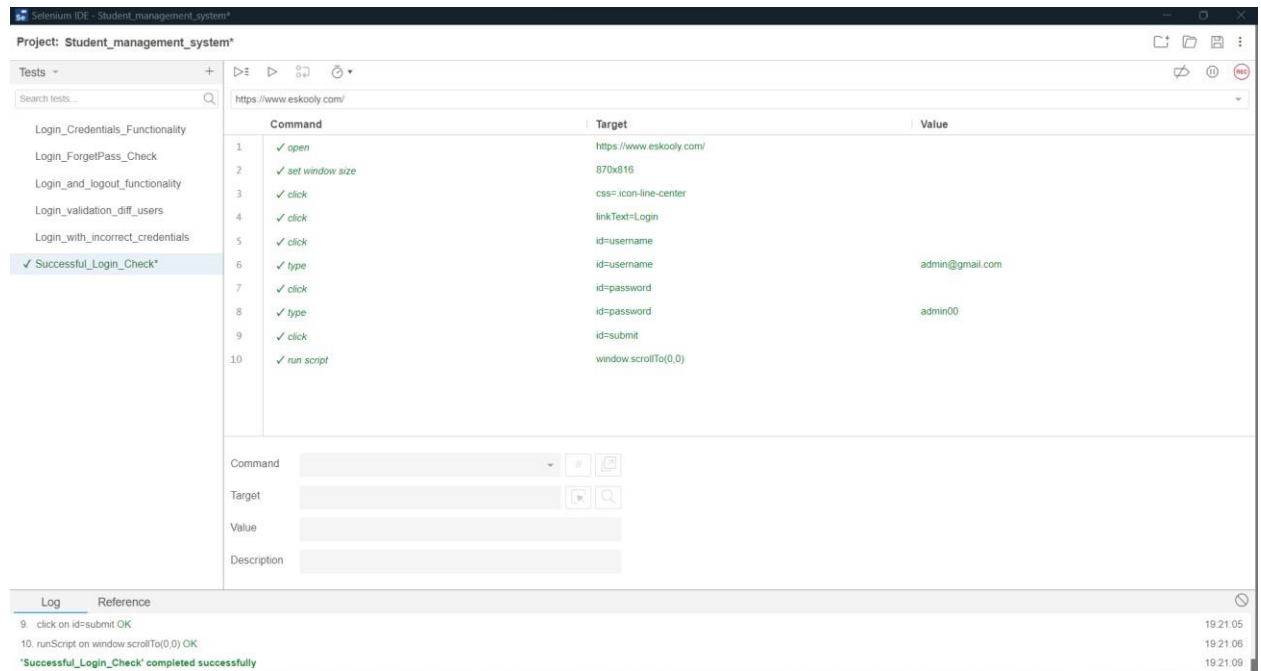


Fig-2

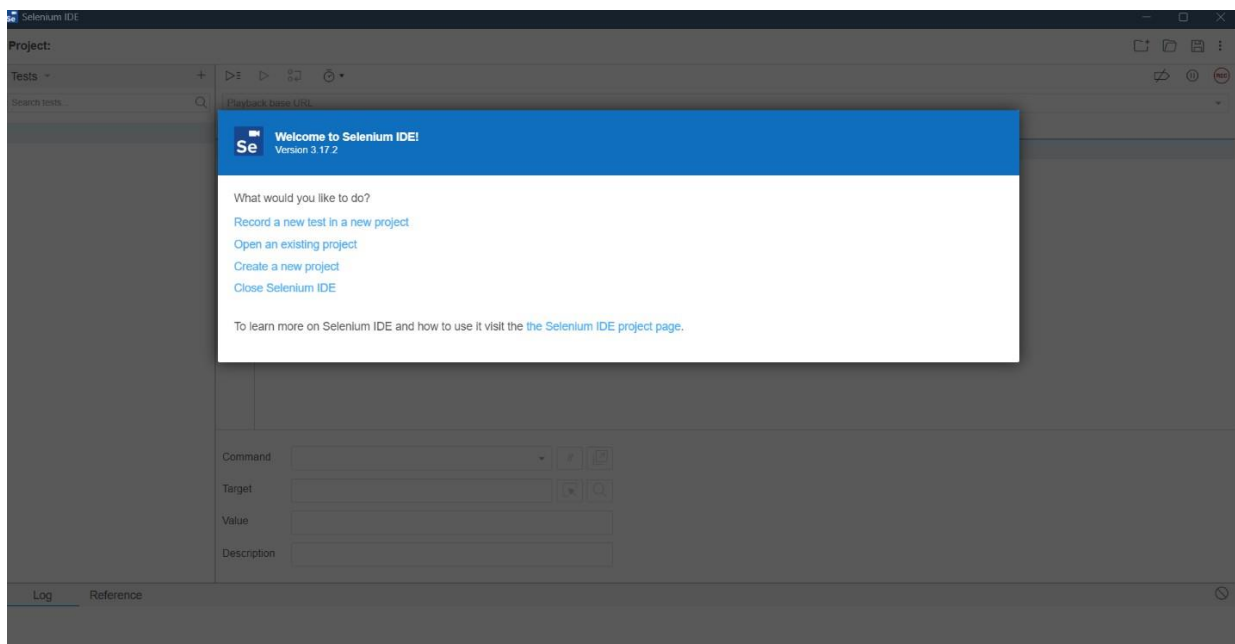


Fig-3

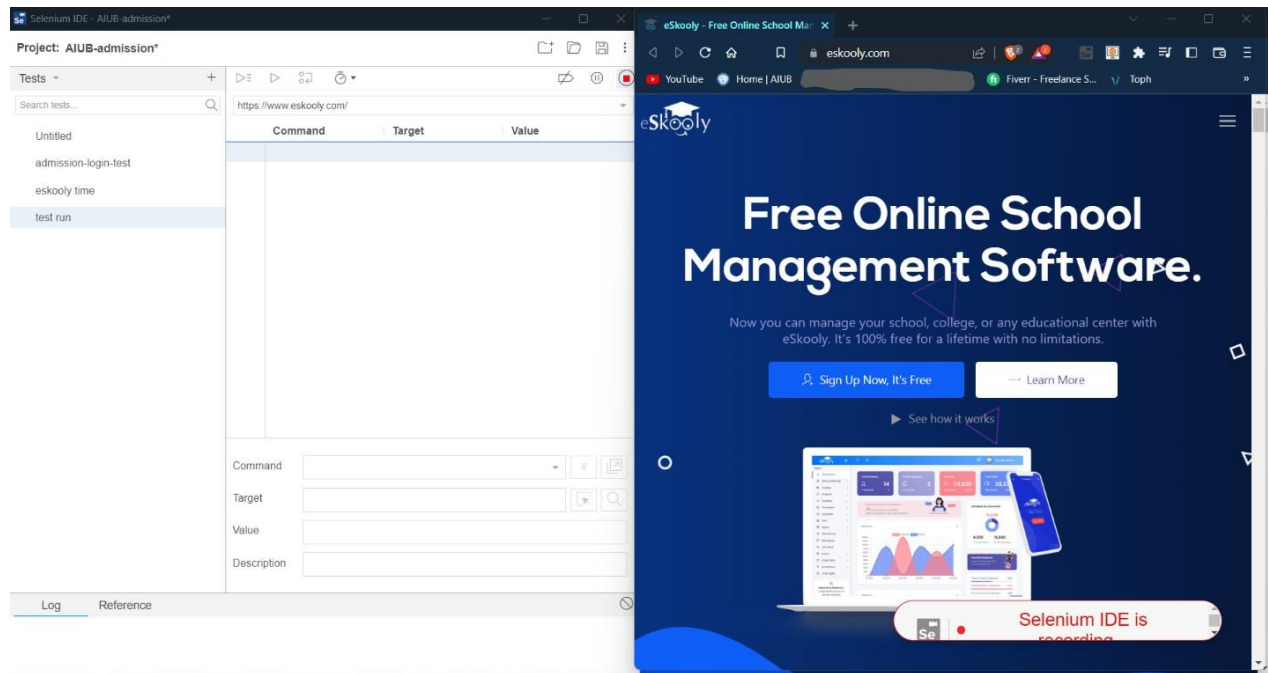


Fig-4

6.3 Meetings

The team leader responsible for quality assurance will arrange a weekly meeting to assess the testing procedures employed for the website. In order to expedite the identification of issues and defects, the practice of conducting code reviews and code walk-throughs, coupled with regular testing, will be employed. The project manager will engage in weekly consultations with each tester. To engage in a conversation regarding the current status of our project with the head of our quality assurance team. The inspection phase will involve the participation of all project staff on a biweekly basis.

