

Course: COMP 1640

Entairpraise Web development Software

Submitted To

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Coordinator

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Team Name: Titan-G4

Team Member

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03	Saidul Islam	Web designer
04	Golam Rabbani	Tester

Credentials:

ROLE	USERNAME	PASSWORD
Admin	Ali	123456
EC Coordinator		
Student		
EC Manager		

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Introduction

The given course work will be developed through a group which is about web based secure role based system for collecting and processing Extenuating circumstance (EC) claims. The system will be developed for a large university. And for them, we will build subsystem of extenuating circumstance (EC) claims. This system has four types of users these lists are given below

- Administration
- Student
- EC Coordinator
- EC manager

The individual user will have the different role of their working view point .first of all, the admin will capable of manage session, manage Assessment, manage subject and manage student .in addition admin will assign password and username. Secondly, the student will make claim with uploading evidence. however, the student will get a notification about successful of claims submission. in EC coordinator point view, the coordinator will capable of processing the claims and can take an action against individual role and EC Manager will capable of viewing the claim details. finally, the system will be responsive so that user can use the system across the platform.

Evaluation of product and process:

End of the development of the extenuating circumstance(EC) System where the interface looks simple and easy to use for the user especially, for the novice user.the user interface is implemented with a combination of HTML and Bootstrap front-end CSS framework which makes a system to be responsive.however, javascript is also used to ensure validation.furthermore, PHP and MYSQLi are used to implement the system.

extenuating circumstance(EC) System has a different dashboard with a different user role. Every user assigned their specific role such as Admin, Student, EC Coordinator, manger. The product has standard login interface. by entering login details user forward to their dashboard so that they can perform their task by their role. Each user performs the individual task as their role is different. Here, in the admin dashboard, Admin can easily assign session, subject, student, and Assessments.

in student dashboard, the student can easily submit their claims with valid evidence and they have individual username and password which is assigned by the administration. However, the student can view their submitted claims details also can edit details if it is required.in addition, they will get notification based on their claim whether the claims is approved or rejected from EC Coordinator.

In EC Coordinator dashboard, Coordinator has only authorized to processes the Submitted claims and take an action base on solid evidence. However, EC coordinator gets a notification about student claim and can view the duration of the claim from the

moment student submit their claims. These claim process within 14 days while the user can view the claim details.

In EC Manager Dashboard, Manager can only view submitted claims, number of Approval claim and number of Rejected claim and not has the right to process the claims or take an action .however, the product has a feature to generate number of claims report in per faculty and can generate report based on number of students making claims with each faculty

Furthermore, system can automatically produce exception reports about without uploaded evidence and reports about claims without decision

The strength of the product:

The main strength of the product is that the product has successfully met all the requirements. Although, the product has some especial strength that is described below

➤ Secure:

The system is very secure As it is enterprise level software.each authorized user can log into the system by providing username and password. One user name can use only once a time. However, MD5 encryption algorithms are

used for encryption password so that hacker will not able to guess the password.

the system use session destroy.A session starts while user logs into the system and A session destroy while the user logs out from the system. Therefore the user will not able to browse the system until the user logs into the system. Security issues like- data validation check, File validation check, avoided SQL injection, secure session etc. are used for this system protection.

➤ **Responsive:**

The designing interface is fully responsive anyone can use the system from a different device like a desktop. Mobile, tablet etc.

➤ **Language:**

The designing interface has a multilanguage facility as a student who comes from the different country. Accessing content required to understand the meaning of the content. Therefore, it will help the different linguistic user to use the system more easily

➤ **Coherent:**

The designing interface is fully organized and coherent also designing dashboard clean and tidy. relevant data are put in this system. Also, data is

well structured. However, in claim page student can upload one or more evidence at a time

➤ **Easy to use:**

The designed interface is very easy to use as the user does not need deep knowledge to use the system. They can easily upload their claims also can get a notification about whether their claim is Approve or rejected.

➤ **Reliable:**

The system seems reliable as it generates a dynamic report about a number of claims, the number of claims approval, the number of decision has been made etc. also it gives accurate result about the report. Though the system has so many strength but there also some weakness there listed below

The weakness of the product:

- The application is Not 100% secured
- Report generation system has a limitation about filtering

Further Development:

As we built subsystem for the university of Greenwich so it is not possible to build more feature in this system within a short deadline. but it is possible to add more feature in this system as a further development .some of the further development are given below

- Would like to build the system more secure
- Student Attendance will be added so that coordinators will be able to take decision more easily
- Course and subject will be more informative

Evaluation of Team

All of my group members are excellent . in order to judge their quality of work I have created list evaluation item these are given below. Numbering range start 1-10 where 1 is lowest and 10 is highest

Evaluation Item	Antu Rozario	Md. Saidul Islam	<u>Provat Sutradhar</u>	Golam Rabbani
Participated in group meeting	10	10	10	10
Helped keep the group focused on the Task	10	10	10	10
Contributed useful ideas	9	7	6	8
Quality of work done	9	8	8	8
Punctuality	9	7	7	6

Self-evaluation

To implementing the web –based secure roles based system are instructed to follow agile, Therefore, we had to accomplish this system with group work. As we have four members in a group through, every member have to play an individual role to accomplish a different level of the task. As for a group member, my role for this project is testing. As a tester, I have tried my level best to contributed in this group in order to implement system successfully. Although my role was a tester but I have spread my knowledge the area of analysis of the system to cooperate the analyst by helping to Draw ERD design, the design of the system to cooperate the system designer by creating user story .however, cooperate the developer by suggesting that how security will be maintained throughout the system. Furthermore, I have attended all the group meeting. And fully committed toward my responsibility.

When the system become fully ready I have done the entire test successfully. Before the starting test, I have studied so much about enterprise web application testing and I tried my best to test the system more professional way.

As a tester main focus was to ensure all the functionality of the system. In order to efficiently I have made a test plan.so, first of all, I have check functionality of the system then I have completed validation, as well as others, the test like a usability test, unit test, acceptance test, cross browsing test etc,

And most importantly I have checked security to ensure the secure level of the system. As a result, the system is highly secured. However, some others test like responsive test is also completed to ensure the responsiveness of the system.

Finally, there is no bug found in this system, test log is made with successfully pass rate.

Lesson learned:

As a tester, I have learned so much from the testing part of the system. Like how to work with a team, how to communicate with a team member. Especially I have learned built the system by following an agile methodology.

As a tester, I had to study about testing related tools and method. I have introduced myself some of the automation testing tools that make more efficiency to my work. However, doing security testing I learned so much about internet security, how to protect the system from different attack like SQL injection, brute force password hacking etc. To performing testing I have some kinds of problem but I solve the problem gradually which make my problem-solving skill better.

And finally learned that team understanding can make better product within short deadline.

Conclusion:

Though to build up the system, it was a tough job but we have made it successfully at the end. To build up the system, scum methodology properly maintained. System fulfilled all of the given requirements and all the function working very smoothly. however, a team member was very active while built the system they accomplish their task perfectly. Team collaboration was too good that made the task easier for us

APPENDIX A: TESTING

Introduction:

Testing play vital role in a software project. A software run along with some specification and requirements. Developer required to verify the system requirements in order to ensure that developer fulfilled the requirement properly, also ensure no bug in the software and all the function of the system are working properly. There is different type testing produce for a different level of the test. A Test required to perform basis on the system. As our project built within a computer environment. therefore, it required

performing some testing according to the system purposes. Although there are so many types of testing to test a software

But Here, we will focus on some specific testing on the basis of our project these are given below

- Functional testing
- Unit testing
- Validation testing
- Usability testing
- Responsive testing
- Cross browser testing
- Security testing
- Crowd testing
- Database testing
- Acceptance testing
- Role base login testing

Functional testing:

Functional testing refers to check the functionality of the system. A system has so many functions for checking this functionality required to functionality testing. it allows without looking the software code every function of the system like- login, logout, data insert etc. function are working successfully without any bug.

Validation testing:

It is used to check all the functionality of the system is valid. It also ensure that all the input data is valid

Usability testing:

It is very important testing for the system as it refers to check system that how much usable for the user.

Responsive testing:

It is referred to check whether the system run with multiple devices wth different browser. It ensure the user satisfaction and its make big impact on the web application though, it is a non-functional testing,

Security Testing:

This is not a functional testing. But it is important and mandatory testing for the Enterprise level of the software application. It is used to check system security. However, it is ensured that only authorized users are login in the system. It is also ensure that unauthorized user cannot access the system without permission.

Database Testing:

It is referred to check data stored in the database correctly. However, it also ensures that data can be modified in the database like- update, delete

Cross-browser testing:

It used to check whether the system is running with a different browser. It is essential testing as it ensure customer satisfaction

Role –based testing:

It is used to check user role based access to the system, this test is essential for role based system

Crowd testing:

It is end user testing. This test used to define how end user use the system . it ensure the system usability also

APPENDIX B: TEST PLAN

Test Plan:

The test plan is an important aspect of implementing the test successfully. There are various software testing available in testing part .however in order to achieve better result required to make plan for the testing

Before starting the test I have made some list of criteria that going to check in this system. Test plan is described below

1. Functional testing

For the functional, I am going to check all the functionality of the system properly working or not. here is the list of functionality given below

- Login test
- Verify every active link

- Verify Dashboard
- Check admin can manage session
- Check admin can manage Assessments
- Check admin can manage Subject
- Check admin can manage Student
- Check student can submit one or more EC claims for any item of assessment
- Check student can upload one or more evidence
- Check Coordinator notification
- Check coordinator process the claims
- Verify students notification
- Check EC manager can view the claims
- Verify student view their claims
- Check claims reports
- Check the session
- Student profile view

2. Validation testing:

In this section, I'm going to check that data is valid taking valid information from the input .lists of validation testing is given below

- Login validation
- Manage session validation
- Manage subject validation
- Submitted claim validation

- Session date validation
- Upload file validation testing

3. Usability testing:

In this section will define how much usable of the system .to performing the test some criteria will be check that is given below –

- Drop down menu
- Checking spelling, font size, font type meaning full symbol
- Notification check
- Search bar
- Checklist and button with color of contrast
- Profile Images

4. Security testing:

In section will going to check the secure level of the system .to performing the test some criteria will be check. Which is given below

- Unauthorised access
- URL modification
- Encryption password
- SQL injection
- Brute force attack
- Malware upload

5. Role base secure testing:

Role base secure system is very important in this system as it user role plays a big role. here some criteria will be tested to check role base testing.

