

Table 1 – Provisional System Functionality

Area	Notes/Essential Functionality
Student Records	Create, Amend, Archive, Display, Assign.
Staff Records	Create, Amend, Archive, Display, Assign.
Course Records	Create Structure, Amend, Display, Delete, Archive.
Module Management	Create, Amend, Delete, Archive, Display, Assign.
Assignment Management	Create, Amend, Delete, Archive, Display, Assign, Mark/Grade
Attendance Records	Create, Amend, Archive, Monitor, Display, Action Poor Attendance.
Personal Tutor Management	Create, Amend, Assign, Display,
Timetable Management	Create, Amend, Delete, Archive, Display
Diary Management	Create, Amend, Display, Prompt, Initiate Automated Action.
Report Generation/Management	Create, Display, Print

A

Requirements:

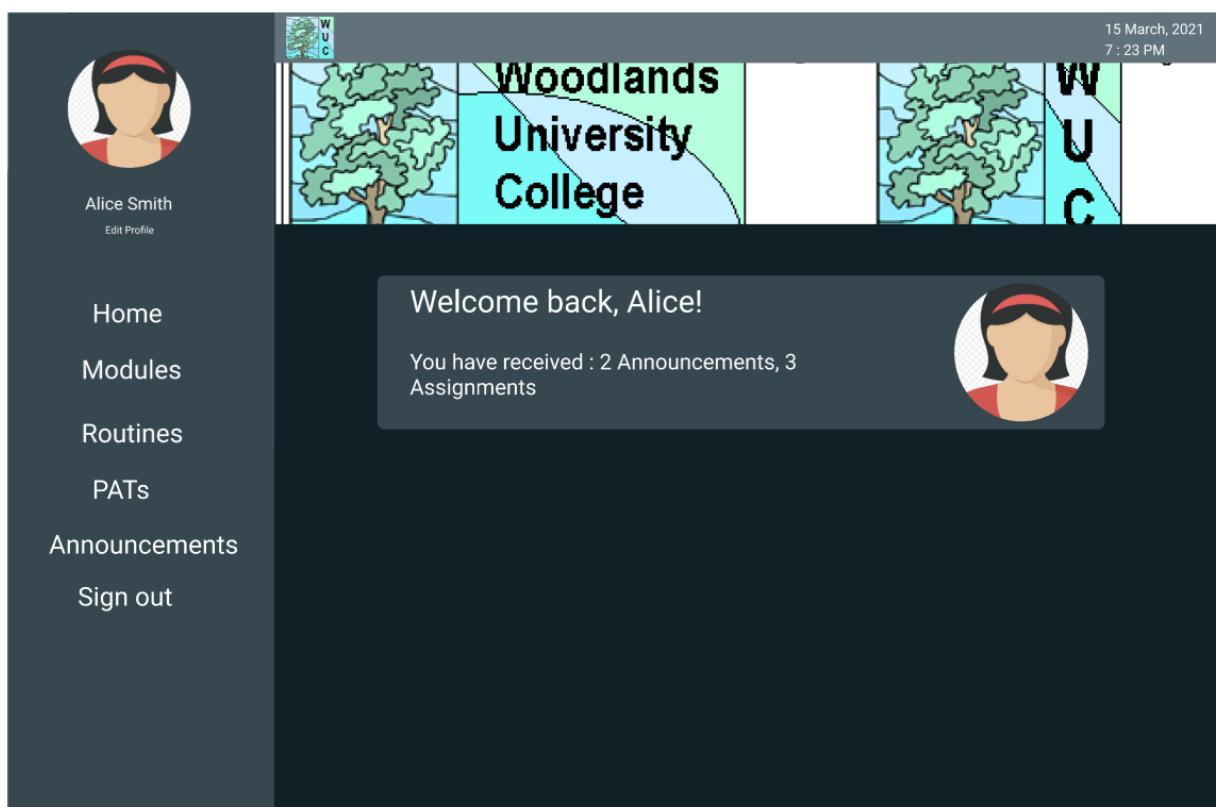
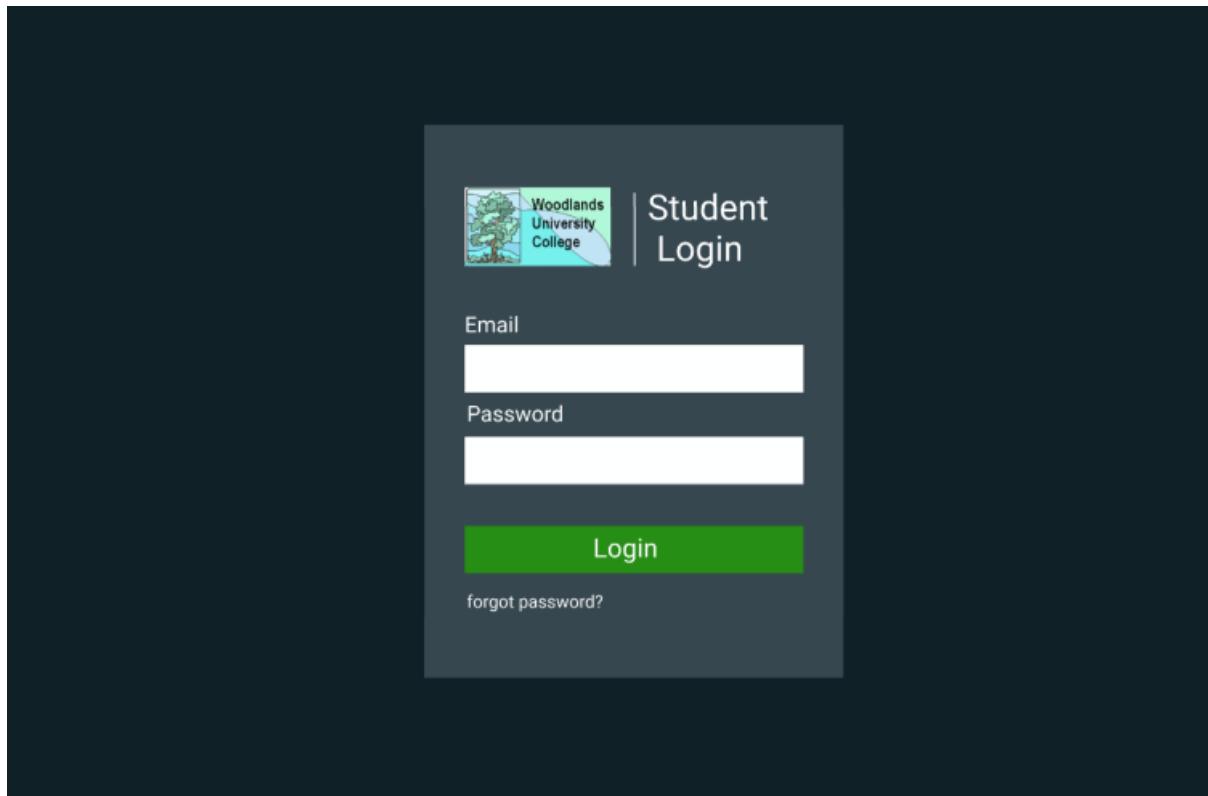
navigation of website should be in left side, sub functionalities should be in tree structure in same left panel.

