

1.0 INTRODUCTION OF SMART COLLEGE MANAGEMENT SYSTEM (SCOMS)

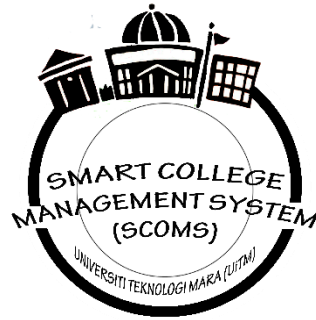


Figure 1 logo of SCOMS

Universiti Teknologi MARA is well establishing university. This University has many branches that located at every state. One of the branches is Universiti Teknologi MARA Cawangan Kelantan (UiTMCK). Established on the 1st of July 1985 Universiti Teknologi MARA Cawangan Kelantan (UiTMCK) was the 9th branch campus in Malaysia. Previously known as Institut Teknologi MARA Kelantan (ITM Kelantan), this campus was officiated by YAB Tan Sri Dato' Haji Mohammad bin Yaakob. The campus was established with the co-operation of the Kelantan State Government and was built on a 12 acres land at Kem Kijang. Financed by the state government, the renovation process amounted to RM1.5 million in total. In 1996, ITM Kelantan was relocated to the current permanent campus at Bukit Ilmu, Machang district.

UiTMCK has ever since soared into a premier tertiary education centre and geared up by the establishment of its city campus (Kampus Kota) in Kota Bharu, in 2007. UiTMCK continues to strive and is ever committed into making UiTM a world class university at large. This Univeristy have provide many facilities that easier the students and staff. One of the facilities is hostel, this hostel is providing to students who want to stay inside the campus. There are 5 hostel built in the campus which is 2 hostels for male students Tunku Abdul Rahman and Tun Razak while 3 hostel for female students Tun Dr Mahathir, Dato On and Tun Hussein On. This hostel consists of rooms and also dorms.

Before the end of semester students are required to fill up form and send the hostel application form at the office. The students need to reach the requirement to be able to stay at the hostel for the next semester. One of the requirement are students who want to stay at the college need to be an active students by joining programme make by Univeristy and collect coupon for every programme. This application is made manually because there is no system is created yet to facilitate students and employees. With that the researcher would like to do a system Smart College Management System (SCOMS) to easier the students and staff of UiTM Kelantan.

2.0 STATEMENT OF PROBLEM

✚ Time restriction by the management

Every hostel in UiTM Kelantan has their own office for taking care of student's welfare. This office is open only during weekdays which are from Sunday to Thursday at 8:00 am until 5:00 pm. This working hours is the same time where students have class, so some students may be not be able to apply college because the time are not suitable.

✚ Lack of Management in handling students records

The person in charge of students data which is the hostel officer is human being, they will make mistake while organize the students data, usually when there are a lot of students register at the same time. The student's data will miss handling. Students need to fill a form and give back to the officer, sometimes the officers do not care the form and it will affect the form to damage. After that, the student's data also can be missed place, and had being mention before that sometimes students can register at same time, and the officer can missed place by putting the student's form at the wrong place.

✚ Students less satisfied towards the management or the facilities provided

Students are the people who are staying at the hostel, so there will be adequate facilities for the students. However some facilities may be broken that are done by students or unexpected damage. Students need to complain about the damage, however it hard for the students to complain because the students need to fill complain form at the office and the office only open during working time which students have class during that time.

✚ Lack of platform and method to properly allocate students accommodations.

After the students had register, the staff needs to organize student's room manually. Due to that it takes a lot of times when there are many students to handle. The staffs need to allocate the students room manually, so it will cost a lot of time.

This problems have been recognized by many students. The developers have post an open opinion and comment towards the college facilities in the social media. Students have been response about the lacking of not having college systems. With the figure 2 until figure 4 it showed that this systems important towards students.



Figure 2 developer post on social media



Figure 3 response

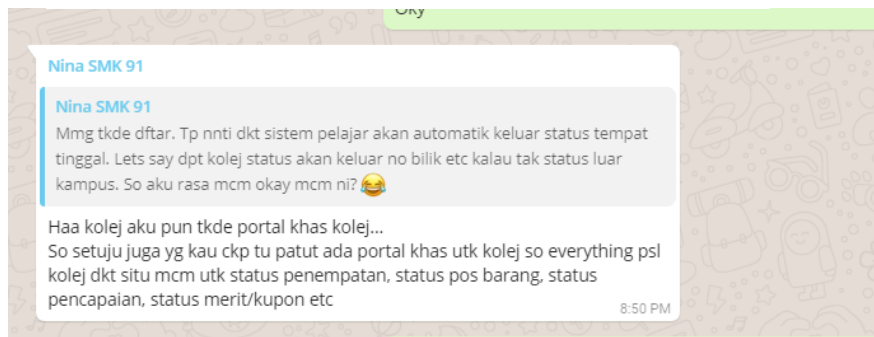


Figure 4 response

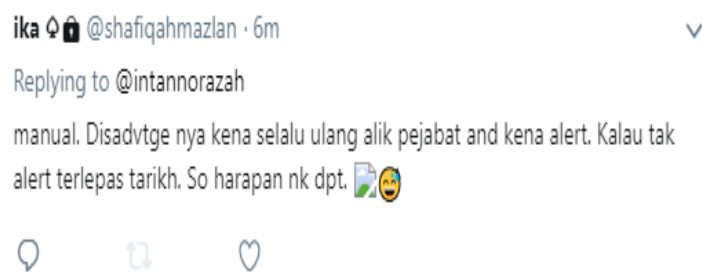


Figure 5 response

4.0 AIMS/ OBJECTIVES OF THE PROJECT

PROBLEMS	OBJECTIVES
Time restriction by the management	To improve efficiency in management where it could suit with students time and staff time
Lack of management in handling students records	To boost up the ways of handling the records by avoiding the mistake made by staff
Students less satisfied towards the management or the facilities provided	To upgrade the facilities in college to make students feel better and safe and giving fast respon towards the complainants
Lack of platform and method to properly allocate students accommodations.	To upgrade the method on handling students room to make it easier towrds students and staff and effiecient

Table 1 problems vs objectives

5.0 SCOPE OF SMART COLLEGE MANAGEMENT SYSTEM (SCOMS)

This Smart College Management System (SCOMS) is about Register College online where students can register anywhere and anytime. This system easier the staff and students where they do not have limitation on register or manage the register. Furthermore, the systems will easier the students on choosing their own room and to complain anything that they unsatisfied toward the college facilities or management. Other than that, students can register their electrical goods and can gain the sticker automatically.

Moreover, this system is made because there is time restriction by the management where students cannot register according to time provided by the management. After that, lack of management in handling student's records whereby there are too many students to handle one time and the students records can be mishandling. Other than that, students less satisfied towards the management or the facilities provided, so they need to complain and this complain need to be solve by the management. Moreover, lack of platform and method to properly allocate students accommodations. Students sometimes having problem with their roommates and the power of choosing room is in the hand of management sometimes students not comfortable in stay with stranger people.