- Admin
- Student
- EC coordinator
- EC manaager

6.Responsive testing:

In this section will define the responsiveness of the system to performing the test some criteria will be tested which is given below

- Desktop view with 1024 pixels
- Laptop view with 786 pixels
- Mobile view with 320 and 360 pixels

7.Cross- browsing testing:

There are so many browsers available for browsing the internet. This testing required to check that the system run properly in all browsing .following lists will be tested for cross-browsing

- Mozilla Firefox
- Google chrome
- Internet Explorer

8. Database testing:

Database plays a big role in any successful system. Some of the criteria will be tested to ensure the database is working properly. Here lists is given below

- Data insert
- Data update
- Date delete
- Data fetch

Crowd testing:

In this section, system will be tested by the end user

Implementation of the testing:

Functionality testing:

It is very important testing for the system. Without looking internal code I will test each of function that system has. implementation of functional testing are given below

- Login test
- Verify every active link
- Verify Dashboard
- Check admin can manage session
- Check admin can manage Assessments
- Check admin can manage Subject
- Check admin can manage Student
- Check student can submit one or more EC claims for any item of assessment
- Check student can upload one or more evidence
- Check Coordinator notification
- Check coordinator process the claims

- Verify students notification
- Check EC manager can view the claims
- Verify student view their claims
- Check claims reports
- Student can view their profile

Login test:

Test Number	01
Test Type	Functionality
Test Name	Login
Purpose of the Test	To check that system can handle log in successfully
Process of The Test	By login in the system with all type of users.
Test Result	The system Successfully able to handle login function.

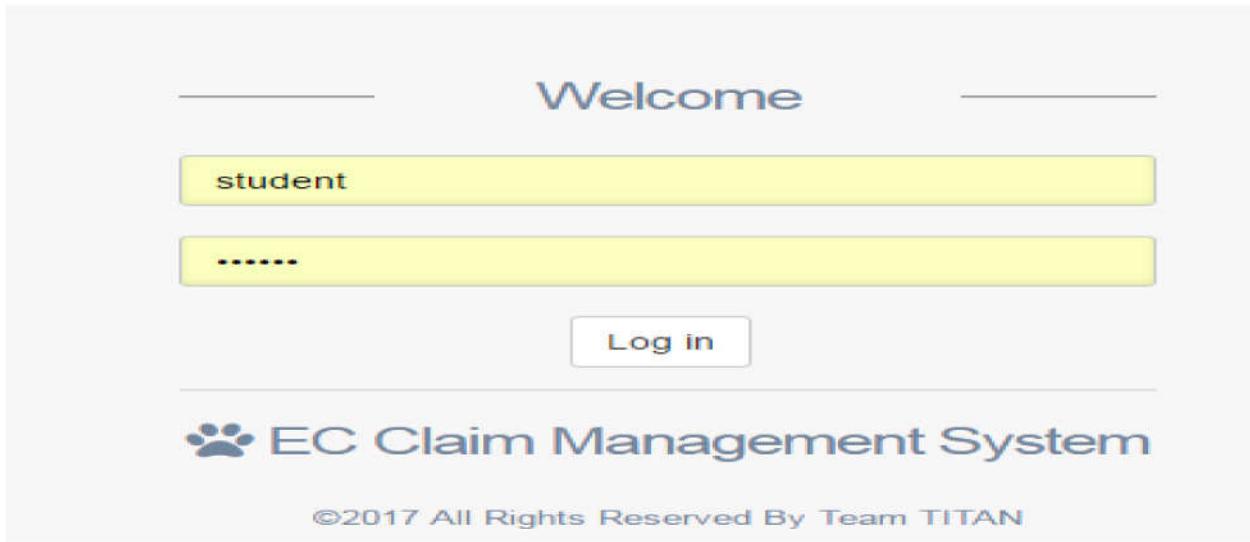


Figure 1 show Successful login function

Verify every active link:

Test Number	02
Test Type	Functionality
Test Name	Verify active link
Purpose of the Test	To check all the link of a system are working successfully
Process of The Test	By checking all the link individually of the system with
Test Result	All the link of the system are working properly

Verify Dashboard:

Test Number	03
Test Type	Functionality
Test Name	Verify Dashboard
Purpose of the Test	To ensure that Dashboard is showing the information correctly
Process of The Test	After login then checking the interface
Test Result	All of the information in dashboard showing correctly like –manage the session, manage a subject, report about the number of users etc.

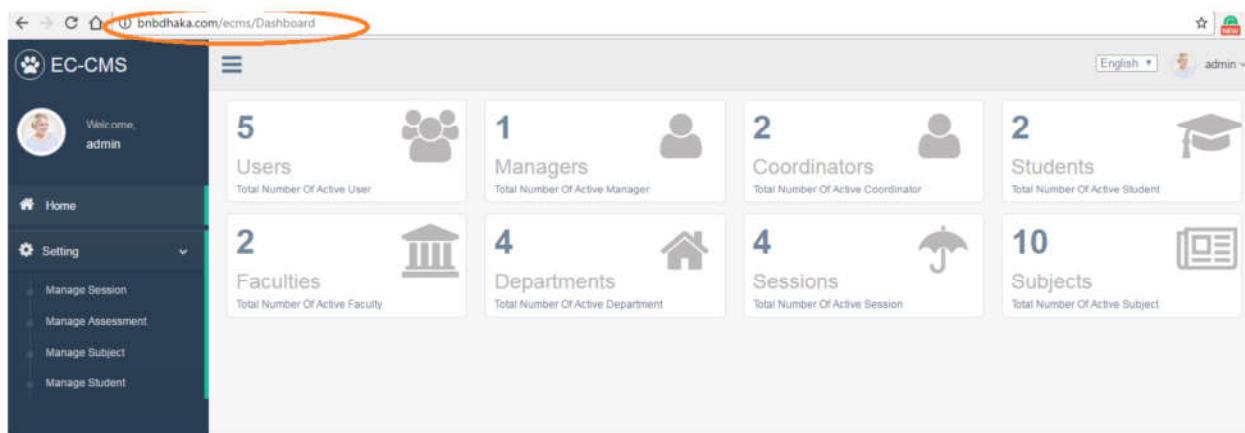


Figure 2 show dashboard with link

Manage session

Test Number	04
Test Type	Functionality
Test Name	Manage session

Purpose of the Test	To ensure that admin can manage the session properly
Process of The Test	After login then add new session
Test Result	Add new session are working successfully

Serial No	Title	Start Date	End Date	Closing Date	Action
1	test	02-03-2017	16-03-2017	01-04-2017	Edit Delete Assign Subject
2	Summer	01-03-2017	15-04-2017	30-04-2017	Edit Delete Assign Subject
3	Winter	01-12-2017	16-01-2018	15-02-2018	Edit Delete Assign Subject
4	Spring	01-04-2017	09-08-2017	20-09-2017	Edit Delete Assign Subject

Figure 3 Admin successfully manage the session

Manage Assessments

Test Number	05
Test Type	Functionality
Test Name	Manage Assessments
Purpose of the Test	To ensure that admin can manage the Assessments of the subject properly
Process of The Test	After login then add new Assessment
Test Result	Add new Assessments are working successfully

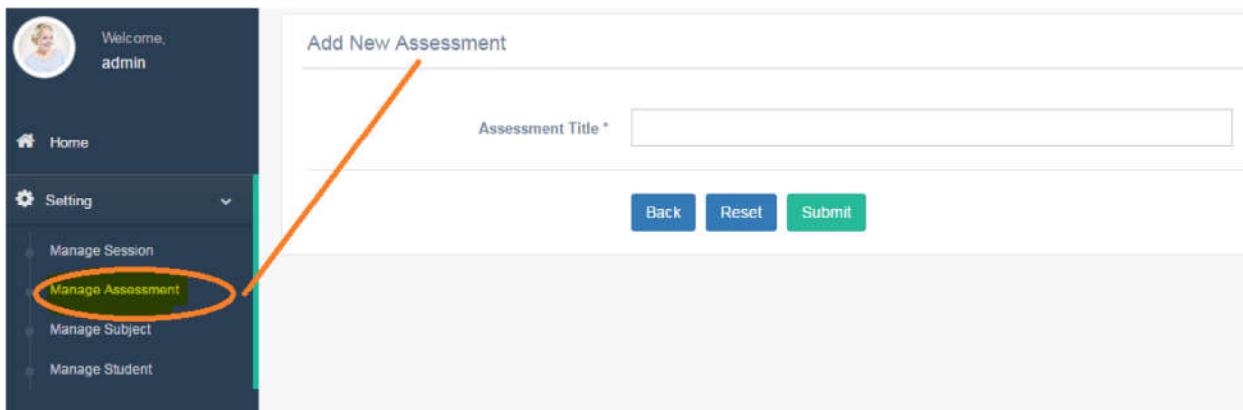


Figure 4 show admin successfully manage the assessment

Manage Subject

Test Number	06
Test Type	Functionality
Test Name	Manage Subject
Purpose of the Test	To ensure that admin can manage subject properly
Process of The Test	After login then add new Subject
Test Result	Add new Subjects are working successfully

Figure 5 show admin successfully manage the subject

Manage student

Test Number	07
Test Type	Functionality
Test Name	Manage student
Purpose of the Test	To ensure that admin can manage the student properly
Process of The Test	After login then manage the student by given them username and password
Test Result	Manage student function are working successfully

Welcome,
admin

Home

Setting

Edit Student Information

Name * Antu Rozario

User Name * student

Password *****

Leave it, If you do not want to set new password.