3 levels of access: admin, module leader, student

student:

- should be able to fill up the basic information and upload documents to apply for university
- after being approved by admin, the student is assigned to the desired course and is provided valid username (student id) and password through email
- student can now login using the student id and password provided
- student navigation should contain modules, routines, PATs(Personal Assistant Tutor), Announcements, Diary
- ‘Module’ should contain the modules the student is assigned to in the format shown in wireframe
- When clicked on a particular module, it should display the module content assignment assigned, grades and attendance of that module.
- student should be able to post assignment, and view their grades and attendance
- ‘Routine’ should display the timetable of the respective course and the level of the students
- ‘PATs’ should display the PAT assigned to the student and should have functionality to send message to PAT (message should be sent via email and notification should be sent to PAT regarding the message)
- ‘Announcement’ should display announcements from module leaders and admin
- student should be able to view and edit their profile

wireframes:



WUC

15 March, 2021
7 : 23 PM



Alice Smith
[Edit Profile](#)

[Home](#)
[Modules](#)
[Routines](#)
[PATs](#)
[Announcements](#)
[Sign out](#)

Edit Profile



Choose a different picture

First Name

Last Name

Email

Phone Number

[Save Changes](#)

[Change Password](#)

WUC

15 March, 2021
7 : 23 PM



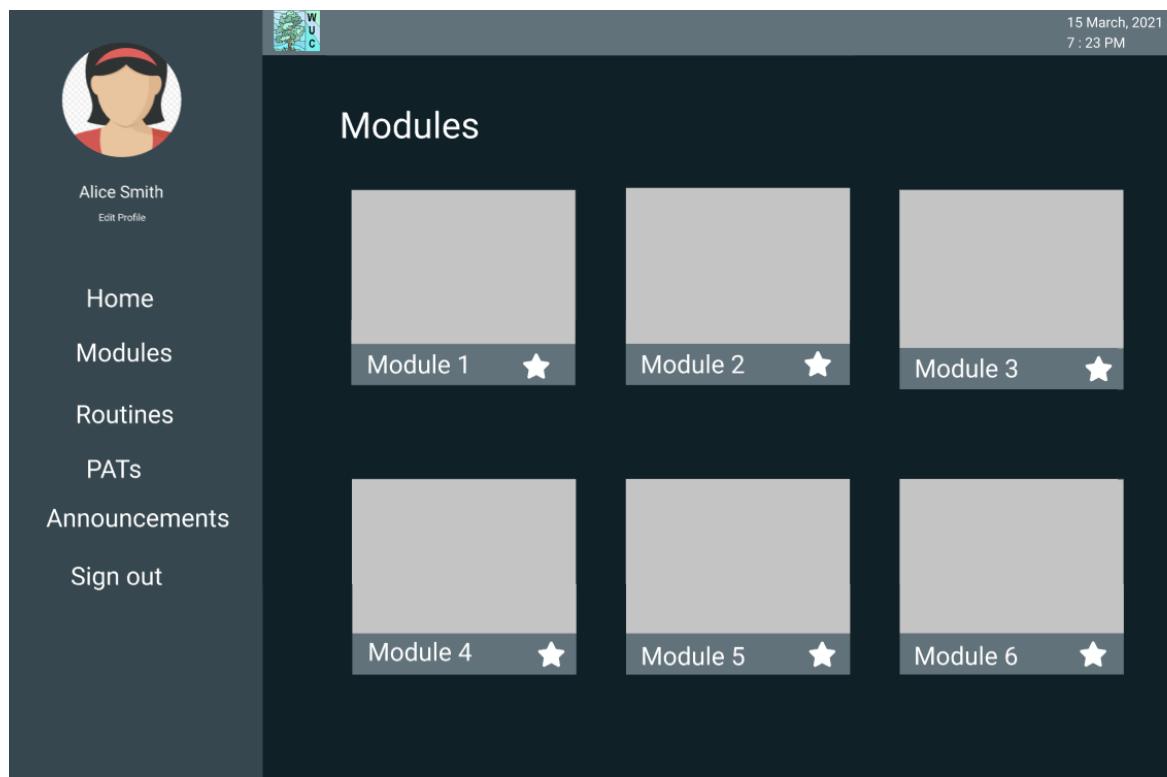
Alice Smith
[Edit Profile](#)

[Home](#)
[Modules](#)
[Routines](#)
[PATs](#)
[Announcements](#)
[Sign out](#)