7. TEST CASES/TEST ITEMS

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_1		Test Designed date: 19/08/2023		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Hasibur Rahman		
Module Name: Registration input field functionality		Test Execution date: 20/08/2023		
Test Title: Successful Registration Check				
Description: Test website's Registration Page and storing username and password to the database.				
Precondition (If any): Must land on sign up page from website homepage successfully.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Click on signup 3. Enter E-mail 4. Enter password 5. Enter_Confirm password 6. Accept terms and condition button 7. Click signup button	E-mail: mhasibur@gmail.com Password: 123456 Confirm Password: 123456	User should register successfully to the website	As expected,	Pass
Post Condition: User is registered with database and can be log in later.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_2		Test Designed date: 19/08/2023		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Hasibur Rahman		
Module Name: Registration input field functionality		Test Execution date: 20/08/2023		
Test Title: Accept Terms and Conditions Validation Check				
Description: Not enabling terms and conditions button after registration.				
Precondition (If any): Must enter email and password.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website's signup page 2. Enter E-mail 3. Enter password 4. Enter confirm password 5. Do not Accept terms and condition button 6. Click signup button	E-mail: mhasibur01@gmail.com Password: 123456 Confirm Password: 123456	User should not register successfully to the website and must show a message	Result not as expected,	Fail
Post Condition: User isn't registered with database and can't be log in later.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_3		Test Designed date: 19/08/2023		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Hasibur Rahman		
Module Name: Registration input field functionality		Test Execution date: 20/08/2023		
Test Title: Empty Registration credentials.				
Description: Enter no input in the registration.				
Precondition (If any): Must not register successfully.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website's signup page 2. Empty E-mail field 3. Empty password 4. Empty confirm password 5. Didn't accept terms and condition button 6. Click signup button	N/A	User should not register successfully to the website and must show a message.	Result as expected,	Pass
Post Condition: User isn't registered with database and can't be log in later.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_4		Test Designed date: 19/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Registration input field functionality		Test Execution date: 20/08/2023		
Test Title: Registration’s E-mail Pattern Validation Checking				
Description: Testing username field functionality as an e-mail’s pattern validation				
Precondition (If any): Must land on sign up page.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website’s signup page 2. Enter E-mail 3. Enter password 4. Enter confirm password 5. Accept terms and condition button 6. Click signup button	E-mail: hasibur@gmail Password: 123456 Confirm Password: 123456	“Invalid Email” message pop up	Result not as expected,	Fail
Post Condition: User can’t be registered.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_5		Test Designed date: 19/08/2023		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Hasibur Rahman		
Module Name: Registration input field functionality 1.1		Test Execution date: 20/08/2023		
Test Title: signup password/confirm password input field validation				
Description: Testing password/confirm password field in signup page				
Precondition (If any): Must land on sign up page.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website's signup page 2. Enter E-mail 3. Enter password 4. Enter confirm password 5. Accept terms and condition button 6. Click signup button	E-mail: rahman11@gmail.com Password: 09876 Confirm Password: 67890	User should not register successfully to the website	Result not as expected,	Fail
Post Condition: User isn't registered with database and can't be log in later.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_6		Test Designed date: 19/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Registration UI/UX check session		Test Execution date: 20/08/2023		
Test Title: Signup page’s button check				
Description: Testing Signup page’s all button				
Precondition (If any): Must land on sign up page.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website’s signup page 2. Click on sign up button 3. Click on Terms & Conditions button 4. Click on login button 5. Back to sign up page by clicking 6. Click on eSkooly logo	N/A	All the buttons should work properly	As expected,	Pass
Post Condition: User can easily land any page from signup page by clicking signup page’s buttons.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_7		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Hasibur Rahman		
Module Name: Registration input field functionality 1.2		Test Execution date: 21/08/2023		
Test Title: Registration’s existing e-mail validation Checking				
Description: Testing email field functionality as existing e-mail’s validation				
Precondition (If any): Must land on sign up page and at least one email should be registered in the database				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website’s signup page 2. Enter an existing e-mail	E-mail: mhasibur@gmail.com	User should not register successfully to the website	As expected,	Pass
Post Condition: Must show a warning message.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_8		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): High		Test Executed by: Md. Hasibur Rahman		
Module Name: Admin module		Test Execution date: 21/08/2023		
Test Title: Login Check				
Description: Test website login page for user- Admin with wrong password				