In addition, this system must be register first by the students so that this system will have the student's detail that can be store in database. After that, the system must be login before enter the systems and unauthorized cannot login. New students need to fill up all the detail while existence students only need update the detail. After that they can use all the features in the system.

Moreover, the Smart College Management System (SCOMS) will be used during the registration period only. Usually the time for registration would be one week before semester end until two wee before next semester start. This system can be use anytime during the registration period. This system is purposely for the students, college staff and also the management. This Smart College Management System (SCOMS) will be used at college in UiTM.

6.0 LIMITATIONS OF SMART COLLEGE MANAGEMENT SYSTEM (SCOMS)

The limitation of Smart College Management System (SCOMS), the students need to fill up all the registration requirement. This system are not integrated with SIMS which is UiTM students data. So students are not automatic register in the system. Other than that, for every college, there are one person in charge for it. That means a lot of admin that will handle for the system. When many people can access on handling the students registration there will be problem such as information redundancy or student's information leak. This system do not provide a specific access to every admin.

Furthermore, students cannot change their decision after choosing their room. After the students choose their room, there is no edit button for students to change their room. Their first choice will be their final choice. Lastly, there is no notification for students to notice if they are accept the college or not. The students need to open the system to check the college results.

7.0 MILESTONE AND GANTT CHART

	2018												
	March				April				May				June
	1	2	3	4	5	6	7	8	9	10	11	12	13
Planning													
Suitable system topic	█												
Plan the structure of the system		█											
Plan target audiences.			█										
Analysis													
Analyse suitable function for user and staff				█									
Design													
Design the interface for user and staff				█	█	█	█						
Design the ERD for process of the system.							█	█	█				
Implementation													
Pilot test the system										█	█		
Tester the system weakness											█	█	
Maintenance													
Enhance the weakness of the system												█	█

8.0 ESTIMATED BUDGET AND AND COST REQUIRED FOR THE PROJECT

NO	HARDWARE/SOFTWARE	QUANTITY	BUDGET
1.	COMPUTER SET	1	RM 3000.00
2.	SOFTWARE	6	RM 300.00
3.	PRINTER	1	RM 250.00
4.	SALARY (1person x 12 hours x RM10) x 60 days	60 days	RM 7,200.00
		TOTAL	RM 10,750.00

Table 2 estimated budget and cost

9.0 HARDWARE AND SOFTWARE DETAILED USE IN THE PROJECT

NO	HARDWARE	USE
1	COMPUTER	The function of computer are input, output, processing and storage. For the developer the computer are used to build a system with the problem given and solve it.

NO	SOFTWARE	USE
1	phpMyAdmin	to store all the data for the system. For example the system is about students registration and will be accept by the admin. So in phpMyAdmin will store the data of students and admins.
2.	Notepad ++	This software are function to write a coding for html and php
2	AdobeDreamweaver	To create form, to design the systems, also to write coding for the html and php.
3.	XAMPP	XAMPP is a free and open source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), database (MariaDB), and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows.