Class Schedule

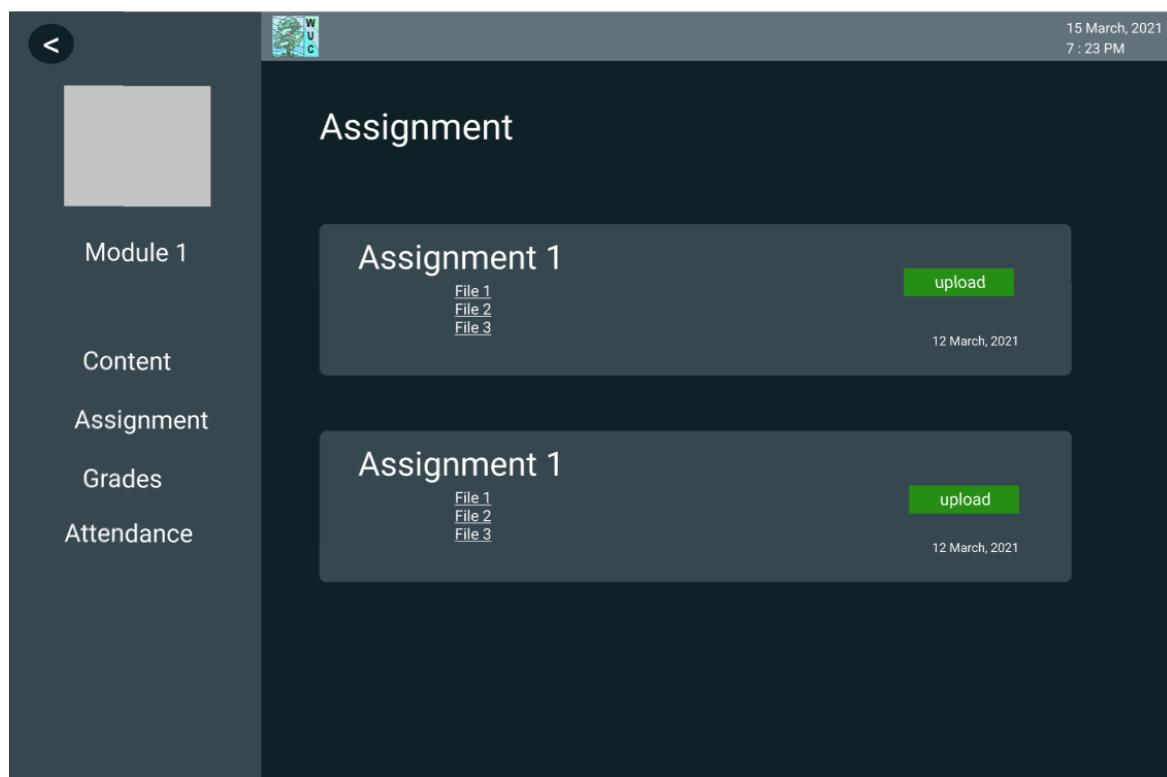
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 9:30						
10:00 - 11:30						
11:30 - 12:30	Break	Break	Break	Break	Break	Break
12:30 - 2:00						
2:00 - 3:30						

[View Due Dates](#)



A mobile application interface showing the 'Modules' section. The top right corner displays the date '15 March, 2021' and time '7 : 23 PM'. On the left, a sidebar menu lists 'Home', 'Modules', 'Routines', 'PATs', 'Announcements', and 'Sign out'. The main area displays six modules arranged in two rows of three. Each module card has a gray background, a dark blue footer bar with white text, and a small star icon.

Module	Star Status
Module 1	★
Module 2	★
Module 3	★
Module 4	★
Module 5	★
Module 6	★



A mobile application interface showing the 'Assignment' section. The top right corner displays the date '15 March, 2021' and time '7 : 23 PM'. On the left, a sidebar menu lists 'Module 1', 'Content', 'Assignment', 'Grades', and 'Attendance'. The main area displays two assignment cards. Each card has a dark blue header with white text, a central content area, and a dark blue footer bar with white text. A green 'upload' button is located in the bottom right corner of each card.

Assignment	Date
Assignment 1	12 March, 2021
Assignment 1	12 March, 2021

The screenshot shows a mobile application interface. On the left side, there is a vertical navigation bar with the following items: Module 1, Content, Assignment, Grades, and Attendance. The main content area on the right is titled "Content". It displays two identical card-like components, each labeled "Week 2". Each card contains three links: "Lecture File 1", "Tutorial File 2", and "File 3". In the top right corner of each card, there are three dots (...). At the bottom right of each card, the date "12 March, 2021" is displayed.

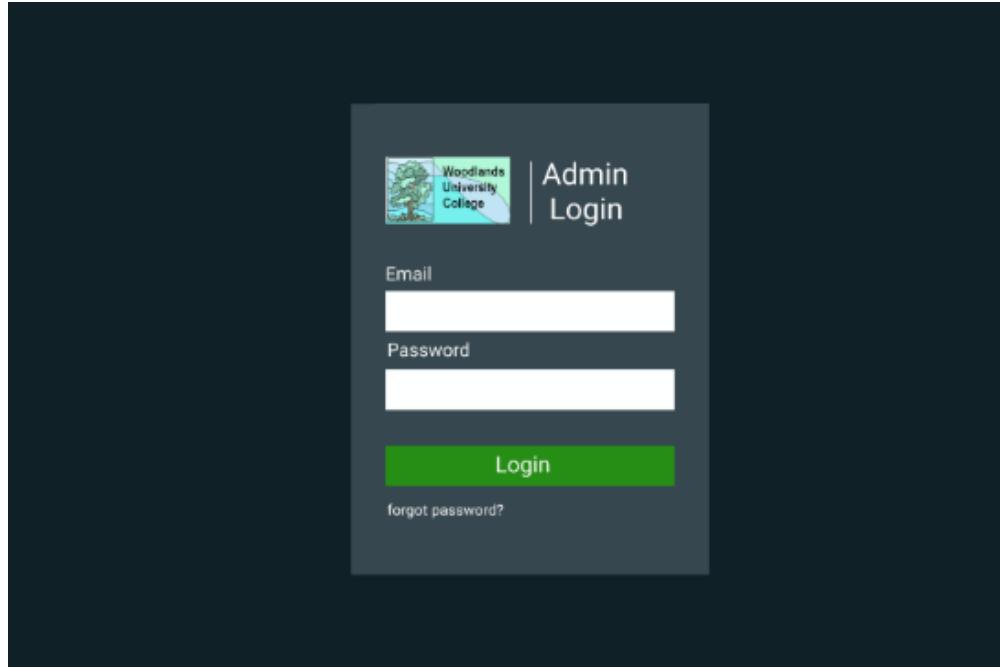
The screenshot shows a mobile application interface. On the left side, there is a vertical navigation bar with the following items: Home, Modules, Routines, PATs, Announcements, and Sign out. Above the navigation bar, there is a user profile section for "Alice Smith" with a circular icon and an "Edit Profile" link. The main content area on the right is titled "PATs". It displays a profile for "Jack Walter" with a circular icon, the name "Jack Walter" below it, and two green buttons at the bottom labeled "Get appointment" and "Send message".