Back Reset Submit

Figure 6 show admin successfully able to give the username and password

Claim submission

Test Number	08
Test Type	Functionality
Test Name	Claim submission
Purpose of the Test	To ensure that student can submit one or more claims properly
Process of The Test	After login then add new claims
Test Result	Submission claims function are working successfully

Figure 7 show student can claim

Upload evidence

Test Number	09
Test Type	Functionality
Test Name	Upload evidence
Purpose of the Test	To ensure that student can upload one or more evidence properly
Process of The Test	Upload one or more evidence in claim submission form
Test Result	uploading function are working successfully

Evidence 17799968_387885451593486_8015932914150382029_n.jpg  

gif|jpg|png|pdf only and max size 1024kb

Evidence 17834825_671267686331427_3292537711372380438_o.jpg  

gif|jpg|png|pdf only and max size 1024kb

Evidence 17807670_1905743679640664_772531268687518721_o.jpg  

gif|jpg|png|pdf only and max size 1024kb

Figure 8 show successfully uploaded one or more claim by clicking add button

Coordinator notification check

Test Number	10
Test Type	Functionality
Test Name	Verify coordinator notification
Purpose of the Test	To ensure that Coordinator get notification from the student claim
Process of The Test	By checking coordinator profile
Test Result	Verify notification Function are working successfully

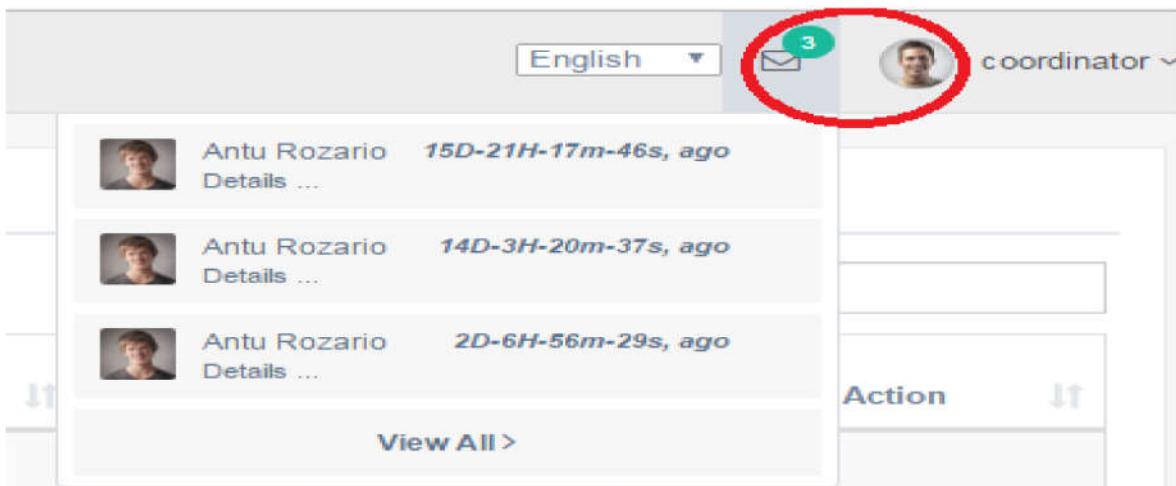


Figure 9 show coordinator get claim notification

Coordinator process the claims

Test Number	11
Test Type	Functionality
Test Name	Coordinator process the claims
Purpose of the Test	To ensure that Coordinator processes the claims
Process of The Test	By taking action against the student claim
Test Result	Claim process Function are working successfully

Action * **Approve**

Comment * This is last time that we approve | 

Back **Reset** **Submit**

Figure 10 show coordinator able to process the claim

Verify student notification

Test Number	12
Test Type	Functionality
Test Name	Verify notification
Purpose of the Test	To ensure that student get notification from EC coordinator
Process of The Test	By checking student profile
Test Result	Verify notification Function are working successfully

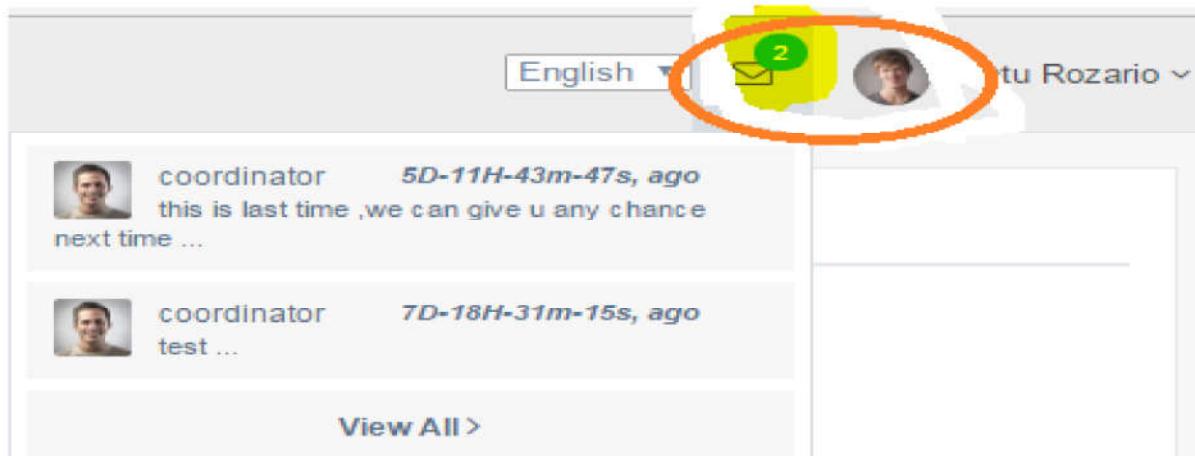


Figure 11 show student get notification from EC coordinator

Check EC manager can view the Claims

Test Number	13
Test Type	Functionality
Test Name	EC Manager view the claims
Purpose of the Test	To ensure that EC Manager view the claims properly
Process of The Test	By viewing submitted claim
Test Result	Manager claim view Function are working successfully

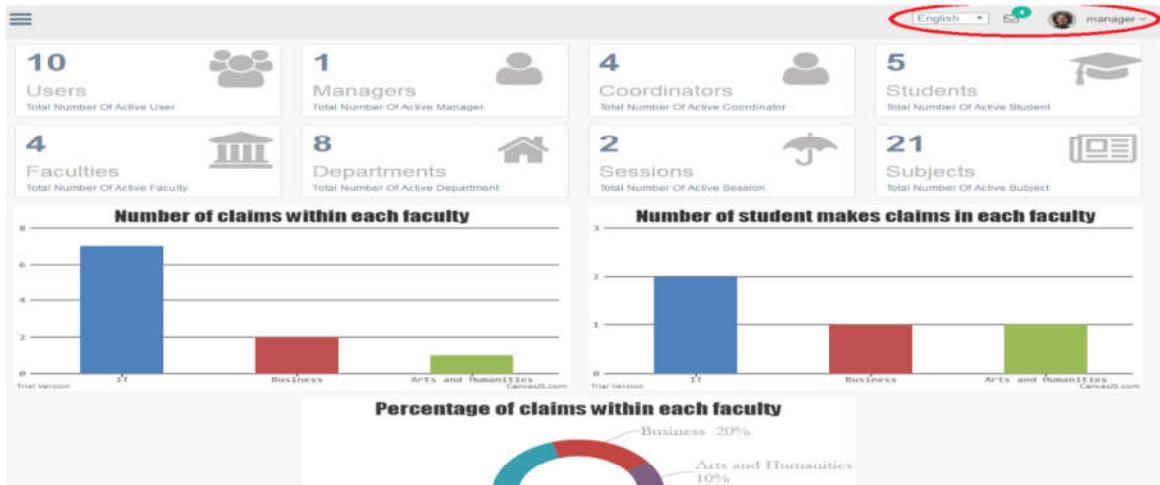


Figure 12 Show EC manager can view the claims details

Student view their claims

Test Number	14
Test Type	Functionality
Test Name	Students view their claim
Purpose of the Test	To ensure that Students view the claims properly
Process of The Test	By clicking submitted claims
Test Result	Student Claim view Function are working successfully

Serial No	Subject	Assessment	Reason	Submitted Date	Have Evidence	Status	Action
1	EWSO	Assignment	Financial	01-04-2017	Yes	Approved	Details
2	EWSO	Assignment	Sick	27-03-2017	Yes	Approved	Details
3	EWSO	Class Test	Sick	27-03-2017	Yes	Rejected	Details
4	IRA	Assignment	Financial	11-03-2017	No	In Progress	Details

Figure 13 show student can view their claims

Check claims report

Test Number	15
Test Type	Functionality
Test Name	Check claims report
Purpose of the Test	To ensure that Dashboard displaying number of claims report
Process of The Test	After login then check the Dashboard for report
Test Result	Claims report Function are working successfully



Figure 14 show claim report

Check session is closed

Test Number	16
Test Type	Functionality
Test Name	Session close
Purpose of the Test	To ensure session can't take any claim
Process of The Test	By uploading claim
Test Result	System successfully show the result

ADD New Claim

Subject *

Sorry! SORRY !!.. The session is closed, We do not accept and claim after the closing date.

Figure 15 when session is closed, cannot take any more claim

Check student profile:

Test Number	17
Test Type	Functionality
Test Name	Profile view
Purpose of the Test	To check that student can view their profile
Process of The Test	By clicking profile.
Test Result	The system Successfully able view their profile information

My Profile



Antu Rozario

Department	BIT
Faculty	IT
Subjects	Enterprise Web Application Development Interaction Design Information Requirement Analysis Final Project Database

Figure 16 show student profile information

Validation testing:

In this section following lists will be tested to ensure data validation

- Login validation
- Manage session validation
- Manage subject validation
- Manage assessment validation
- Submitted claim validation
- Session date validation
- Upload file validation testing

Login validation:

Test Number	01
Test Type	Validation
Test Name	Check login validity
Purpose of the Test	To ensure that system does not accept wrong username and password
Process of The Test	By login in the system with a blank field.
Test Result	The system denied the wrong field.

The screenshot shows a login form on a website. At the top, there is a header with a back arrow, the text 'EC-CMS', and the URL 'bnbdhaka.com'. Below the header is a 'Welcome' message. The form has two fields: 'Username' and 'Password'. A large orange oval highlights the 'Password' field and the error message 'Please fill in this field.' which is displayed in a box above the 'Log in' button. The 'Log in' button is located below the password field.