Table 3 hardware and software used

10.0 SYSTEM FLOWCHART/DIAGRAM

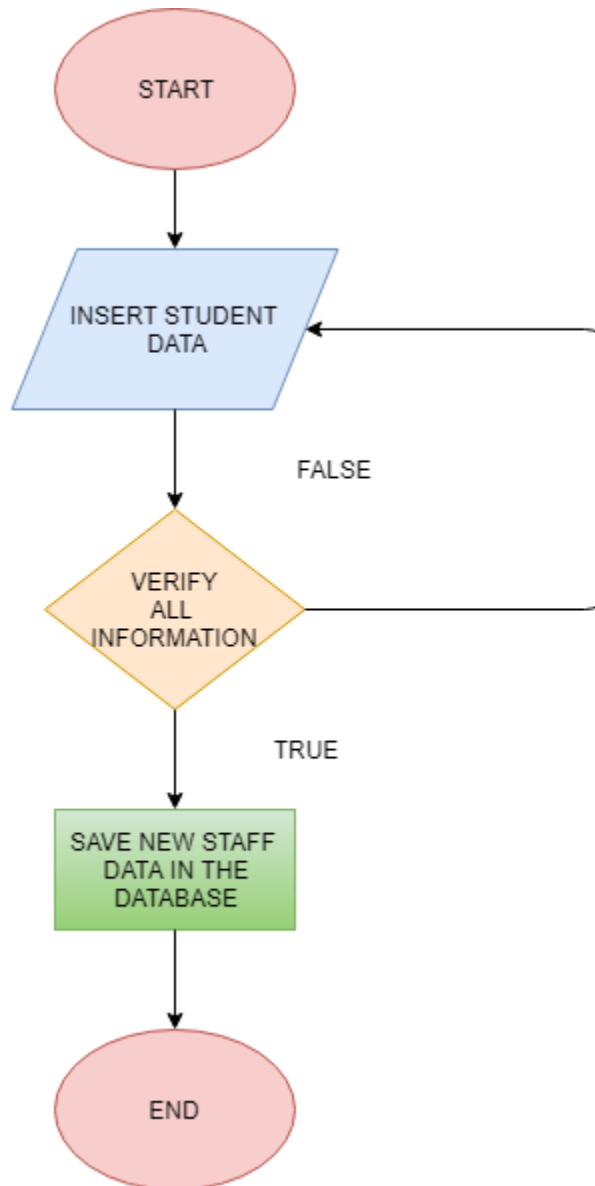


Figure 6 student registration process

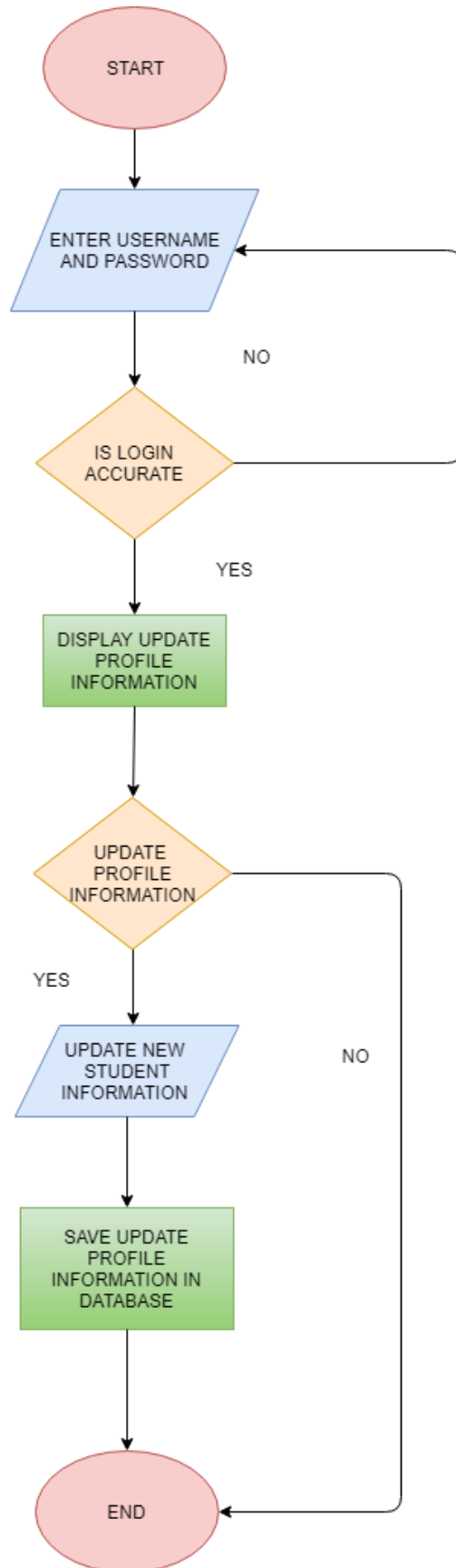


Figure 7 student update profile process

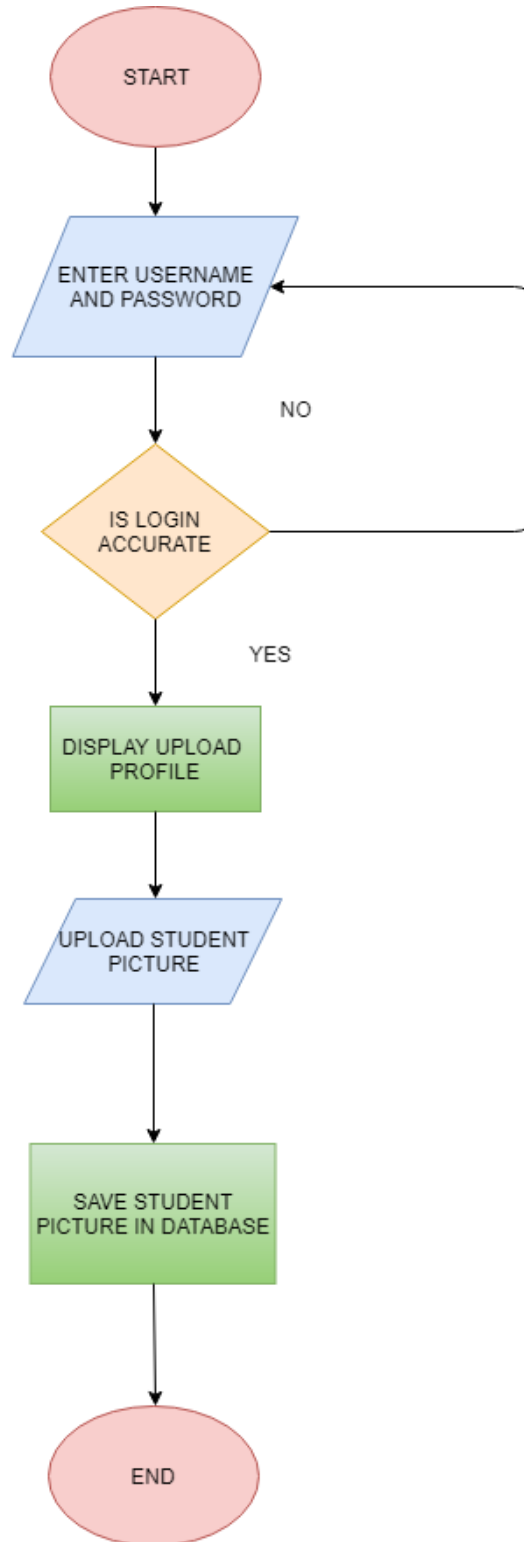


Figure 8 student upload picture process

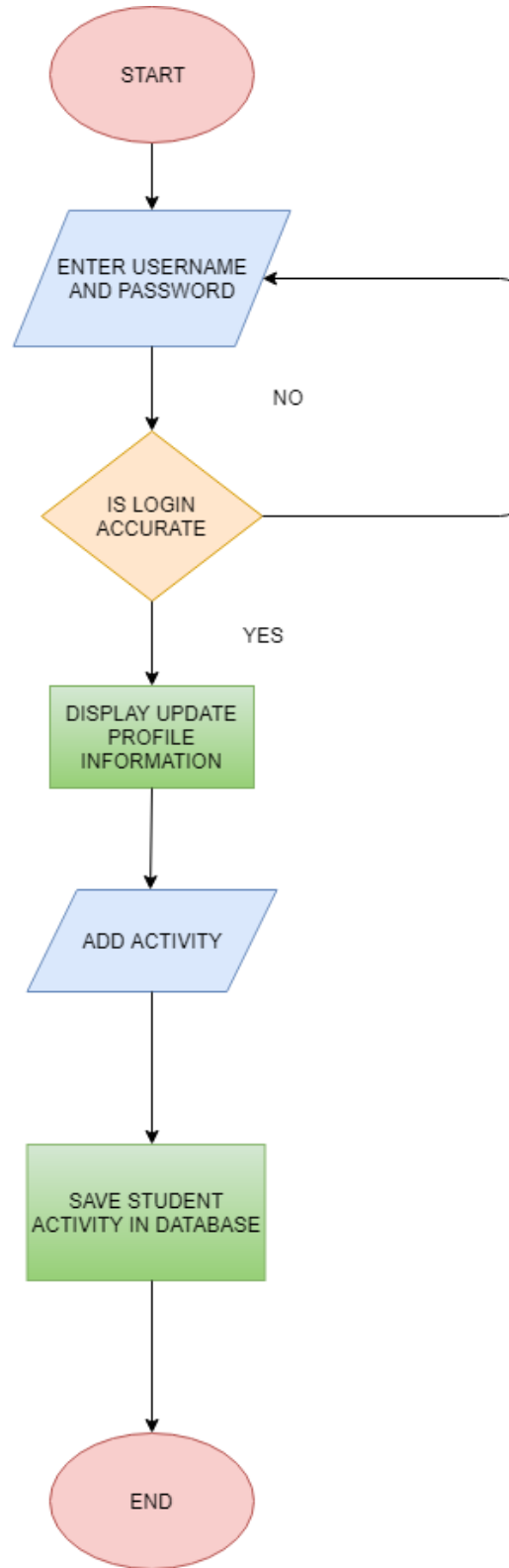


Figure 9 student fill up activity process

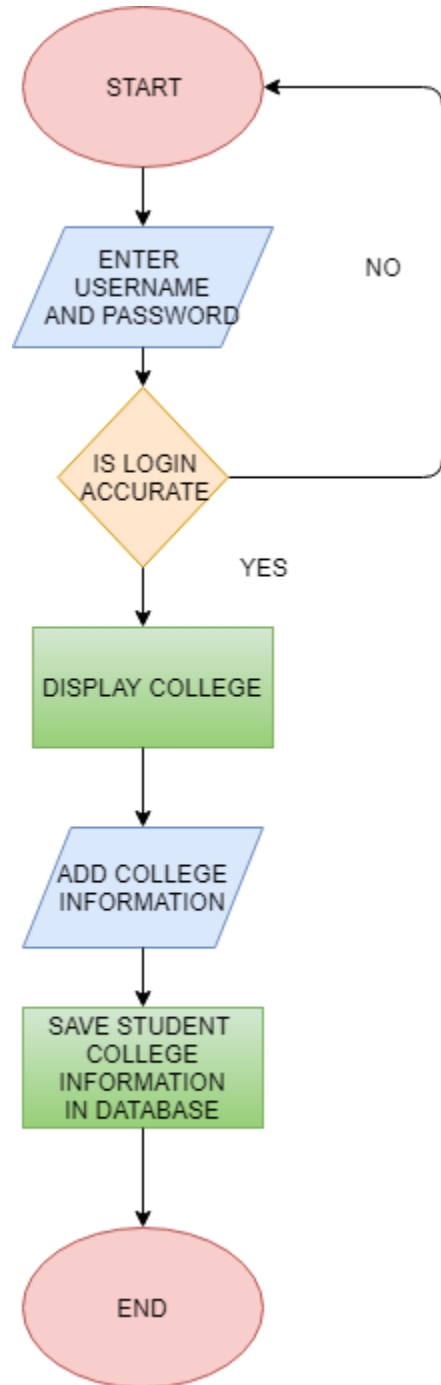


Figure 10 student register college process

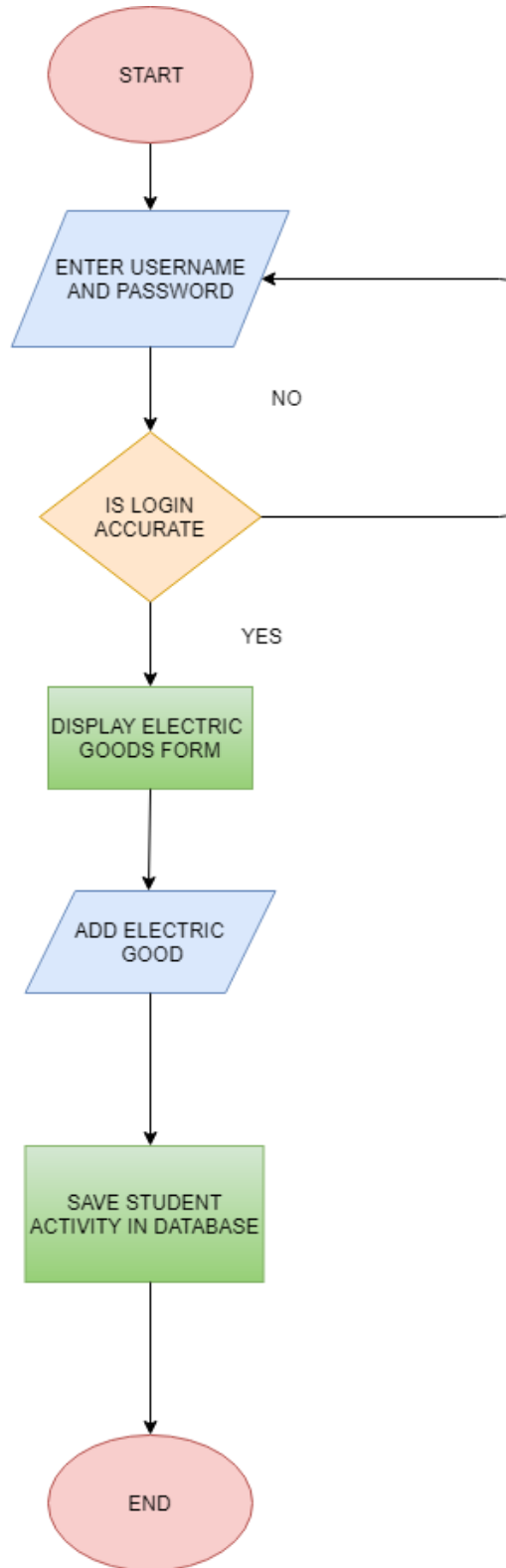


Figure 11 student register electric good process

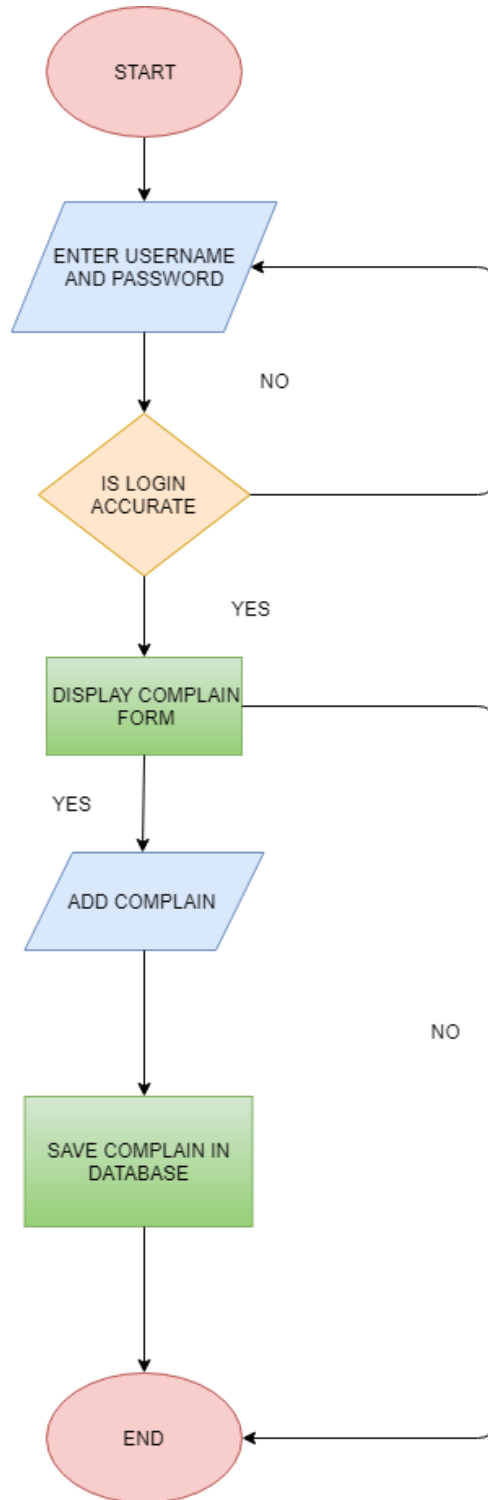


Figure 12 student add complain process

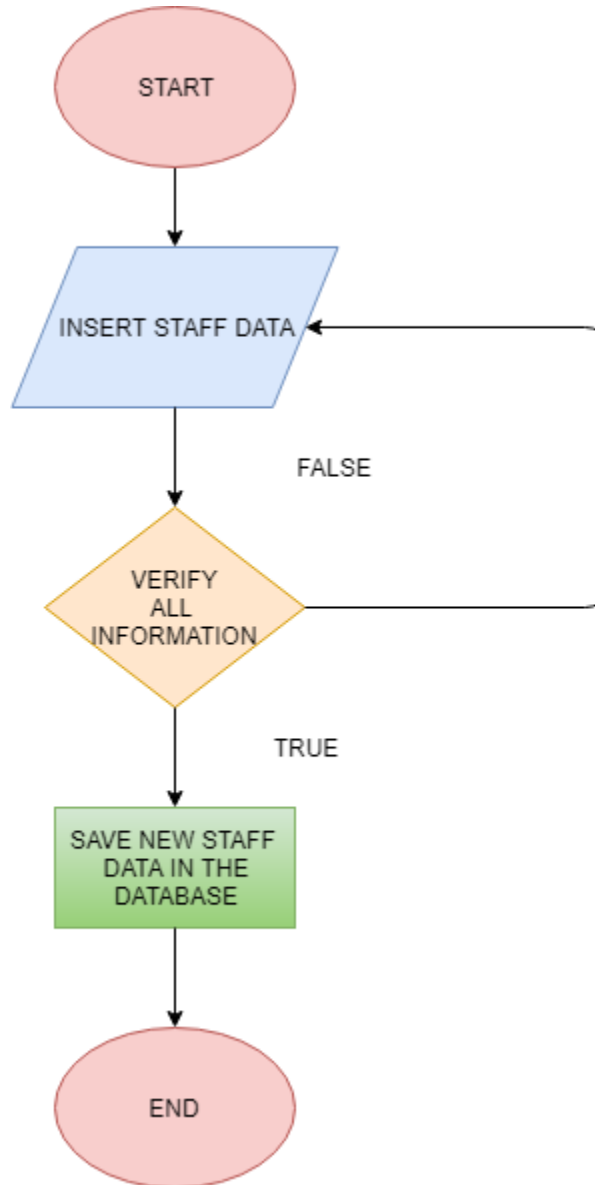


Figure 13 staff registration process

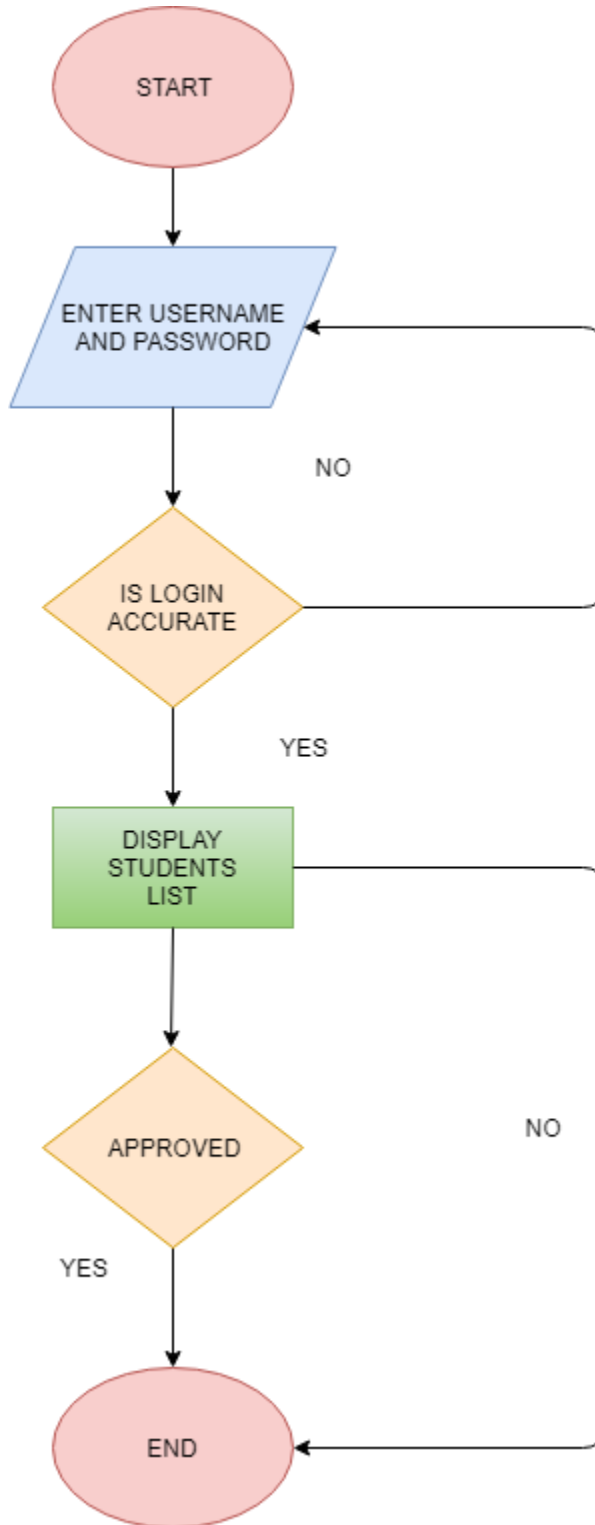