Precondition (If any): User must have valid email and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Enter admin email 4. Enter admin wrong password 5. Click submit	Username: mhasibur@gmail.com Password: 2345678	User should not login into the application	As expected,	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_9		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Admin module		Test Execution date: 21/08/2023		
Test Title: Employee’s account registration				
Description: Testing a successful registration of Employee’s account and storing username and password to the database.				
Precondition (If any): Must land on login page and have an admin’s account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Enter admin username 4. Enter admin password 5. Click submit 6. Click on employee 7. Add new 8. Enter name of employee 9. Enter mobile number 10. Enter joining date 11. Enter salary 12. Enter father’s name 13. Enter CNIC 14. Enter education qualification 15. Enter gender 16. Enter religion 17. Enter Employee’s email 18. Enter blood group 19. Enter previous job experience 20. Enter Date of birth 21. Address 22. Click on submit	E-mail: mhasibur@gmail.com Password: 123456 Employee’s name: Md Rokibul Islam Number: 01781161012 Type: Teacher Joining date: 2023-08-26 Salary: 20000 Father’s name: Md. Azizur Rahman Gender: Male CNIC: 2500 Religion: Islam Employees’ email: aziz@gmail.com Education: BSc Blood group: A+ Date of birth: 1965-06-01 Address: Mirpur, Dhaka-1216	Admin should register employees’ account successfully to the website	As expected,	Pass
Post Condition: Employee’s account is registered with database and can be log in later using provided username and password				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_10		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Admin module		Test Execution date: 21/08/2023		
Test Title: Edit Employee’s account credentials				
Description: Edit and update a registered employee’s credentials				
Precondition (If any): Must land on login page and have an admin’s account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Click All Employees 4. Click edit button on an employee 5. Edit employee’s name 6. Edit mobile number 7. Edit salary 8. Edit father’s name 9. Edit email 10. Edit address 11. Click on update	Employee’s name: Md Anisul Islam Number: 01781161010 Type: Teacher Salary: 27000 Father’s name: Md. Maksudur Rahman Email: rokib@gmail.com Address: Rangpur	Admis should success fully edit employees’ account to the website	As expected,	Pass
Post Condition: Employee’s account is registered with database and can be log in later using provided email and password				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_11		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Admin module		Test Execution date: 21/08/2023		
Test Title: Add a class				
Description: Add a new class for the students				
Precondition (If any): Must land on login page and have an admin’s account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Click All Classes 2. Click add new 3. Enter Name of class 4. Enter monthly tuition fees 5. Select class teacher 6. Click on submit	Class name: Class 10 Tuition fees: 1200 Class teacher’s name: Md. Anisul Islam	A new class will be added	As expected,	Pass
Post Condition: Admin’s account is registered with database and can be logged in.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_12		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Admin Module		Test Execution date: 21/08/2023		
Test Title: Institution Information				
Description: Edit institutional information				
Precondition (If any): Must land on login page and have an admin’s account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Click General settings 2. Click Institute Profile 3. Add name of institute 4. Add a tagline 5. Add phone number 6. Add website 7. Add address 8. Add country 9. Click update	Name of institute: Dhaka High School Tagline: Empowering Minds, Inspiring Futures: Nurturing Excellence at Every Step Phone number: 02 647 565 Website: dhakaschool.edu.bd Address: Mirpur, Dhaka-1216 Country: Bangladesh	Update successfully	As expected,	Pass
Post Condition: Admin’s account is registered with database and can be logged in.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_13		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Admin Module		Test Execution date: 21/08/2023		
Test Title: Add a new student				
Description: Add student with proper credentials				
Precondition (If any): Must land on login page and have an admin’s account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Enter email 2. Enter password 3. Click add new student 4. Add student name 5. Add student registration number 6. Add student class 7. Add date of admission 8. Add discount percentage 9. Add phone number 10. Add date of birth 11. Add NIC no. 12. Add cast 13. Add ID mark 14. Add blood group 15. Drop down if there is any disease 16. Add additional info 17. Add no. sibling 18. Add address 19. Add religion 20. Add father’s NIC 21. Add fathers’ occupation 22. Add father’s education 23. Add mobile 24. Add mother’s name 25. Add mother’s occupation 26. Add mother’s education 27. Add father’s monthly income 28. Add mother’s monthly income 29. Click submit	email: mhasibur@gmail.com password: 123456 student name: Nabil Hossain student registration number: 2010958569 Add student class: 10 Add date of admission: 2023-08-25 Add discount percentage:15 Add phone number: 01869587654 Add date of birth: 2007-11-14 Gender: Male ID mark: none blood group: A+ no. sibling: 2 Religion: Islam address: Mirpur, Dhaka Father’s name: Sagor Islam father’s NIC: 84646946464 fathers’ occupation: Businessman father’s education: MSc mobile: 0159678464 mother’s name: Rubaiya mother’s occupation: Home-maker mother’s education: BBA Mother’s phone: 01786945854 father’s monthly income: 75000 mother’s monthly income: 10000	Added successfully	As expected,	Pass
Post Condition: Admin’s account is registered with database and can be logged in.				