Figure 17 show fill in this field, blank field does not allow to access

Manage session Validation

Test Number	02
Test Type	Manage session Validation
Test Name	Check Session validity
Purpose of the Test	To ensure that system does not accept any blank field
Process of The Test	By keeping blank field in the session form
Test Result	Alert message will show to fill the blank field

The screenshot shows a web form for session details. It includes fields for Session Title, Start Date, End Date, and Closing Date, each with a date picker icon. Below the form are three buttons: Back, Reset, and Submit. A red arrow points from the bottom right towards a red-bordered warning message box. The message box contains the text "Warning Alert" and "The Session Title field is required." The entire form is enclosed in a light gray border.

Figure 18 show that when filed is blank warning message is pop up

Manage Subject Validation:

Test Number	03
Test Type	Manage Subject Validation
Test Name	Check Session validity
Purpose of the Test	To ensure that system does not accept any blank field
Process of The Test	By keeping blank field in the Subject
Test Result	Alert message will show to fill the blank field

Subject Title *

Department * BBA

Assessments *

- Class test
- Assignment
- Project
- Final Examination
- Attendance

Back **Reset** **Submit**

The Subject Title field is required.

Figure 19 show when filed is blank, warning message will pop up that field is required

Manage Assessments Validation:

Test Number	04
Test Type	Manage Assessments Validation
Test Name	Check Session validity
Purpose of the Test	To ensure that system does not accept any blank field
Process of The Test	By keeping blank field in the Subject
Test Result	Alert message will show to fill the blank field

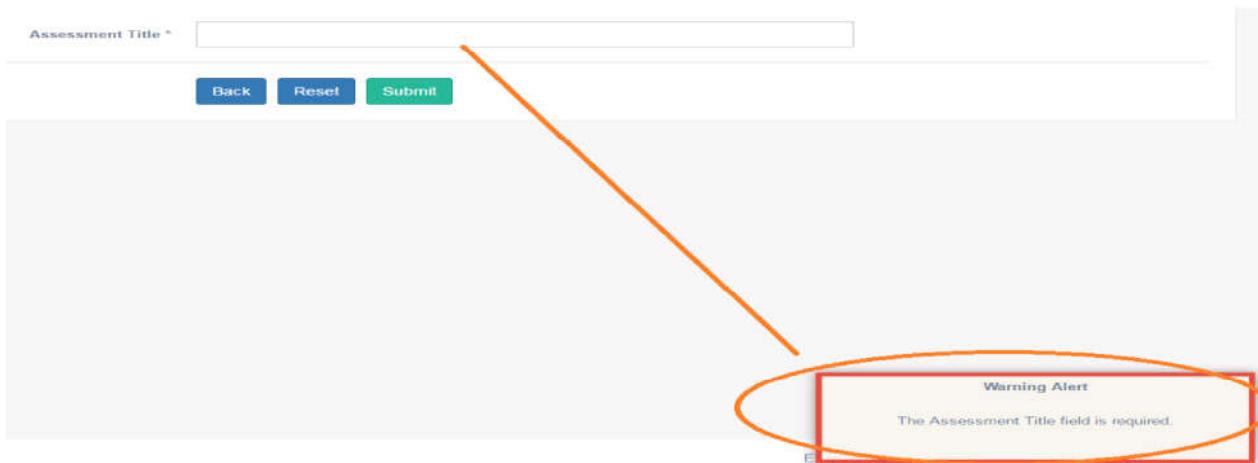


Figure 20 when assessment field is blank it show warning notification to fill up field

Submitted claim Validation

Test Number	05
Test Type	Submitted claim Validation
Test Name	Check Claim validity
Purpose of the Test	To ensure that system does not accept any blank field
Process of The Test	By keeping blank field in the claim
Test Result	Alert message will show to fill the blank field

Action *

Comment *

Warning Alert

The Action field is required.

The Comment field is required.

Back **Reset** **Submit**

Figure 21 show claim cannot process with blank field, warning message pop up

Upload evidence Validation

Test Number	06
Test Type	Upload evidence Validation
Test Name	Check evidence validity
Purpose of the Test	To ensure that system does not accept without less than 1024 kb size file
Process of The Test	By submitted big file in the claim
Test Result	Claim cannot submit

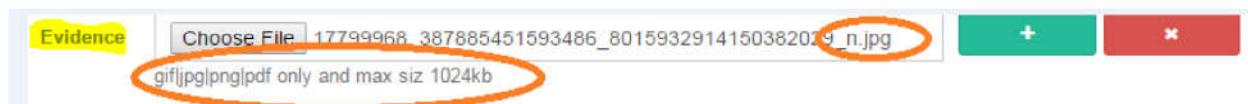


Figure 22 show file can upload max 1024 kb

Test Number	07
Test Type	Date session Validation
Test Name	Check date validity
Purpose of the Test	To ensure that system does not accept starting date smaller than End date
Process of The Test	By entering date starting date smaller than end date
Test Result	System successfully denied

Session Title *

Start Date *

End Date *

Closing Date *

Warning Alert
 Please check your dates

Figure 23 it pop up warning message to check valid date

Security testing:

In this section following lists will be tested to the system security

- Unauthorised access
- URL modification
- Encryption password
- SQL injection
- Malware upload

Unauthorized Access:

Test Number	01
Test Type	Security
Test Name	unauthorized access
Purpose of the Test	To ensure valid user of the system
Test process	By entering wrong username or Password
Test result	System successfully detect the invalid access

Welcome

EC Claim Management System

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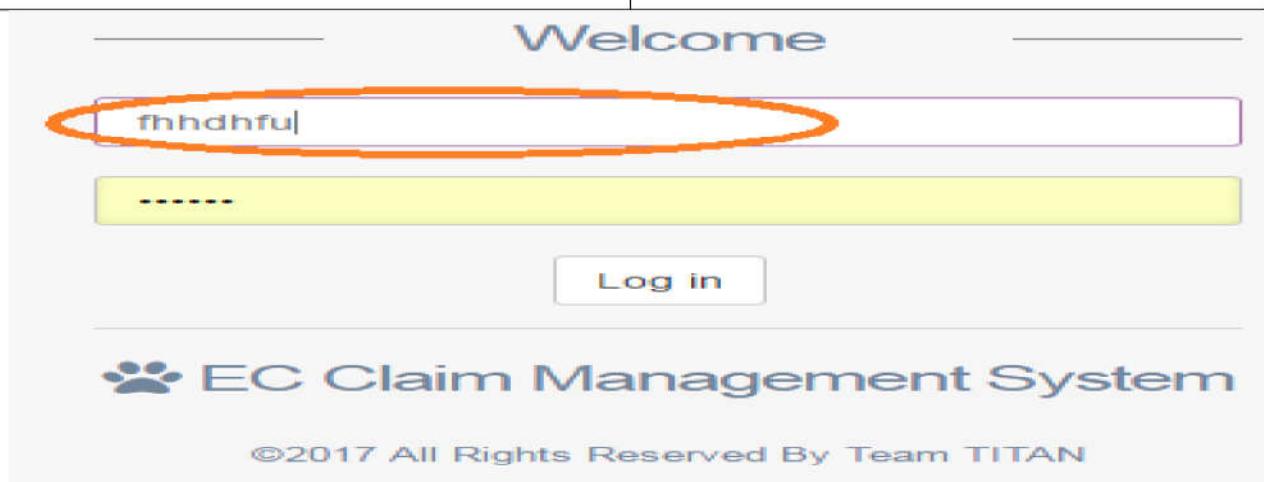


Figure 24 show warning alert for wrong username and password

URL Manipulation

Test Number	02
Test Type	Security
Test Name	URL manipulation
Purpose of the Test	To ensure that unauthorized can get access without login
Test process	By entering URL that cannot have authentication to hit the link
Test result	System Successfully redirect the URL

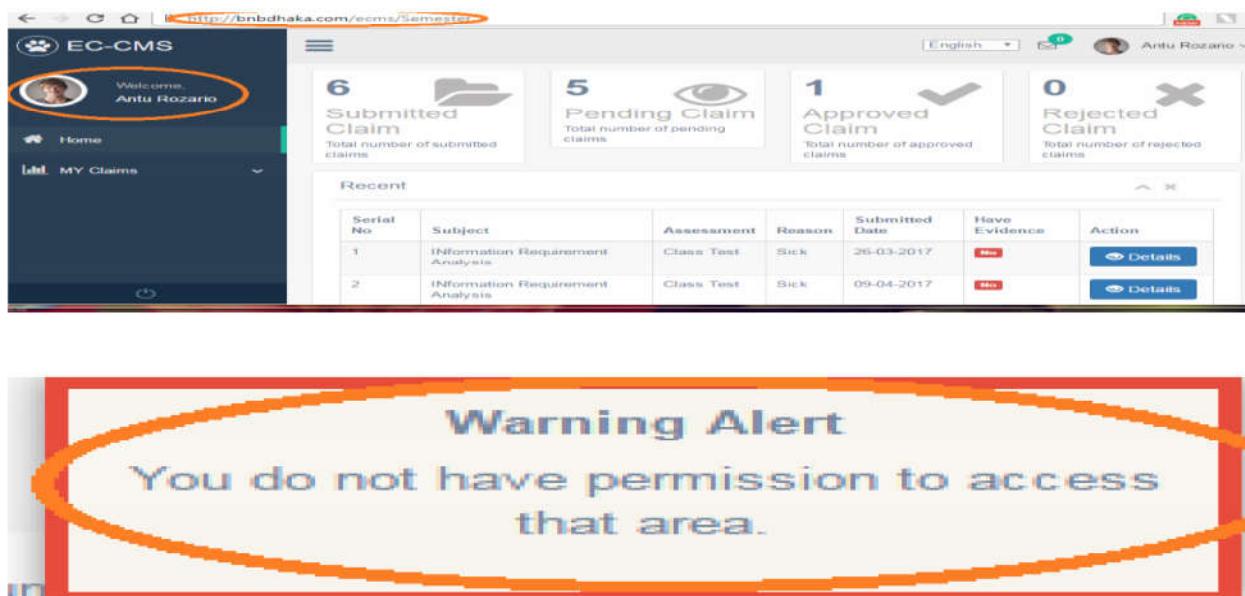


Figure 25 Student cannot access the admin dashboard by using admin link

Password Hashing

Test Number	03
Test Type	Security
Test Name	Password Hashing
Purpose of the Test	To ensure that password is encrypted properly or not
Test process	By Checking the Database
Test result	Password is encrypted properly by MD5 encryption algorithm