admin

- approve or deny the student requesting to apply for university. Initially, when the student applies for the course, the status of student is set to 'provisional'. If the admin approved the student, status is changed to 'live'
- can view students, module leaders and modules

- can add module leaders
- can add course and modules (first add course, each course will have different modules, assign module leaders to each module)
- can view all available courses and modules inside it
- can hide/ unhide module contents for students
- can create announcements for students or module leaders

wireframes:



A wireframe of the Admin Dashboard. The top right corner shows the date "15 March, 2021" and time "7:23 PM". On the far left is a vertical sidebar with a user profile picture and the text "Admin" and "Edit Profile". Below this are links for "Home", "Students", "Module Leaders", "Modules", "Announcements", and "Sign out". The main content area has a dark header with the text "Welcome back, Admin!" and a user profile picture. Below the header are three summary cards: "Students" (74, TOTAL STUDENTS), "Module Leaders" (12, TOTAL MODULE LEADERS), and "Modules" (6, TOTAL MODULES). Each card has a three-dot menu icon in the top right corner.

The screenshot shows the 'Students' page of a web application. At the top right, the date and time are displayed as '15 March, 2021 7 : 23 PM'. On the left, a sidebar menu includes 'Admin' (with 'Edit Profile' link), 'Home', 'Students', 'Module Leaders', 'Modules', 'Announcements', and 'Sign out'. The main content area has a title 'Students' and a search bar with 'Sort by: Course' and 'Search Students'. A table with columns 'Student Id', 'Student Name', 'Email', 'Contact', 'Course', and 'Associated PAT' is shown, currently empty. A green 'Add Students' button is at the bottom.

The screenshot shows the 'Module Leaders' page of the same application. The top right shows the date and time '15 March, 2021 7 : 23 PM'. The left sidebar is identical to the previous screenshot. The main content area has a title 'Module Leaders' and a search bar with 'Sort by: Course' and 'Search Module Leaders'. A table with columns 'Id', 'Student Name', 'Email', 'Contact', 'Associated Module', and 'Roles' is shown, currently empty. A green 'Add Module Leaders' button is at the bottom.

The screenshot shows a dark-themed web application interface. On the left, a sidebar contains a user profile icon, the text "Admin", and a "Edit Profile" link. Below these are navigation links: "Home", "Students", "Module Leaders", "Modules", "Announcements", and "Sign out". The main content area is titled "Modules". It features a table with columns: Module Code, Module Title, Course, Level, Associated Tutor, and Credit Points. A "Sort by" dropdown is set to "Level" and a search bar is present. At the bottom is a green "Add Modules" button.

The screenshot shows a dark-themed web application interface. On the left, a sidebar contains a user profile icon, the text "Admin", and a "Edit Profile" link. Below these are navigation links: "Home", "Students", "Module Leaders", "Modules", "Announcements", and "Sign out". The main content area is titled "Announcements". It displays three cards, each containing an "Announcement Title" (with placeholder text about lorem ipsum), a truncated description, and a timestamp ("2 hours ago"). At the bottom is a green "Create an Announcement" button.

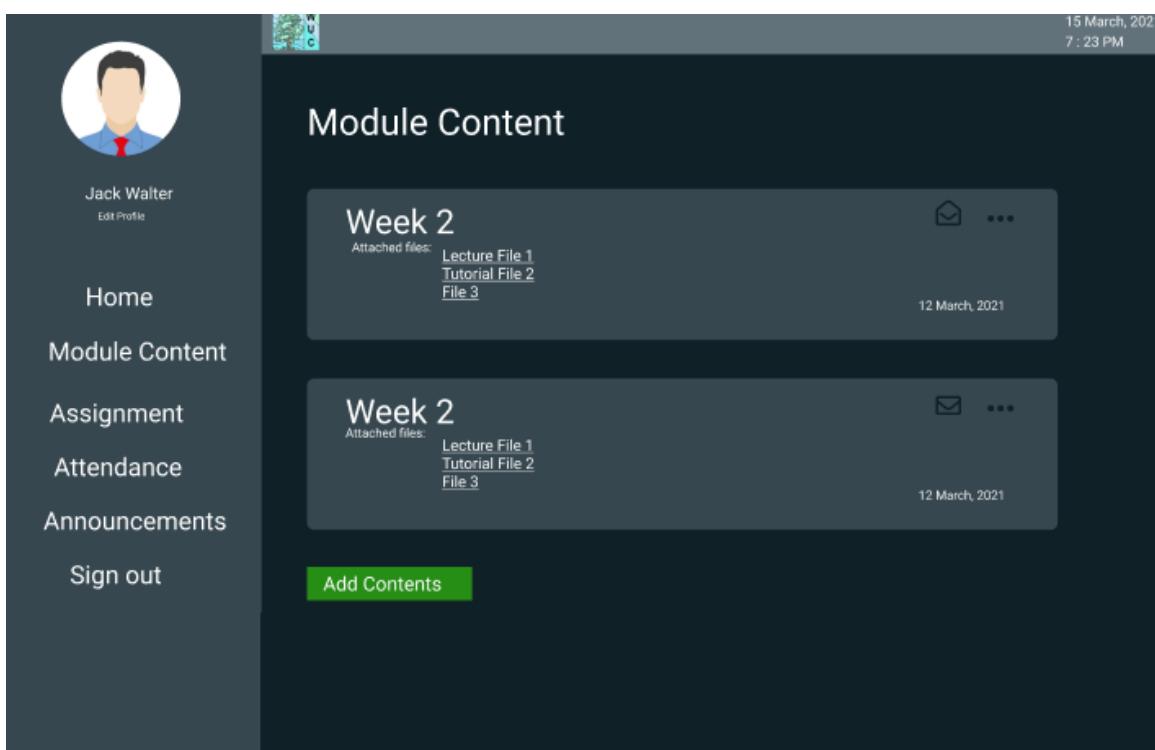
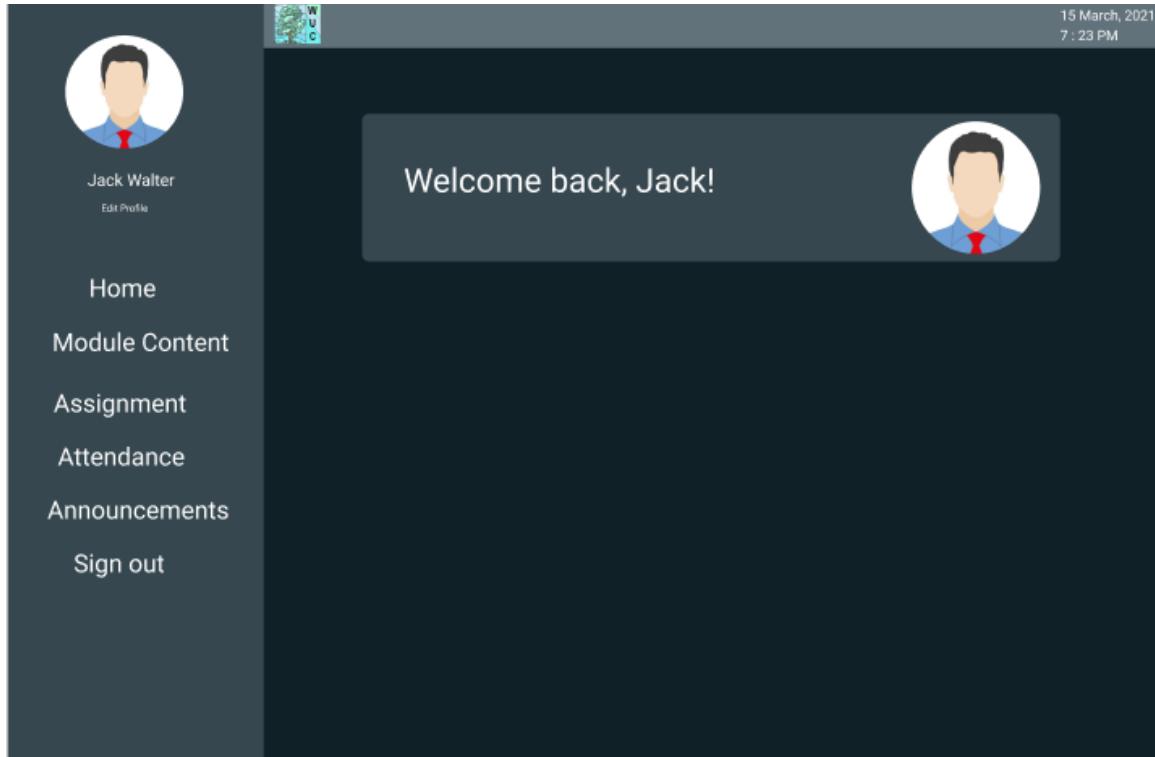
module leader