Project Name: Student Management System		Test Designed by: Md. Hasibur Rahman		
Test Case ID: FR_14		Test Designed date: 20/08/2023		
Test Priority (Low, Medium, High): Medium		Test Executed by: Md. Hasibur Rahman		
Module Name: Admin Module		Test Execution date: 21/08/2023		
Test Title: Add monthly income				
Description: Add income and check in accounts statement				
Precondition (If any): Must land on login page and have an admin’s account.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Enter in account section 2. Click add monthly income 3. Add income date 4. Add income description 5. Add amount 6. Click submit 7. Check in account statement	Income date: 2023-08-19 Income type: Fund Amount: 1985	Add successfully	As expected,	Pass
Post Condition: All income amount should be in account statement				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_15		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Login Validation 1.1		Test Execution date: 25-08-23		
Test Title: Login Validation Different Users				
Description: Checking for log into different users with same username and password				
Precondition (If any): Username and password must be registered in the database before checking				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Enter admin username into employee username 4. Enter admin password into employee password 5. Click submit	Username: saif.2000@gmail.com Password: Saif@2000	User shouldn't be log in to employee accounts	As expected,	Pass
Post Condition: User must have different username and password for log into different accounts.				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_16		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Login and Logout Session		Test Execution date: 25-08-23		
Test Title: Login and Logout Functionality				
Description: Checking the login and logout functionality working successfully				
Precondition (If any): Must be on the Login page. Username and password must be correct.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Enter correct username 4. Enter correct password 5. Click submit 6. Click logout	Username: Saif@2000 Password: Saif@2000	User should be able login and logout successfully	As expected,	Pass
Post Condition: Same as precondition				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_17		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Login Functionality Session		Test Execution date: 25-08-23		
Test Title: Login Credential Functionality				
Description: Checking the credentials functionalities working properly or not				
Precondition (If any): Must be on the Login page. Username and password should be incorrect format				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Enter incorrect username format 4. Enter incorrect password format 5. Click submit	Username: student@yahoo Password: 123	User shouldn't be able to login	Not as expected	Fail
Post Condition: Must give warning while giving incorrect information's				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_18		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): Medium		Test Executed by: Saifullah		
Module Name: Login Feature Session		Test Execution date: 25-08-23		
Test Title: Login Forgot Password Feature Checking				
Description: Checking forgot password option working properly or not				
Precondition (If any): Must be on the Login page. Username must be registered to database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Click forgot password 4. Enter correct username 5. Click reset password	Username: truesaif111@gmail.com	User should be able to reset password and get login info in e mail	As expected,	Pass
Post Condition: User should get login information's via email				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_19		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Employee addition feature		Test Execution date: 25-08-23		
Test Title: Add employee with valid input				
Description: Checking the addition of a new employee by providing the valid information in both required and optional section of the employee form				
Precondition (If any): Must be landed on the dashboard page. Username must be registered to database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<div>1. Land to the dashboard section</div> <div>2. Go to Employees in menu bar</div> <div>3. Click on All Employees</div> <div>4. Click Add new button</div> <div>5. Enter employee name</div> <div>6. Enter mobile no</div> <div>7. Enter joining date</div> <div>8. Enter employee-type</div> <div>9. Enter monthly salary</div> <div>10. Enter father name</div> <div>11. Enter CNIC</div> <div>12. Enter education</div> <div>13. Enter gender</div> <div>14. Enter religion</div> <div>15. Enter blood group</div> <div>16. Enter experience</div> <div>17. Enter email</div> <div>18. Enter date of birth</div> <div>19. Enter address</div> <div>20. Click on submit</div>	<div>Name: Sefat</div> <div>Mob no: 01870083734</div> <div>Joining-date:2022-02-26</div> <div>Employee-type: Teacher</div> <div>Monthly-salary:40000</div> <div>Father-name: Rahim</div> <div>CNIC:3123</div> <div>Education: AIUB</div> <div>Gender: Male</div> <div>Religion: Islam</div> <div>Blood group: A+</div> <div>Experience: Teaching</div> <div>Email:sefat@gmail.com</div> <div>Date of birth:1990-12-1</div> <div>Address:Uttara Bangladesh</div>	User must be registered as an employee	As expected,	Pass
Post Condition: The registered user got a new role as an employee in the website. The data must be stored into the database				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_20		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Employee form validation 1.0		Test Execution date: 25-08-23		
Test Title: Add employee with invalid input				
Description: Checking the addition of a new employee by providing the invalid information in required section of the employee form				
Precondition (If any): Must be landed on the employee form page during the addition of the new employee. Username must be registered to database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<div>1. Land to the dashboard section</div> <div>2. Go to Employees in menu bar</div> <div>3. Click on All Employees</div> <div>4. Click Add new button</div> <div>5. Enter employee name</div> <div>6. Enter mobile no</div> <div>7. Enter joining date</div> <div>8. Enter employee-type</div> <div>9. Enter monthly salary</div> <div>10. Click on submit</div>	<div>Name: 1234</div> <div>Mob no: 01644412678</div> <div>Joining-date:2022-12-1</div> <div>Employee-type: other</div> <div>Monthly-salary: -9000</div> <div>Father-name:Null</div> <div>CNIC: Null</div> <div>Education: Null</div> <div>Gender: Null</div> <div>Religion: Null</div> <div>Blood group: Null</div> <div>Experience: Null</div> <div>Email: Null</div> <div>Date of birth: Null</div> <div>Address: Null</div>	Employee should not able to be registered.	Not as expected,	Fail