Figure 14 staff approve student college process

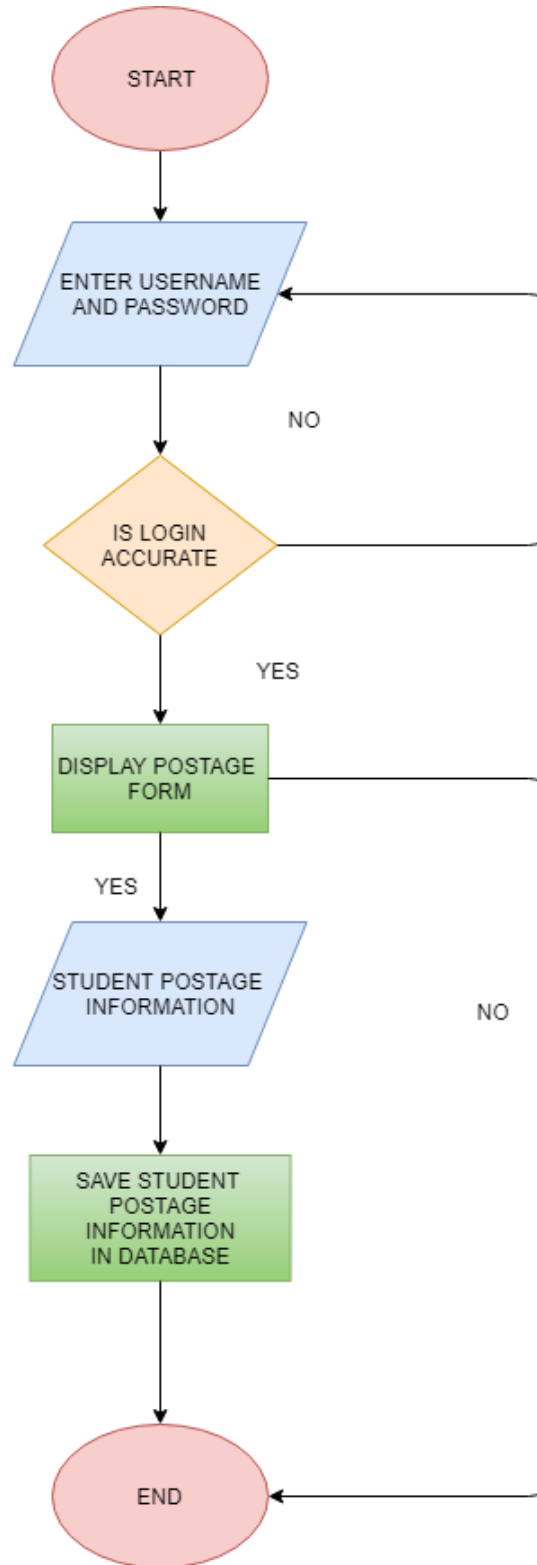


Figure 15 staff add student postage

11.0 STORYBOARD, WEB STRUCTURE AND NAVIGATION

11.1 SITEMAP

11.1.1 STAFF

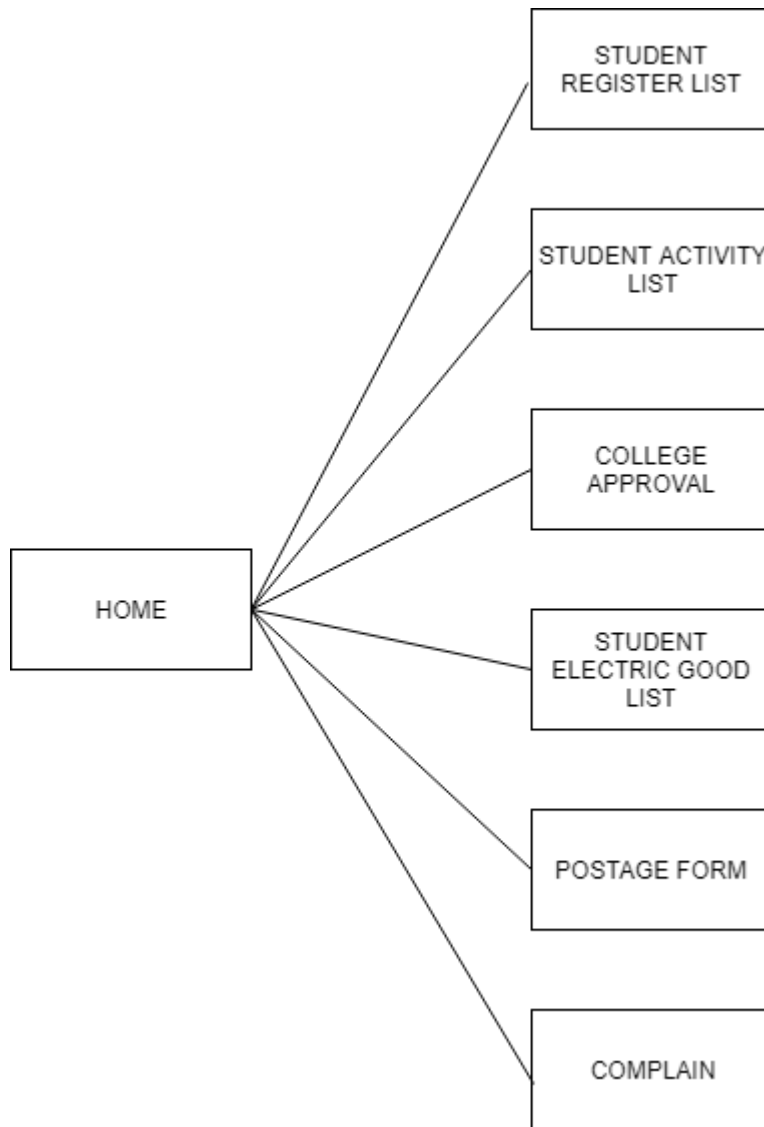


Figure 16 staff sitemap

11.1.2 USER (STUDENTS)

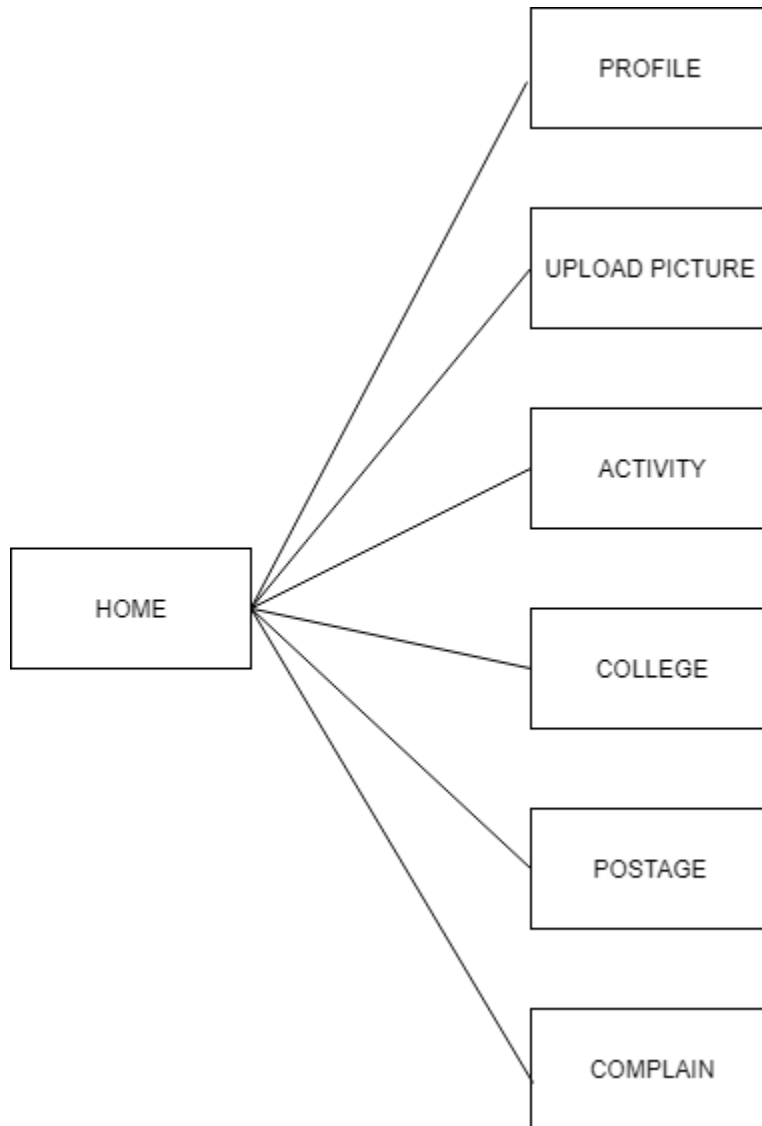


Figure 17 student sitemap

11.2 STORYBOARD FOR THE STAFF

The storyboard is divided into two panels by a vertical line. The left panel is for staff login, and the right panel is for staff registration. Both panels feature a circular logo at the top. The login panel includes a 'LOGIN' title, two input fields for 'USERNAME:' and 'STAFF ID:', a 'SUBMIT' button, and a link 'CLICK HERE TO REGISTER AS NEW MEMBER'. The