- one module leader is assigned to each module
- can view, add, edit, delete module contents
- can hide/unhide module contents from students
- can add, view, edit, delete assignments
- after adding assignment, the student should get notification

- can post grades to the uploaded assignment by student
- take attendance, can send warnings if the attendance % is low

- get notification if student submits an assignment

wireframes:





15 March, 2021
7 : 23 PM



Jack Walter
[Edit Profile](#)

- [Home](#)
- [Module Content](#)
- [Assignment](#)
- [Attendance](#)
- [Announcements](#)

[Sign out](#)

Assignments

Assignment 1

Attached files:

- [File 1](#)
- [File 2](#)
- [File 3](#)

12 March, 2021

Assignment 1

- [File 1](#)
- [File 2](#)
- [File 3](#)

12 March, 2021

[Add Assignment](#)

The screenshot shows a student's profile on the left with a placeholder profile picture and the name "Suresh Gautam". The main content area is titled "Attendance". It includes a "Sort by" dropdown set to "Level" and a search bar. A table lists student attendance status across multiple rows. The columns are "Student Id", "Student Name", and "Attendance". Each row contains three radio buttons: checked (filled), empty, and checked (filled).

Student Id	Student Name	Attendance
		<input checked="" type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
		<input checked="" type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
		<input checked="" type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
		<input checked="" type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
		<input checked="" type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
		<input checked="" type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
		<input checked="" type="radio"/> <input type="radio"/> <input checked="" type="radio"/>

[View Attendance](#)

The screenshot shows a student's profile on the left with a placeholder profile picture and the name "Jack Walter". The main content area is titled "Announcements". It displays three announcement cards, each with a title, a preview of the content, and a timestamp. A "Create an Announcement" button is at the bottom.

- Announcement Title**
Lorem ipsum, or ipsum as it is sometimes known, is dummy text used in laying out print, graphic or web designs. The passage is attributed to an unknown typesetter in the 15th century
2 hours ago
- Announcement Title**
Lorem ipsum, or ipsum as it is sometimes known, is dummy text used in laying out print, graphic or web designs. The passage is attributed to an unknown typesetter in the 15th century
2 hours ago
- Announcement Title**
Lorem ipsum, or ipsum as it is sometimes known, is dummy text used in laying out print, graphic or web designs. The passage is attributed to an unknown typesetter in the 15th century
2 hours ago

[Create an Announcement](#)

2.2.2.1. Required functionalities for the system

2.2.2.1.1. Student Records

The system will store and manage the records of students based on the three statuses i.e. provisional, live and dormant. The records of the students who applied for the university but did not get enrolled will be stored as provisional. The records of the passed out or withdrawn students will be stored as dormant and the currently enrolled students will be

stored as live. The students whose status is live will only be given access to the proposed system. Student records can be added, edited or disabled by the admin.

2.2.2.1.2. Student Records

The system will also store the records of the staff that are related with the university. There will be the provision to add, edit and delete staff records from the system. The staff will be categorized into two sub sections: admin and module leaders where admin will have the utmost priority and access right followed by the module leaders.

2.2.2.1.3. Course Management

The system will store the information about the courses available at the university. Admin can add, edit and delete a course and its content. A course will have a course leader, modules and levels associated to it. And, a student is enrolled at a particular course at a time.