Post Condition: The registered user will not able to add as an employee. A warning must be showed for the invalid name and the invalid salary				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_21		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Employee form validation 1.1		Test Execution date: 25-08-23		
Test Title: Add employee with invalid mobile no				
Description: Checking the addition of a new employee by providing the invalid mobile no in the required section of the employee form				
Precondition (If any): Must be landed on the employee form page during the addition of the new employee. Username must be registered to database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<div>1. Land to the dashboard section</div> <div>2. Go to Employees in menu bar</div> <div>3. Click on All Employees</div> <div>4. Click Add new button</div> <div>5. Enter employee name</div> <div>6. Enter mobile no</div> <div>7. Enter joining date</div> <div>8. Enter employee-type</div> <div>9. Enter monthly salary</div> <div>10. Click on submit</div>	<div>Name: Invalid phone, String number</div> <div>Mob-no:Null, String_)(*^&^^%</div> <div>Joining-date: 2022-12-1, 2022-12-1</div> <div>Employee-type:Store manager, Other</div> <div>Monthly-salary: 3000,2000</div> <div>Father-name: Null</div> <div>CNIC: Null</div> <div>Education: Null</div> <div>Gender: Null</div> <div>Religion: Null</div> <div>Blood group: Null</div> <div>Experience: Null</div> <div>Email: Null</div> <div>Date of birth: Null</div> <div>Address: Null</div>	Employee should not able to be registered.	Not as expected,	Fail
Post Condition: The registered user will not able to add as an employee and not add the information to the database. A warning need to be showed for the null input in the required section and the invalid string input as the mobile number.				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_22		Test Designed date:25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Employee form validation 1.2		Test Execution date: 25-08-23		
Test Title: Add employee without other required input				
Description: Checking the addition of a new employee without providing the inputs in the required section of the employee form				
Precondition (If any): Must be landed on the employee form page during the addition of the new employee. Username must be registered to database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<div>1. Land to the dashboard section</div> <div>2. Go to Employees in menu bar</div> <div>3. Click on All Employees</div> <div>4. Click Add new button</div> <div>5. Land on the employee form section</div> <div>6. Enter mobile number</div> <div>7. Enter employee name, employee type and salary keeping joining date empty</div> <div>8. Enter joining date, employee type and salary keeping employee name empty</div> <div>9. Enter employee name, joining date, and salary keeping employee type empty</div> <div>10. Enter employee name, joining date, employee type keeping salary empty</div> <div>11. Click on submit</div>	<div>Name: test_req, Null</div> <div>Mob-no: 01824500704</div> <div>Joining-date:Null, 2022-12-1</div> <div>Employee type: Other, Null</div> <div>Monthly-salary: 1000,Null</div> <div>Father-name: Null</div> <div>CNIC: Null</div> <div>Education: Null</div> <div>Gender: Null</div> <div>Religion: Null</div> <div>Blood group: Null</div> <div>Experience: Null</div> <div>Email: Null</div> <div>Date of birth: Null</div> <div>Address: Null</div>	Employee should not able to be registered.	As expected,	Pass
Post Condition: The blank textboxes in required information must show the warning and new employee is not registered or not added to the database.				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_23		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Saifullah		
Module Name: Employee form validation 1.3		Test Execution date: 25-12-22		
Test Title: Add employee with null optional input				
Description: Checking the addition of a new employee without providing the inputs in the optional section of the employee form				
Precondition (If any): Must be landed on the employee form page during the addition of the new employee and must provide the valid information in the required section. Username must be registered to database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<div>1. Land to the dashboard section</div> <div>2. Go to Employees in menu bar</div> <div>3. Click on All Employees</div> <div>4. Click Add new button</div> <div>5. Enter employee name</div> <div>6. Enter mobile no</div> <div>7. Enter joining date</div> <div>8. Enter employee-type</div> <div>9. Enter monthly salary</div> <div>10. Click on submit</div>	<div>Name:Null option check</div> <div>Mob-no: 01824500704</div> <div>Joining-date:2022-12-15</div> <div>Employee type: Other</div> <div>Monthly-salary: 1000</div> <div>Father-name: Null</div> <div>CNIC: Null</div> <div>Education: Null</div> <div>Gender: Null</div> <div>Religion: Null</div> <div>Blood group: Null</div> <div>Experience: Null</div> <div>Email: Null</div> <div>Date of birth: Null</div> <div>Address: Null</div>	Employee can able to be registered.	As expected,	Pass
Post Condition: Employee is registered based on the required information and store the information to the database.				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_24		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): Medium		Test Executed by: Saifullah		
Module Name: Register Already existing account		Test Execution date: 25-08-23		
Test Title: Register an already existing admin				
Description: Will check if the form will check that the account already exists				
Precondition (If any): Must be landed on the employee form page during the addition of the new employee. Username must be registered to database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Login Page 2. Enter admin email in the admin username 3. Enter password in the password field 4. submit	Username: saif.2000@gmail.com Pass: Saif@2000	Admin should not be able to create account	As expected,	Pass
Post Condition: Cannot submit because account already exist				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_25		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): Medium		Test Executed by: Saifullah		
Module Name: Multiple accounts		Test Execution date: 25-08-23		
Test Title: Add multiple employees				
Description: Will check if the database is able to store multiple employees				
Precondition (If any): Must be logged in as the admin				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
5. Land to the dashboard section 6. Go to Employees in menu bar 7. Click on All Employees 8. Click Add new button 9. Enter employee name 10. Enter mobile no 11. Enter joining date 12. Enter employee-type 13. Enter monthly salary 14. Click on submit	Name:1000-2000 option check Mob-no: 01824500704 Joining-date:2022-12-15 Employee type: Other Monthly-salary: 1000 Father-name: Null CNIC: Null Education: Null Gender: Null Religion: Null Blood group: Null Experience: Null Email: Null Date of birth: Null Address: Null	All employees are expected to be added	As expected,	Pass
Post Condition: All employees were inserted successfully				