registration panel includes a 'STAFF REGISTRATION' title, seven input fields for 'FULLNAME:', 'USERNAME:', 'IDENTIFICATION NUMBER:', 'STAFF ID:', 'PHONE NUMBER', 'EMAIL', and 'ADDRESS', a 'REGISTER' button, and a link 'CLICK HERE TO CANCEL'.

Figure 18 staff login and staff registration

STUDENT LIST											STUDENT ACTIVITY LIST									
#	PICTURE	MAT NO	FULLNAME	EMAIL	DATE OF BIRTH	PLACE OF BIRTH	ADDRESS	PHO NO	ID NO	RACE	GENDER	PARENT'S NAME	PARENT NO	#	MATRIC NUMBER	FULLNAME	ACTIVITY NAME	DATE OF ACTIVITY	ORGANIZER	PLACE
STUDENT LIST											STUDENT ACTIVITY LIST									

Figure 19 register student list and student activity list

STUDENTS LIST	STUDENT ACTIVITY LIST	COLLEGE APPROVAL	ELECTRIC GOODS LIST	POSTAGE FORM	COMPLAIN LIST	LOGOUT	STUDENTS LIST	STUDENT ACTIVITY LIST	COLLEGE APPROVAL	ELECTRIC GOODS LIST	POSTAGE FORM	COMPLAIN LIST	LOGOUT												