2.2.2.1.4. Module Management

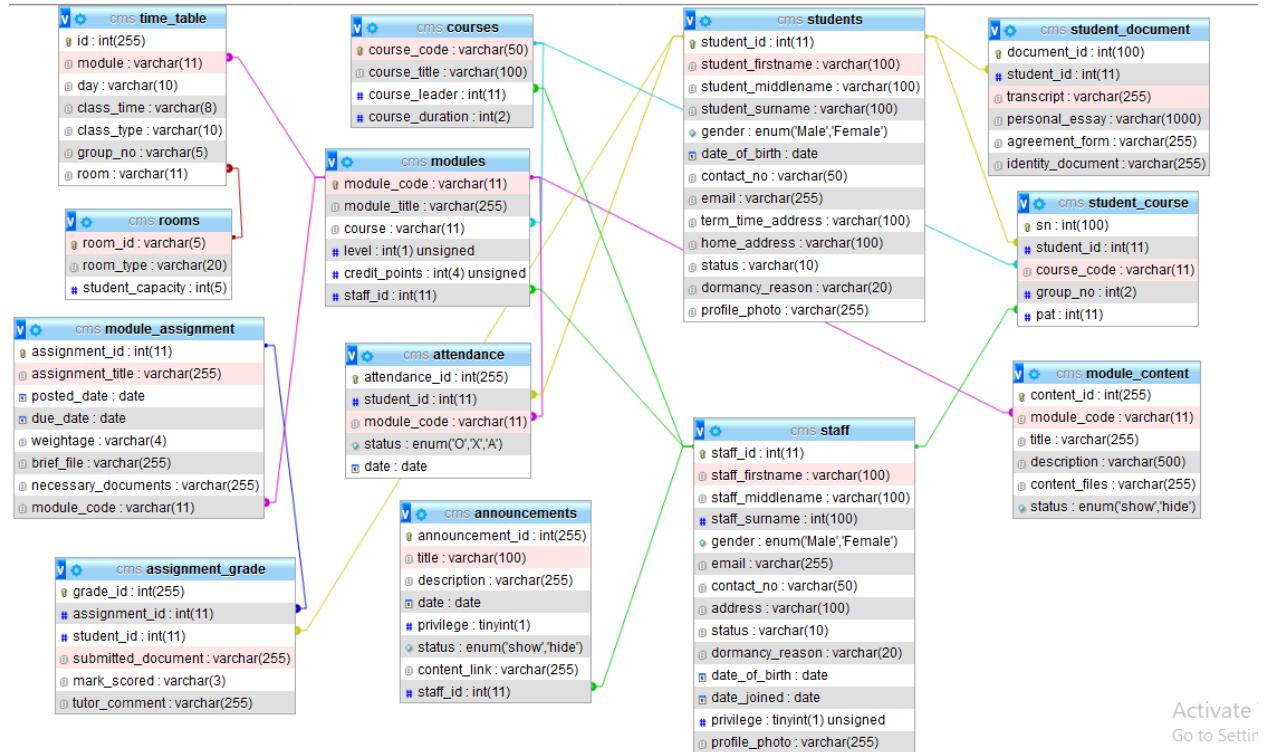
- Many modules will have a course associated to them
- Admin can add, edit, delete and view modules
- A module leader will be assigned to each module

2.2.2.1.4. Module Content Management

- Module leaders can add, edit and delete a module content
- Students can view contents only after the allowance of module leaders
- A module will have many content associated with it

3.4 System Database Design

3.4.1 E-R Model



3.4.2. Attribute Listings

S.N	Table Name	Attributes
1.	students	student_id, student_firstname, student_middlename, student_surname, gender, date_of_birth, term_time_address, home_address, contact_no, email, status, dormancy_reason, login_password, profile_photo
2.	staff	staff_id, staff_firstname, staff_middlename, staff_surname, gender, email, contact_no, address, status, dormancy_reason, date_of_birth, date_joined, login_password, privilege, profile_photo,
3.	courses	course_code, course_title, course_leader, course_duration
4.	modules	module_code, module_title, level, credit_points, description,
5.	module_course	sn, module_code, course_code, staff_id
5.	module_content	content_id, module_code, title, description, content_files, status
6.	student_module	sn, student_id, course_code, group_no, pat
7.	student_document	document_id, student_id, transcript, personal_essay, agreement_form, identity_document
8.	module_assignment	assignment_id, assignment_title, posted_date, due_date, weightage, brief_file, necessary_documents, module_code

9.	attendance	attendance_id, student_id, module_code, status, date
10.	assignment_grade	grade_id, assignment_id, student_id, submitted_document, mark_scored, tutor_comment
11.	announcements	announcement_id, title, description, date, privilege, announcement_status, staff_id, content_link
12.	classrooms	room_id, room_type, student_capacity
13.	time-table	id, module, day, class_time, class_type, group_no, room_no

Access rights:

The screenshot shows a Windows desktop environment. A PDF document titled "sample group project.pdf" is open in a browser window. The PDF contains two tables illustrating access rights:

2.2.2.6. Attendance Management

Operation	Administrator	Module Leader	Student
Add Attendance	No access	Add attendance of a student	No access
Edit Attendance	No access	Amend the attendance	No access
Delete Attendance	No access	Delete the attendance completely	No access

Send warning

	Send warning if attendance is low	Send a warning if attendance is low	No access
Send warning			No access
View Attendance	View the attendance	View the attendance	Can view own attendance
View warning	View the warning	View the warning	View the warning
Archive Attendance	No access	Archive grade	No access

At the bottom of the screen, there is a taskbar with various icons and a system tray indicating the date and time (3/27/2021, 9:45 PM).

sample group project.pdf

File | C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf

2.2.2.5. Grade Management

Operation	Administrator	Module Leader	Student
Add Grade	No access	Add a new grade to a module for a term for a student	No access
Edit Grade	No access	Amend the grade	No access
Delete Grade	No access	Delete the grade completely	No access
View Grade	No access	View the grade	Can view own grade of the module for the term
Archive Grade	No access	Archive grade	No access

Activate Windows
Go to Settings to activate Windows.

Type here to search

9:45 PM 3/27/2021

sample group project.pdf

File | C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf

2.2.2.1. Administrator, Staff and Student Management

1. Administrator records management

Operation	Administrator	Module Leader	Student
Add Administrator	Add a new administrator	No access	No access
Edit Administrator	Amend the administrator's information	No access	No access
Delete Administrator	Delete the administrator completely	No access	No access
View Administrator	View an administrator	No access	No access
Archive Administrator	Archive administrator	No access	No access

Activate Windows
Go to Settings to activate Windows.