Project Name: Student Management System		Test Designed by: Saifullah		
Test Case ID: FR_26		Test Designed date: 25-08-23		
Test Priority (Low, Medium, High): low		Test Executed by: Saifullah		
Module Name: Employee Salary		Test Execution date: 25-08-23		
Test Title: Checking salary payment				
Description: Checking if the salary payment option is working				
Precondition (If any): Employee must exist in the database.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to login page 3. Go to Salary 4. Add Month 5. Add deduction 6. Add bonus	Username: truesaif111@gmail.com Month: June Deduction: 500 Bonus: 2000	User should be able to pay the teacher and the money will be deduction from the revenue	As expected,	Pass
Post Condition: The user must have a revenue, if not will show negative value				

Project Name: Student Management System		Test Designed by: Jubaer Ahmad Nabil		
Test Case ID: 27		Test Designed date: 29-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Jubaer Ahmad Nabil		
Module Name: Details for Bank chalan		Test Execution date: 29-08-23		
Test Title: Bank Added				
Description: Bank name adding in Details for Bank chalan				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to dashboard 3. Go to general setting 4. Go to Bank Chalan 5. Update Bank information 6. Click submit	Username: mhasibur@gmail.com Password: 123456	Admin can update Bank information	As expected,	Pass
Post Condition:				