COLLEGE APPROVAL							<table border="1"> <thead> <tr> <th>#</th> <th>USERNAME</th> <th>NAME</th> <th>ELECTRIC GOODS</th> <th>QUANTITY</th> <th>ELECTRIC GOODS</th> </tr> </thead> <tbody> <tr> <td colspan="6" style="text-align: center;">LIST ELECTRIC GOODS</td> </tr> </tbody> </table>							#	USERNAME	NAME	ELECTRIC GOODS	QUANTITY	ELECTRIC GOODS	LIST ELECTRIC GOODS					
#	USERNAME	NAME	ELECTRIC GOODS	QUANTITY	ELECTRIC GOODS																				
LIST ELECTRIC GOODS																									
<p>COLLEGE STATUS: PENDING</p> <p>MATRIC CARD NUMBER:</p> <p>COLLEGE NAME:</p> <p>BLOCK:</p> <p>LEVEL:</p> <p>ROOM:</p> <p>APPROVED</p>																									

Figure 20 college approval by staff and student electric good list

11.2.1 STORYBOARD FOR THE STUDENT

The storyboard consists of two panels. The left panel is for the login page, featuring a circular logo at the top, a 'LOGIN' title, two input fields for 'USERNAME:' and 'MATRIC NUMBER:', a 'SUBMIT' button, and a link 'CLICK HERE TO REGISTER AS NEW MEMBER'. The right panel is for the registration page, featuring a circular logo at the top, a 'STUDENT REGISTRATION' title, and a series of input fields for 'FULLNAME:', 'USERNAME:', 'IDENTIFICATION NUMBER:', 'EMAIL:', 'STUDENT MATRIC NUMBER:', 'ADDRESS', 'DATE OF BIRTH:', 'PLACE OF BIRTH:', 'GENDER', 'RACE', 'PARENT NAME:', and 'PARENT PHONE NUMBER'. Below these fields are a 'REGISTER' button and a link 'CLICK HERE TO CANCEL'.