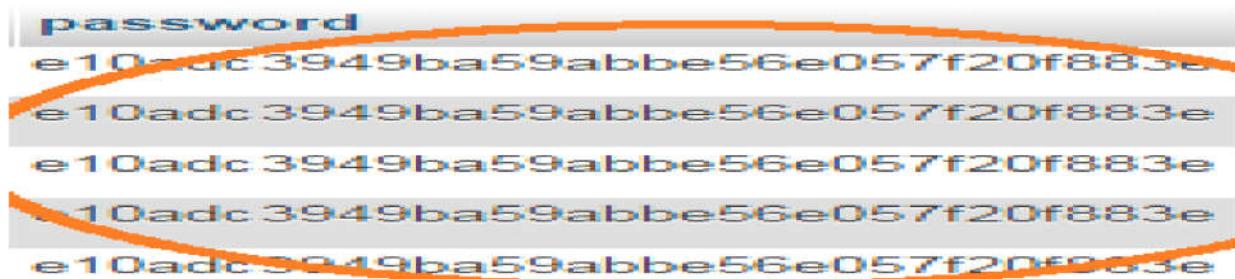


Figure 26 show encrypted password

SQL Injection

Test Number	04
Test Type	Security
Test Name	SQL Injection
Purpose of the Test	To ensure the security of the system from

	preventing the SQL Injection
Test process	Using Havij process to test a SQL injection
Test result	System successfully able to denied the SQL Injection

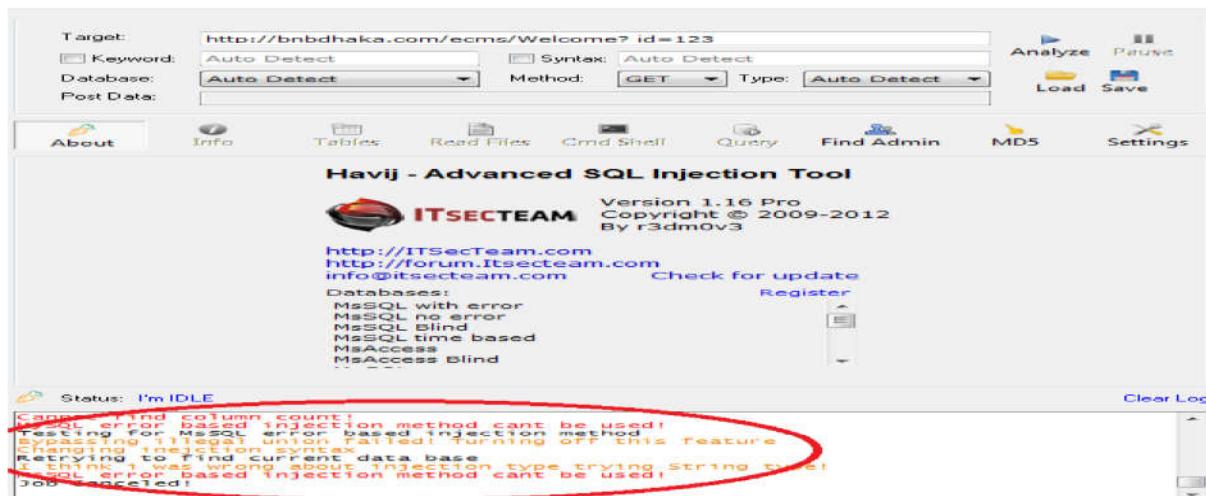


Figure 27 SQL injection using Havij

Brute force attack testing

Test Number	05
Test Type	Security
Test Name	Brute force attack
Purpose of the Test	To ensure system cracking password by brute force attack

Test process	Using Havij process to test a brute force attack
Test result	System successfully able to denied the Brute force

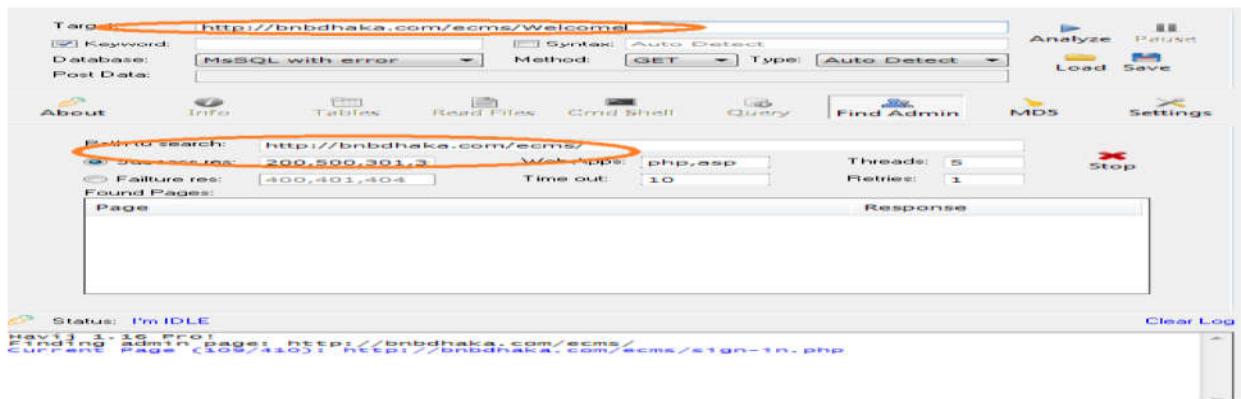


Figure 28 show brute force attack to the system

Usability Testing:

in this section following list will be performing to test system usability

- Drop down menu
- Checking spelling, font size, font type meaning full symbol
- Notification check
- Search bar
- Checklist and button with color of contrast

Drop down menu:

Test Number	01
Test Type	Usability
Test Name	Checking drop down menu
Purpose of the Test	To verify the drop down menu
Process of The Test	By clicking the admin setting in the system.
Test Result	There no problem in drop down menu

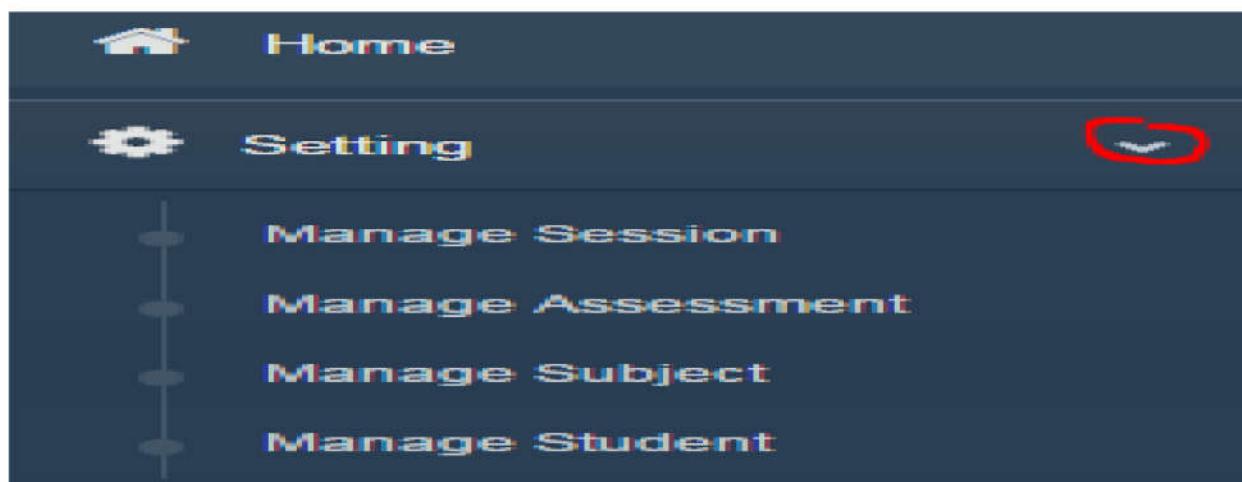


Figure 29 show drop down menu by clicking setting

Checking spelling, font size, font type, meaningful icon

Test Number	02
Test Type	Usability

Test Name	Checking spelling, font size, font type, meaning full icon
Purpose of the Test	To verify meaningful symbol, font size, font type are set up properly
Process of The Test	By checking the whole system.
Test Result	There is no problem in font size, font type icon etc.



Figure 30 proper font size, font type are used

Checking notification

Test Number	03
Test Type	Usability
Test Name	Checking notification
Purpose of the Test	To verify system can produce notification

	easily
Process of The Test	By checking notification
Test Result	System generate notification successfully

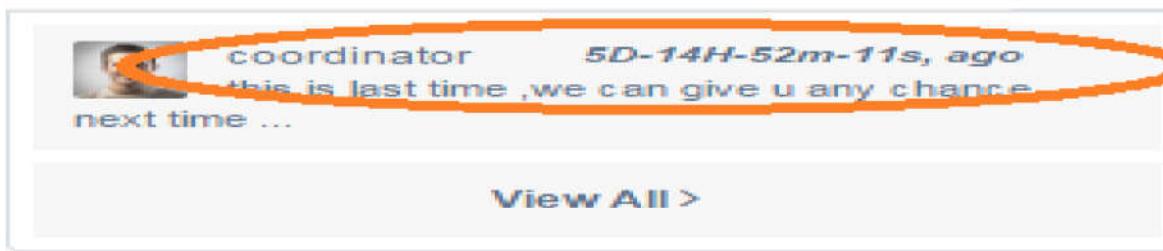


Figure 31 show system generate notification with time that makes the system more usable

Search bar

Test Number	04
Test Type	Usability
Test Name	Checking search bar
Purpose of the Test	To verify search bar can fetch the result easily
Process of The Test	By checking search bar
Test Result	Searching fetch the result successfully

Show 10 entries

Serial No	Subject	Assessment	Reason	Submitted Date	Have Evidence	Status	Action
5	Enterprise Web Application Development	Assignment	Financial	10-04-2017	Yes	Approved	

Figure 32 show searching bar to find information more easily.