Project Name: Student Management System		Test Designed by: Jubaer Ahmad Nabil		
Test Case ID: 28		Test Designed date: 29-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Jubaer Ahmad Nabil		
Module Name: Institute Rules & Regulations		Test Execution date: 29-08-23		
Test Title: Publish new rule				
Description: Create new rules and regulations and publish				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to General settings 3. Go to Institution rules & regulations 4. Write new rules 5. Click save changes	Username: mhasibur@gmail.com Password: 123456	New rules published	As expected,	Pass
Post Condition:				

Project Name: Student Management System		Test Designed by: Jubaer Ahmad Nabil		
Test Case ID: 29		Test Designed date: 29-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Jubaer Ahmad Nabil		
Module Name: Student marks grading		Test Execution date: 29-08-23		
Test Title: Grading				
Description: Admin can change gradings				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. General setting 3. Marks grading 4. Update grading	Username: mhasibur@gmail.com Password: 123456	Admin can change marks grading	as expected	pass
Post Condition:				

Project Name: Student Management System			Test Designed by: Jubaer Ahmad Nabil	
Test Case ID: 30			Test Designed date: 29-08-23	
Test Priority (Low, Medium, High): low			Test Executed by: Jubaer Ahmad Nabil	
Module Name: Accounts			Test Execution date: 29-08-23	
Test Title: Add Chart of Account				
Description: Name of head of account, Types				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to Account 3. Chart of Account 4. Write name and type	Username: mhasibur@gmail.com Password: 123456	User assign chart of account	As expected,	Pass
Post Condition:				

Project Name: Student Management System			Test Designed by: Jubaer Ahmad Nabil		
Test Case ID: 31			Test Designed date: 29-08-23		
Test Priority (Low, Medium, High): Low			Test Executed by: Jubaer Ahmad Nabil		
Module Name: Attendance			Test Execution date: 29-08-23		
Test Title: Mark Manual Attendance Class wise					
Description: Giving absent, present, late					
Precondition (If any):					
Test Steps		Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to Attendance 3. Submit date 7. Select Class 8. Search 9. Give attendance		Username: mhasibur@gmail.com Password: 123456	Teacher can give attendance	As expected,	Pass
Post Condition:					

Project Name: Student Management System			Test Designed by: Jubaer Ahmad Nabil		
Test Case ID: 32			Test Designed date: 29-08-23		
Test Priority (Low, Medium, High): High			Test Executed by: Jubaer Ahmad Nabil		
Module Name: Messaging			Test Execution date: 29-08-23		
Test Title: Compose a new message					
Description: Admin can send a message to all students					
Precondition (If any):					
Test Steps		Test Data	Expected Results	Actual Results	Status (Pass/Fail)
4. Go to the website 5. Go to messaging 6. Write a message 7. Send 10.		Username: mhasibur@gmail.com Password: 123456	Admin can send messages	As expected,	Pass
Post Condition:					

Project Name: Student Management System		Test Designed by: Jubaer Ahmad Nabil		
Test Case ID: 33		Test Designed date: 29-08-23		
Test Priority (Low, Medium, High): High		Test Executed by: Jubaer Ahmad Nabil		
Module Name: Exams		Test Execution date: 29-08-23		
Test Title: Add New Examination				
Description: Admin can assign new exam schedule				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Go to exams 3. Add new exam schedule	Username: mhasibur@gmail.com Password: 123456	Admin can assign new exam schedule	As expected,	Pass
Post Condition:				

8. ITEM PASS/FAIL CRITERIA

- A unit test is conducted for every module or functionality.
- Each module was sequentially added and an integration test was conducted following the integration of each module.
- All integration tests have successfully passed with a 100% success rate.
- There are no significant defects that remain unresolved.
- There are currently no more than 15 minor faults that remain unresolved.
- The code coverage tools suggest that all of the code has been covered.
- Ensuring the successful execution of all essential test cases.
- The task at hand involves the identification and resolution of faults that hold significant priority.

9. TESTING SCHEDULE

The project timeline has allocated time for the forthcoming testing activities. The specific hours and dates corresponding to each work are documented in the timetable outlined in the project plan. The project timeline and strategy also delineate the staffing requirements for each phase. The project manager will facilitate the coordination of employees necessary for each assignment, including the test team, development team, management, and the client. This collaboration will be conducted in conjunction with the leaders of the development and test teams.

GANTT CHART (August 21-26)