Figure 22 student log in and student register

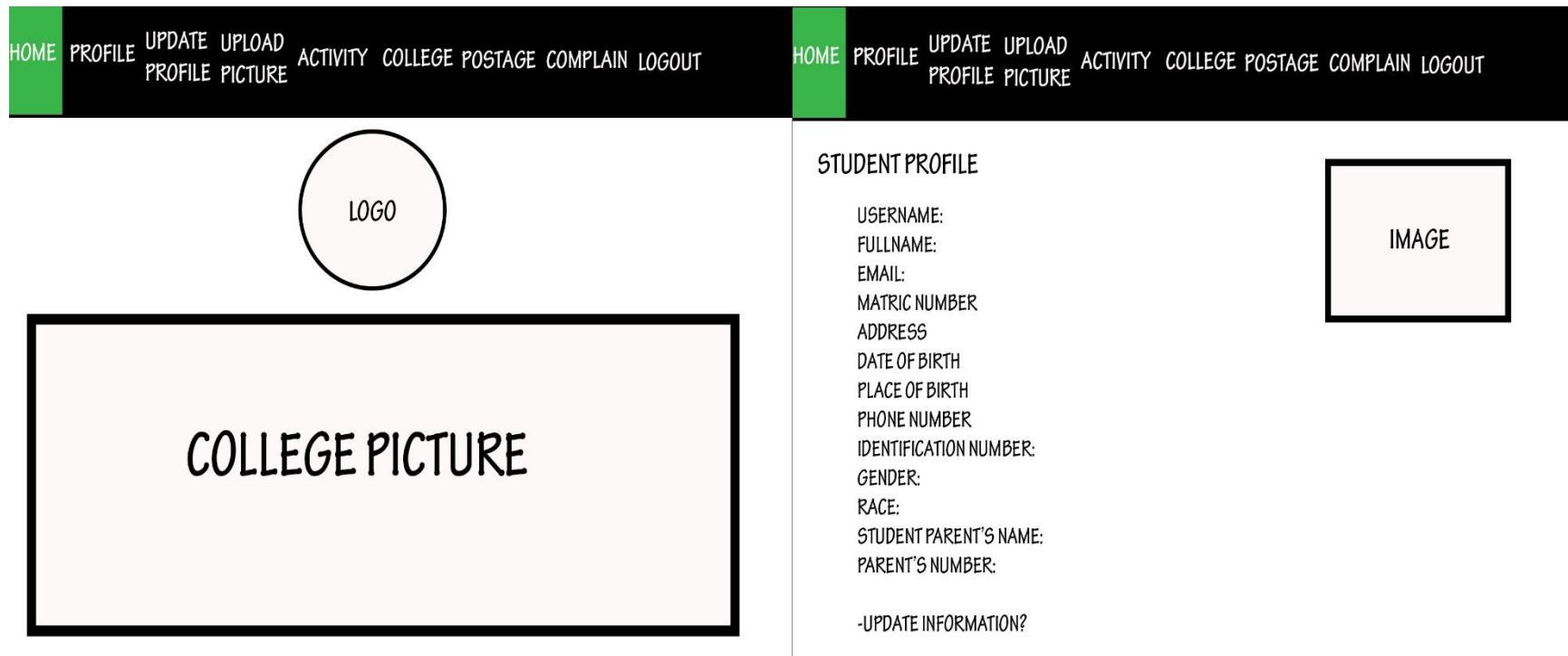


Figure 23 student home page and student profile

<p>HOME PROFILE UPDATE PROFILE UPLOAD PROFILE ACTIVITY COLLEGE POSTAGE COMPLAIN LOGOUT</p> <h3>UPDATE PROFILE</h3> <p>MATRIC NUMBER: <input type="text"/></p> <p>USERNAME: <input type="text"/></p> <p>FULLNAME: <input type="text"/></p> <p>EMAIL: <input type="text"/></p> <p>ADDRESS: <input type="text"/></p> <p>PHONE NUMBER: <input type="text"/></p> <p>IDENTIFICATION NUMBER: <input type="text"/></p> <p><input type="button" value="UPDATE"/></p>	<p>HOME PROFILE UPDATE PROFILE UPLOAD PROFILE ACTIVITY COLLEGE POSTAGE COMPLAIN LOGOUT</p> <h3>UPLOAD PROFILE PICTURE</h3> <p>SELECT PICTURE</p> <p><input type="button" value="CHOOSE FILE"/> NO FILE CHOOSE</p> <p><input type="button" value="UPDATE"/></p>
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Figure 24 student update profile and student upload profile picture

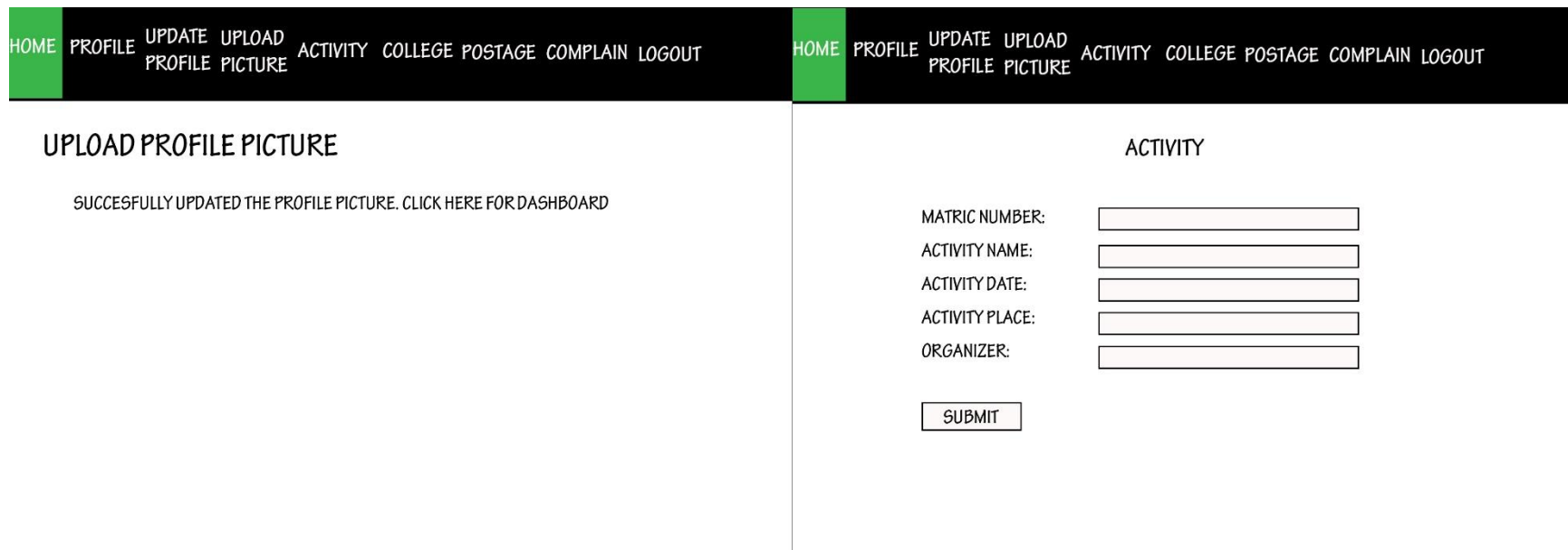


Figure 25 upload profile successful and student add activity

HOME PROFILE UPDATE PROFILE UPLOAD PROFILE PICTURE ACTIVITY COLLEGE POSTAGE COMPLAIN LOGOUT	HOME PROFILE UPDATE PROFILE UPLOAD PROFILE PICTURE ACTIVITY COLLEGE POSTAGE COMPLAIN LOGOUT
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RECORD STATUS:

COLLEGE FORM

COLLEGE NAME:

MATRIC CARD NUMBER:

BLOCK

LEVEL

ROOM

ELECTRIC GOODS

MATRIC NUMBER:

NAME OF ELECTRIC GOODS

QUANTITY

Figure 26 student fill up college form and student register electric good

The screenshot displays two side-by-side web pages from the SCOMS system. Both pages share a common top navigation bar with a black background and white text. The navigation items are: HOME (highlighted in green), PROFILE, UPDATE PROFILE, UPLOAD PROFILE PICTURE, ACTIVITY, COLLEGE POSTAGE, COMPLAIN, and LOGOUT. The left page is titled 'STUDENT POSTAGE LIST' and features a table with the following headers: #, MATRIC NUMBER, FULLNAME, POSTAGETRACK NUMBER, and DATE ARRIVED. The right page is titled 'COMPLAIN FORM' and contains five input fields labeled: MATRIC NUMBER:, TYPE OF COMPLAIN:, DATE:, TIME:, and COMPLAIN:. Below these fields is a 'SUBMIT' button.

Figure 27 student postage list and student complain form

12.0 CONCLUSION

In conclusion, this system is relevant to use nowadays because this system can help students and staff to easier their staff. Other than that, by using this system the students do not tie with the office time. In addition, the college management will be more smoothen. The main advantages of existence of this system is, the students and staff will be not burden with a lot of work and it give many benefits to both side.