Type here to search

9:44 PM 3/27/2021

sample group project.pdf

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2. Module Leader records management

Operation	Administrator	Module Leader	Student
Add Module Leader	Add a new module leader	No access	No access

sample group project.pdf

File | C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf

2. Student records management

Operation	Administrator	Module Leader	Student
Add Module Leader	Add a new module leader	No access	No access
Edit Module Leader	Amend the module leader's information	No access	No access
Delete Module Leader	Delete the module leader completely	No access	No access

sample group project.pdf

File | C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf

2. Student records management

Operation	Administrator	Module Leader	Student
Add Module Leader	Add a new module leader	No access	No access
Edit Module Leader	Amend the module leader's information	No access	No access
Delete Module Leader	Delete the module leader completely	No access	No access
View Module Leader	View a module leader	View students profile	View own profile
Archive Module Leader	Archive module leader	No access	No access

sample group project.pdf

File | C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf

2.2.2.2. Course Management

Operation	Administrator	Module Leader	Student
Add Course	Add a new course	No access	No access
Edit Course	Amend the courses' information	No access	No access
	Delete the course completely	No access	No access
View Course	View a course	No access	Can view the course in which the student is enrolled
Archive Course	Archive course	No access	No access

Activate Windows
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2.2.2.3. Module and Content Management

1. Module Management

Operation	Administrator	Module Leader	Student
Add Module	Add a new module in a course	No access	No access

Edit Module	Amend the module's information	No access	No access
Assign Module	Assign a module to a module leader	No access	No access
Delete Module	Delete the module completely	No access	No access
View Module	View a module	No access	Can view the module in which the student is enrolled

Activate Windows
Go to Settings to activate Windows.

1. Content Management

Operation	Administrator	Module Leader	Student
Add Content	No access	Add a new content to a module	No access
Edit Content	No access	Amend the content	No access
Delete Content	No access	Delete the content completely	No access
View Content	No access	View the content	Can view the content of the module
Archive Content	No access	Archive content	No access

Name of entity Type/Format Notes

Activate Windows
Go to Settings to activate Windows.

2.3.3.4. Assignment Management

Operation	Administrator	Module Leader	Student
Add Assignment	No access	Add a new assignment to a module for a term	No access
Edit Assignment	No access	Amend the assignment	No access
Delete Assignment	No access	Delete the assignment completely	No access
View Assignment	No access	View the assignment	Can view the assignment of the module for the term
Submit assignment	No access	No access	Can submit an assignment
Archive Assignment	No access	Archive assignment	No access

Name of entity Type/Format Notes

Activate Windows
Go to Settings to activate Windows.

Other wireframes that you can use for reference:

sample group project.pdf

File | C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf

of the system according to the finalized view. Even though mockups are visual representations, they only give the basic idea of the system and might be a lot different than the actual system.

Admin

The dashboard features a sidebar with links for Home, Administrators, Module Leaders, Courses, Students, and Announcements. It includes four summary cards: Total Students (1080), Total Module Leaders (980), Total Modules (120), and Total Courses (320). A footer note encourages activating Windows.

Activate Windows
Go to Settings to activate Windows.

Type here to search

9:33 PM 3/27/2021

sample group project.pdf

File | C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf

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Figure 1.22. Admin Dashboard

The dashboard shows a table of student records with columns for S.N., Title, First Name, Sur Name, Gender, Email, Courses, Status, Manage, Detail, and Delete. The table contains six rows of student data. A footer note encourages activating Windows.

Add Student

S.N.	Title	First Name	Sur Name	Gender	Email	Courses	Status	Manage	Detail	Delete
3	Title	Georgiana	Grant	Gender	Email	Courses	Provisional			
3	Title	Giovanna	Koelpin	Gender	Email	Courses	Provisional			
4	Title	Donnell	Zboncak	Gender	Email	Courses	Provisional			
4	Title	Jacqueline	Terry	Gender	Email	Courses	Provisional			
6	Title	Stanley	Russel	Gender	Email	Courses	Provisional			

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Activate Windows
Go to Settings to activate Windows.