Checklist and button with color of contrast

Test Number	05
Test Type	Usability
Test Name	Checklist and button with color of contrast
Purpose of the Test	To verify checklist and button are working properly
Process of The Test	By checking the whole system
Test Result	There no problem with checklist and button

Assessments *

- Class Test
- Assignment
- Project
- Final Examination
- Exam + Assignment
- Assignment

Back
Reset
Submit

Figure 33 show checklists and button with perfect color of combination

Verify user images

Test Number	06
Test Type	Usability
Test Name	User role with image
Purpose of the Test	To verify images are perfectly set up
Process of The Test	By checking the whole system
Test Result	User images are set up perfectly

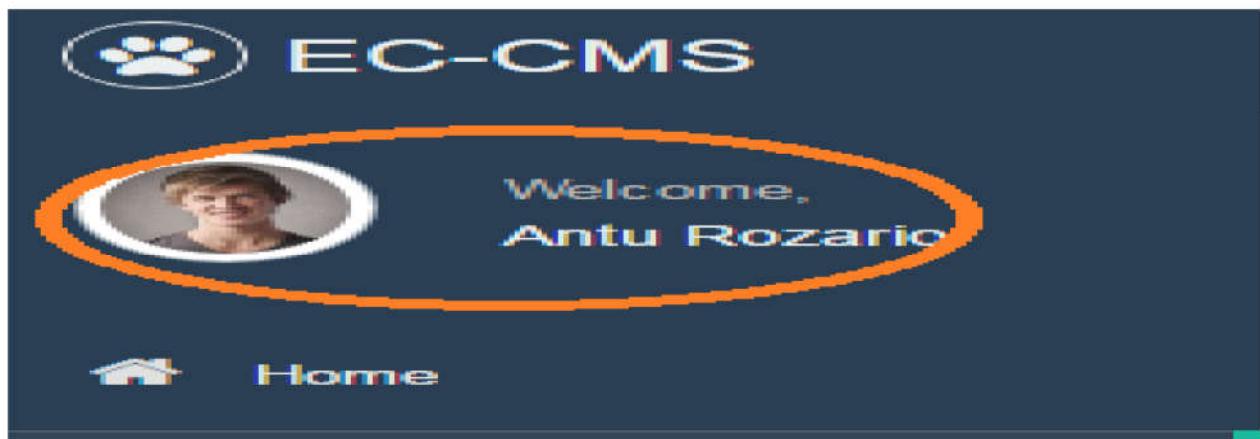


Figure 34 show user profile picture that makes the system more usable

Role-based secure system testing:

This section will follow some criteria to check one user cannot perform another user task

- Check admin dashboard link
- check student dashboard link
- check Coordinator dashboard link
- check manager dashboard link

Admin dashboard link

Test Number	01
Test Type	Role based security
Test Name	Student cannot access the admin dashboard
Purpose of the Test	To verify link is proper to secure with specific user
Process of The Test	By manipulating the URL
Test Result	It redirect the previous page

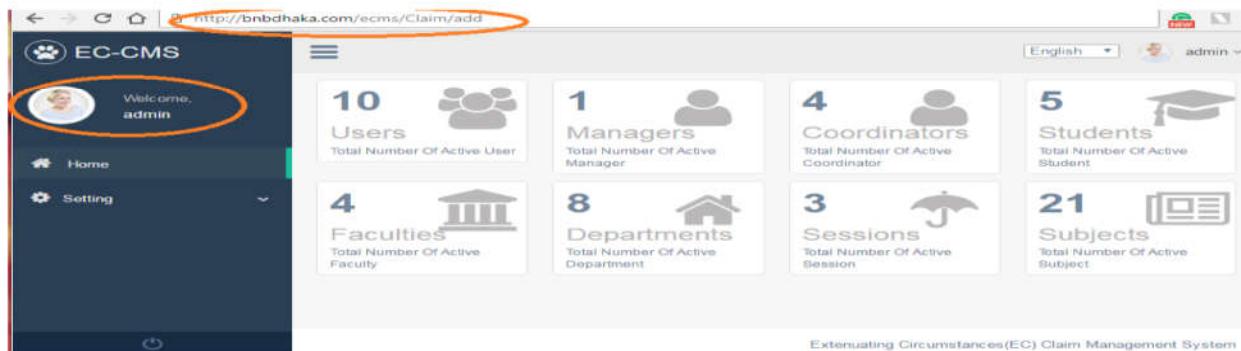


Figure 35 show warning alert that student don't have permission to access admin dashboard

Student dashboard

Test Number	02
Test Type	Role based security
Test Name	admin cannot access the student dashboard
Purpose of the Test	To verify link is proper to secure with specific user
Process of The Test	By manipulating the URL
Test Result	It redirect the previous page

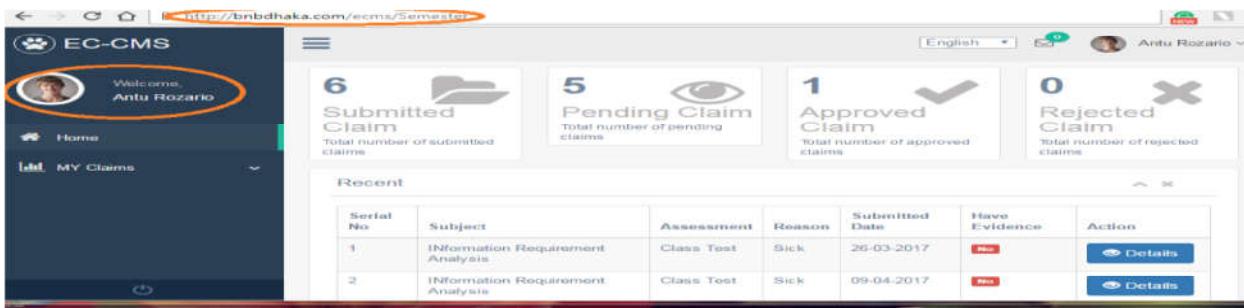


Figure 36 show warning that admin doesn't have permission to access student dashboard

Coordinator dashboard

Test Number	03
Test Type	Role based security
Test Name	Student cannot access the coordinator dashboard

Purpose of the Test	To verify link is proper to secure with specific user
Process of The Test	By manipulating the URL
Test Result	It redirect the previous page

The screenshot shows a web browser window with the URL <http://bnbdhaka.com/ecms/Claim/add>. The address bar and the URL are circled in orange. On the left, a sidebar shows a user profile picture (circled in orange) and the text "Welcome, coordinator". The main dashboard area displays four cards: "Pending Claim" (3), "Claim In Process" (3), "Approved Claim" (1), and "Rejected Claim" (0). Below these cards, a section titled "Pending Claims" shows a message: "SORRY !!.. No data found." A red box highlights the "Warning Alert" message at the bottom of the page: "You do not have permission to access that area."

Figure 37 show student does not have any permission to access coordinator dashboard

Manager dashboard:

Test Number	04
Test Type	Role base security
Test Name	Coordinator cannot access the manager dashboard
Purpose of the Test	To verify link is proper to secure with specific user
Process of The Test	By manipulating the URL
Test Result	It redirect the previous page

The screenshot shows a web browser displaying the EC-CMS Manager dashboard at the URL http://bnbdhaka.com/ecms/Claims_by_faculty. The dashboard features a sidebar with a user profile picture and the text "Welcome, manager". The main area contains several cards with statistics: 10 Users, 1 Managers, 4 Coordinators, 5 Students, 4 Faculties, 8 Departments, 3 Sessions, and 21 Subjects. Below these are two charts: "Number of claims within each faculty" and "Number of student makes claims in each faculty". A prominent red box highlights a "Warning Alert" message: "You do not have permission to access that area." The URL in the address bar and the "manager" text in the sidebar are also circled in red.

Figure 38 show that coordinator does not have any permission to access manager dashboard

Responsive testing:

In this section following criteria will be tested to check the system responsiveness.

- Desktop view with 1024 pixels
- Laptop view with 786 pixels
- Mobile view with 320 and 360 pixels

Mobile view:

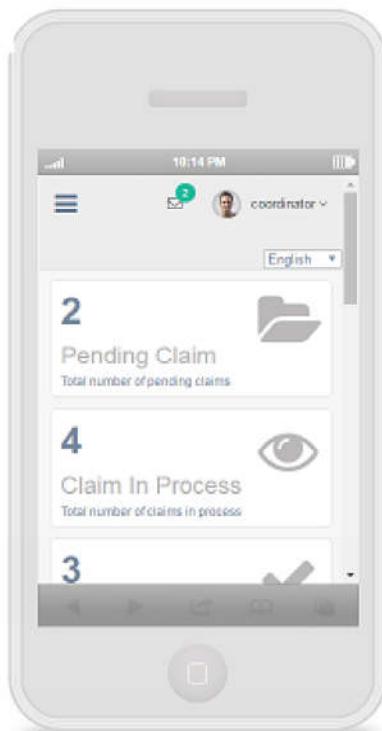


Figure 39 claim page mobile view from I phone

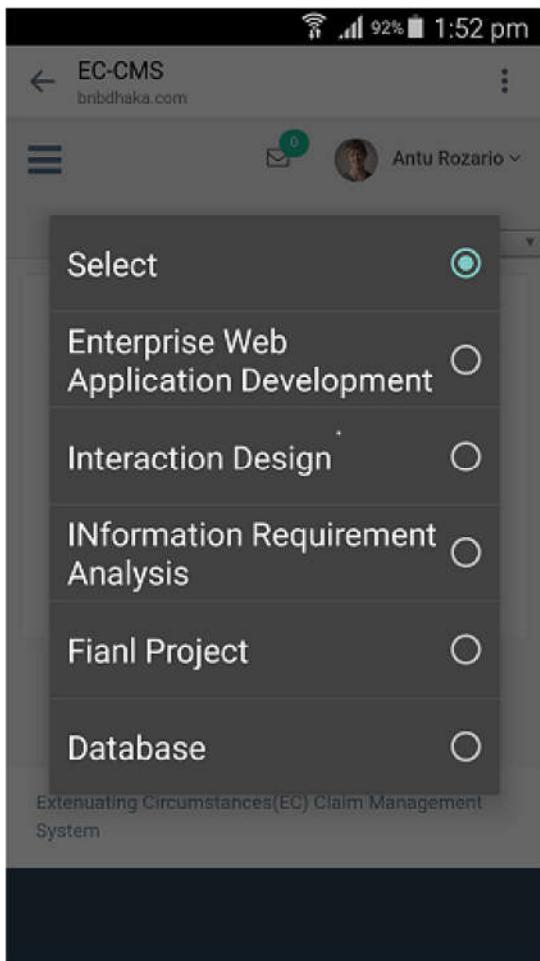


Figure 40 student claim selection view from Samsung

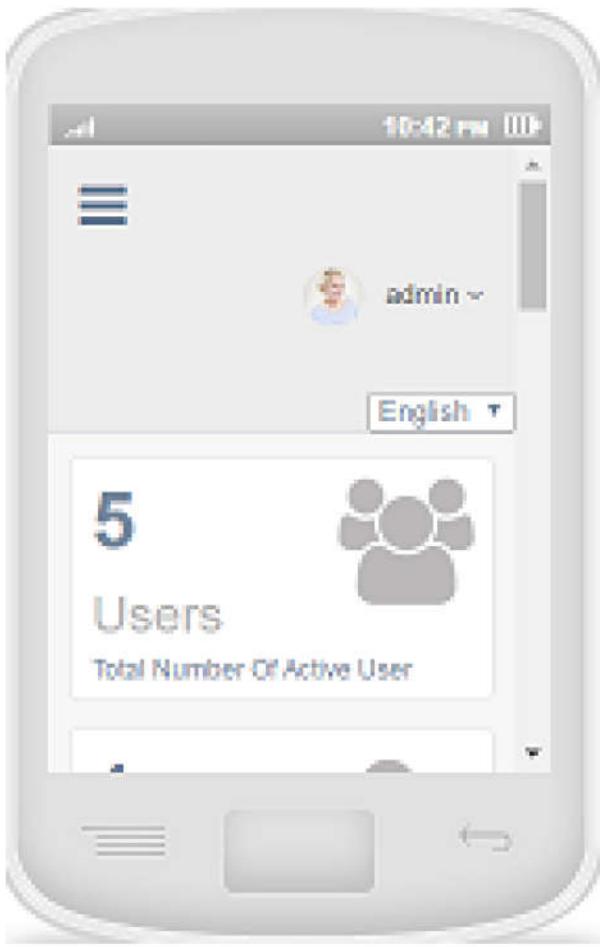


Figure 41 mobile with 320 pixel

Desktop view:

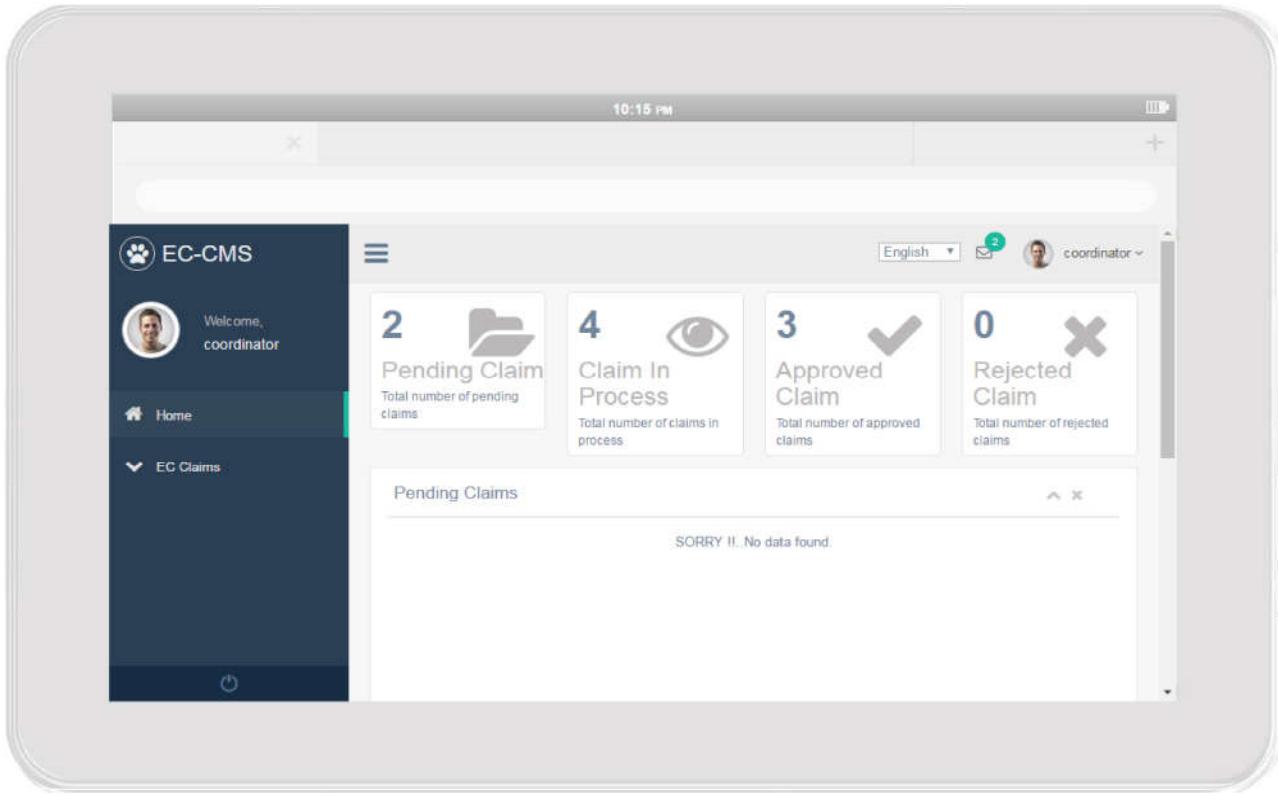


Figure 42 coordinator dashboard with 1024 pixel

Laptop view:

The screenshot shows the EC-CMS Admin Dashboard. On the left is a dark sidebar with a user icon and the text "Welcome, admin". Below it are "Home" and "Setting" options. The main area has a header with a back button, forward button, refresh button, and a URL bar showing "bmdbdhaka.com/ecms/Dashboard". The top right corner shows language ("English") and user ("admin"). The dashboard features a grid of eight cards with icons and data: 10 Users (Total Number Of Active User), 1 Managers (Total Number Of Active Manager), 4 Coordinators (Total Number Of Active Coordinator), 5 Students (Total Number Of Active Student), 4 Faculties (Total Number Of Active Faculty), 8 Departments (Total Number Of Active Department), 2 Sessions (Total Number Of Active Session), and 21 Subjects (Total Number Of Active Subject). At the bottom right is the text "Extenuating Circumstances(EC) Claim Management System".

Figure 43 laptop view from admin dashboard

The screenshot shows the EC coordinator dashboard. The left sidebar is identical to the admin dashboard, showing "Welcome, coordinator" and "Home" and "EC Claims" options. The main area has a header with a back button, forward button, refresh button, and a URL bar showing "bmdbdhaka.com/ecms/Dashboard". The top right corner shows language ("English") and user ("coordinator"). The dashboard features a grid of four cards: 2 Pending Claim (Total number of pending claims), 4 Claim In Process (Total number of claims in process), 1 Approved Claim (Total number of approved claims), and 0 Rejected Claim (Total number of rejected claims). Below these cards is a section titled "Pending Claims Last 7day" with the message "SORRY H.. No data found.". At the bottom is a section titled "In Process claims Last 7day" with a table:

Serial No	Subject	Assessment	Reason	Submitted Date	Have Evidence	Action
1	Enterprise Web Application Development	Attendance	Sick	10-04-2017		
2	Basic Electronics	Class Test	Sick	10-04-2017		
3	Information Requirement Analysis	Class Test	Sick	09-04-2017		

Figure 44 EC coordinator dashboard from laptop view

Cross-browsing testing:

There are so many browsers available for browsing the internet. here, I have used three most popular browser to test. following browser will be tested to check browser compatibility. These are given below

- Mozilla Firefox
- Google chrome
- Internet Explorer

Mozilla Firefox view:

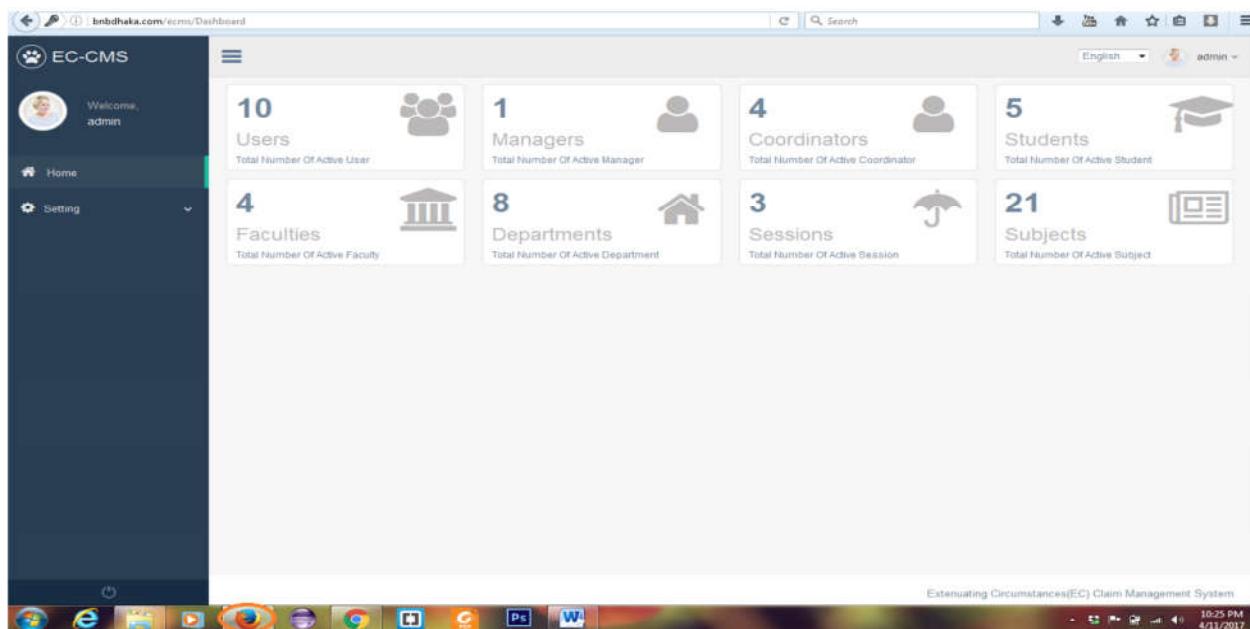


Figure 45 admin dashboard view from the Mozilla firefox

Google chrome:

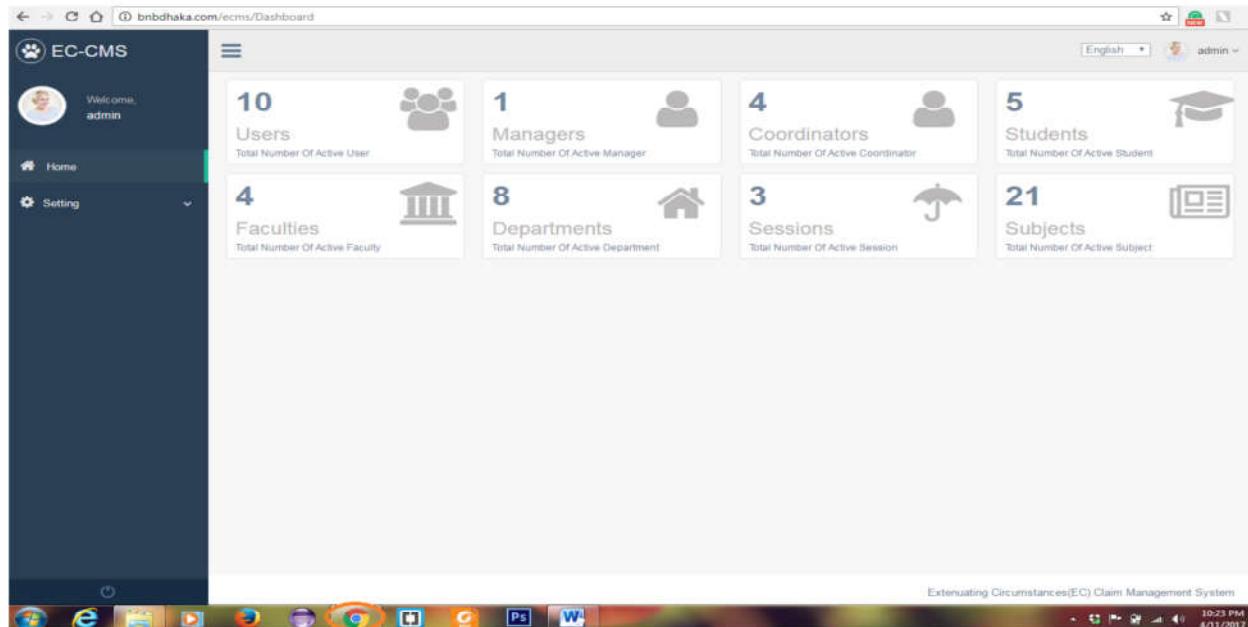


Figure 46 show admin view from google chrome

Internet Explorer:

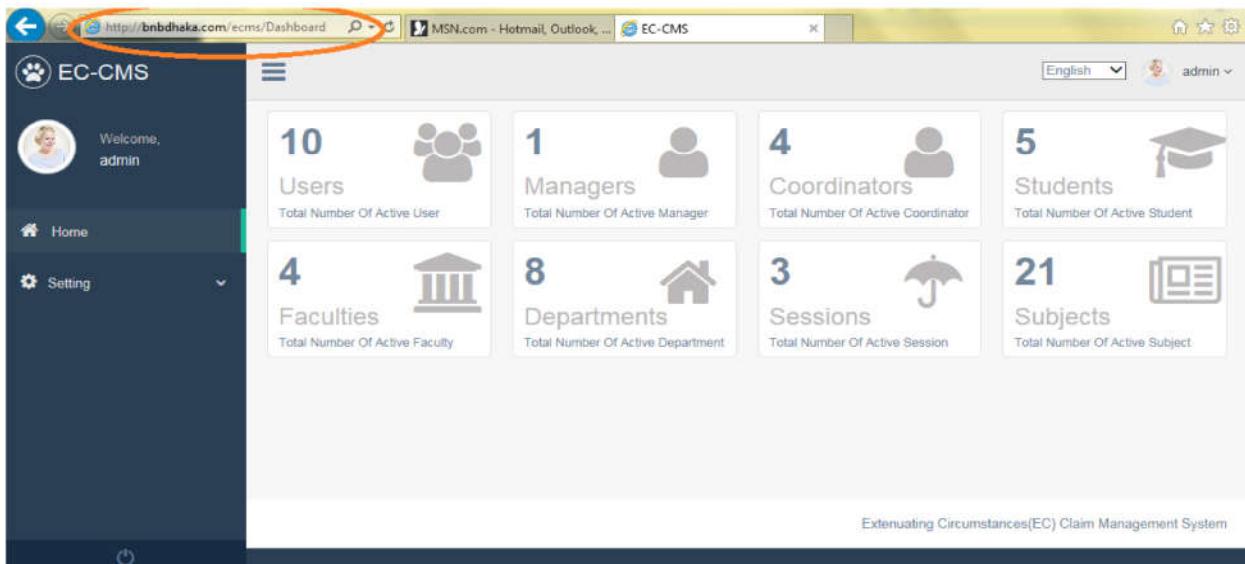


Figure 47 show Dashboard view from Internet Explorer

Database testing:

Database one of the most important testing. It allows the system to insert, update, delete and fetching data from the database. In this section following lists will be tested to check database

- Data insertion
- Data update
- Data delete
- Data fetch:

Data insertion:

Session List						Add New
Serial No	Title	Start Date	End Date	Closing Date	Action	
1	Winter	01-01-2018	15-06-2018	30-06-2018	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	
2	Summer	01-07-2017	15-12-2017	31-12-2017	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	
3	Spring	30-03-2017	19-05-2017	23-06-2017	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	
4	Spring	19-04-2017	19-05-2017	16-06-2017	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	

Showing 1 to 4 of 4 entries

Success A
OK !!. Data successfully recorded.

Figure 48 show data successfully recorded

Data update:

Session List						Add New
Serial No	Title	Start Date	End Date	Closing Date	Action	
1	Spring	01-01-2018	15-06-2018	30-06-2018	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	
2	Summer	01-07-2017	15-12-2017	31-12-2017	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	
3	Spring	30-03-2017	19-05-2017	23-06-2017	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	
4	Spring	19-04-2017	19-05-2017	16-06-2017	<button>Edit</button> <button>Delete</button> <button>Assign Subject</button>	

Showing 1 to 4 of 4 entries

Success A
OK !!. Data successfully Updated.

Figure 49 show data successfully updated

Data deletion:

Data Table						
Serial No	Title	Start Date	End Date	Closing Date	Action	
1	Summer	01-07-2017	15-12-2017	31-12-2017	<button>Edit</button>	<button>Delete</button>
2	Spring	30-03-2017	19-05-2017	23-06-2017	<button>Edit</button>	<button>Delete</button>
3	Spring	19-04-2017	19-05-2017	16-06-2017	<button>Edit</button>	<button>Delete</button>

Showing 1 to 3 of 3 entries

Previous 1 Next

Success Alert
OK !!. Data removed Successfully.

Figure 50 show data has been removed from table

Data fetching:

Assign Subject In Session	
Department	Subjects
BIT	<input checked="" type="checkbox"/> Final Project <input checked="" type="checkbox"/> Database
CSE	<input checked="" type="checkbox"/> Object Oriented Programming <input checked="" type="checkbox"/> Mathematical foundation of Computer Science
BBA	<input checked="" type="checkbox"/> Business fundamental <input checked="" type="checkbox"/> Fundamentals of Financial Management
MBA	<input checked="" type="checkbox"/> Government & Business <input checked="" type="checkbox"/> Enrichment Course -III
Department of Architecture	<input checked="" type="checkbox"/> Design Studio: Information and Visualization

Figure 51 it show subject and department lists data come from the database

Crowd testing:

Test Number	01
Test Type	Crowd testing
Test Name	Test with end user
Purpose of the Test	To ensure the system is good enough for the user
Process of The Test	By letting people use the system
Test Result	User remarks the system as a user-friendly system

3.APPENDIX C:

TEST LOG

Test No	Test Name	Test Type	Result
01	Login test	Functionality testing	Pass
02	Active links	Functional testing	Pass
03	Verify dashboard	Functional testing	Pass
04	Manage session	Functional testing	Pass
05	Check manage assessment	Functional testing	Pass

06	Check manage subject	Functional testing	Pass
07	Check manage student	Functional testing	Pass
08	Check student claim submission	Functional testing	Pass
09	Upload evidence	Functional testing	Pass
10	Check coordinator notification	Functional testing	Pass
11	Check coordinator process	Functional testing	Pass
12	Verify student notification	Functional testing	Pass
13	Check EC manager notification	Functional testing	Pass
14	Verify student view their claims	Functional testing	Pass
15	Check claims report	Functional testing	Pass
16	Check date session	Functional testing	Pass
17	Check student profile	Functional testing	Pass
18	Login validation	Validation	Pass

		testing	
19	Manage session validation	Validation testing	Pass
20	Manage subject validation	Validation testing	Pass
21	Manage claim validation	Validation testing	Pass
22	Manage session date validation	Validation testing	Pass
23	Manage upload file validation	Validation testing	Pass
24	Drop down menu	Usability	Pass
25	Notification check	Usability	Pass
26	Font size, check	Usability	Pass
27	Search bar	Usability	Pass
28	Checklists and button	Usability	Pass
29	Profile images	Usability	Pass
30	Unauthorized access	Security	Pass
31	URL modification	Security	Pass
32	Encryption password	Security	Pass
33	SQL injection	Security	Pass

34	Brute force attack	Security	Pass
35	Admin dashboard	Role-based second test	Pass
36	Student dashboard	Role-based second test	Pass
37	Coordinator dashboard	Role-based secured test	Pass
38	EC manager dashboard	Role-based secured test	Pass
39	Mobile view	Responsive testing	Pass
40	desktop view	Responsive testing	Pass
41	Laptop view	Responsive testing	Pass
42	Mozilla Firefox	Cross-browsing testing	Pass
43	Google chrome	Cross-browsing testing	Pass
44	Internet explorer	Cross-browsing testing	pass
45	Data insert	Database testing	pass
46	Data update	Database testing	pass
47	Data delete	Database testing	pass
48	Data fetching	Database testing	pass

49	End user testing	Crowd testing	pass
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