Type here to search

9:33 PM 3/27/2021

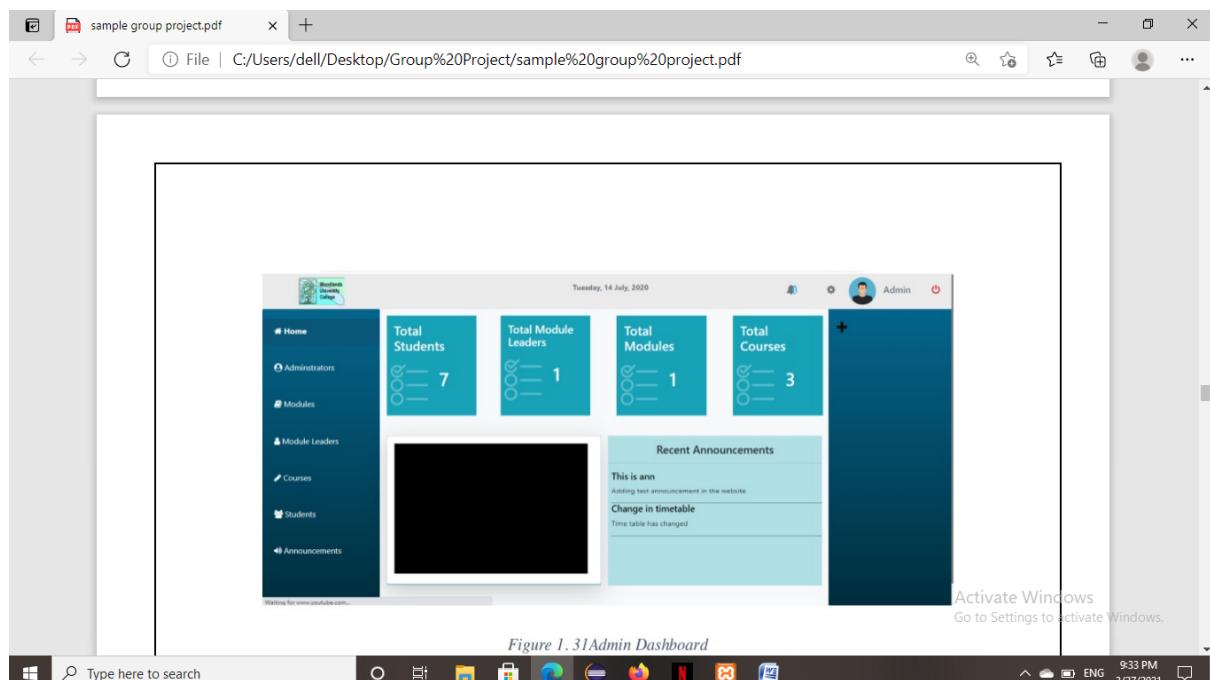


Figure 1.31Admin Dashboard

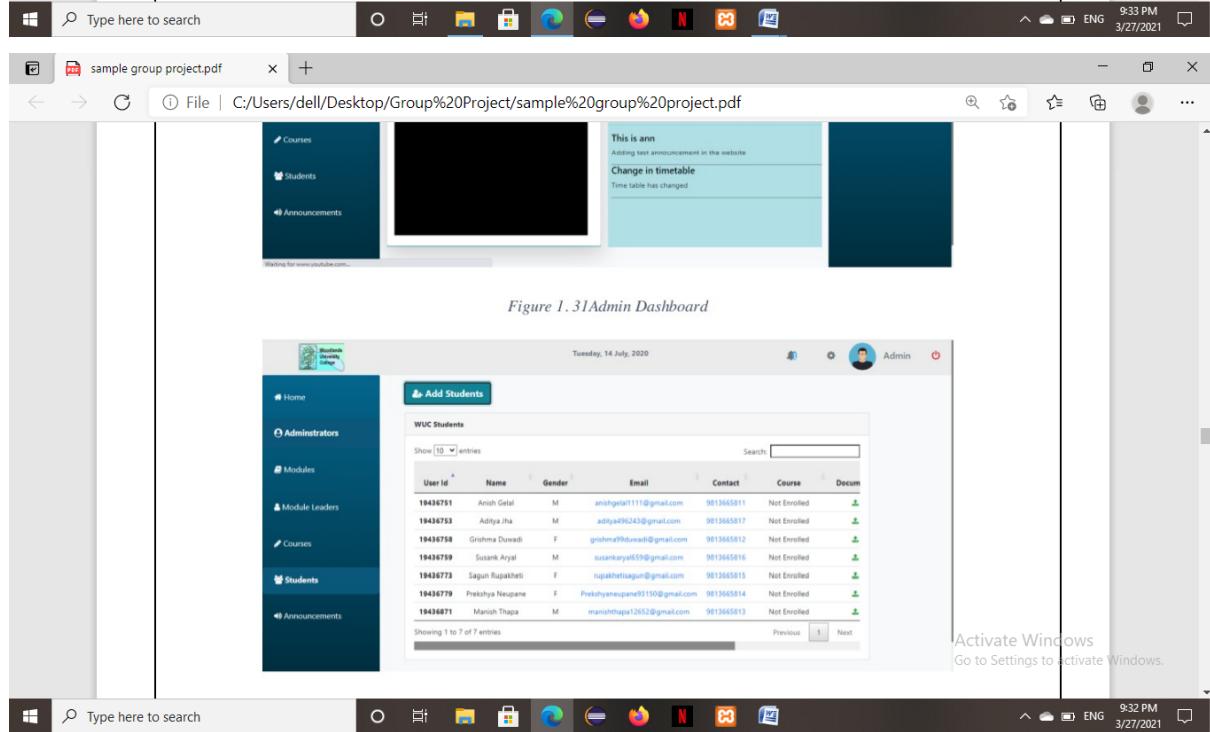


Figure 1.31Admin Dashboard

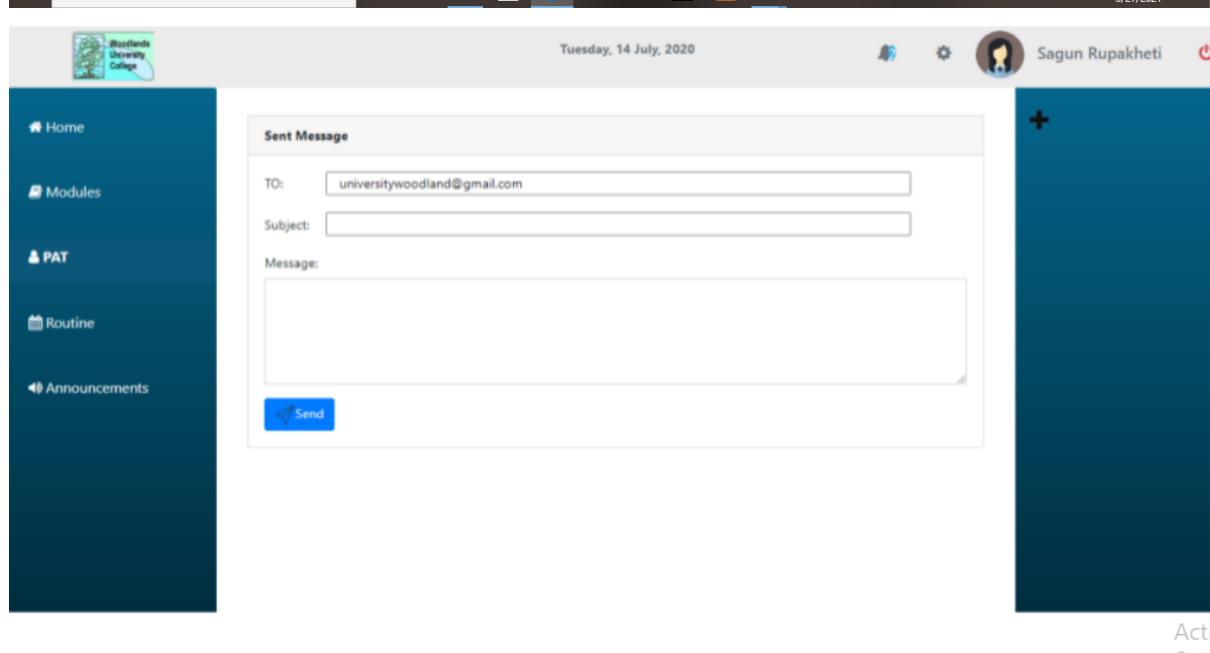
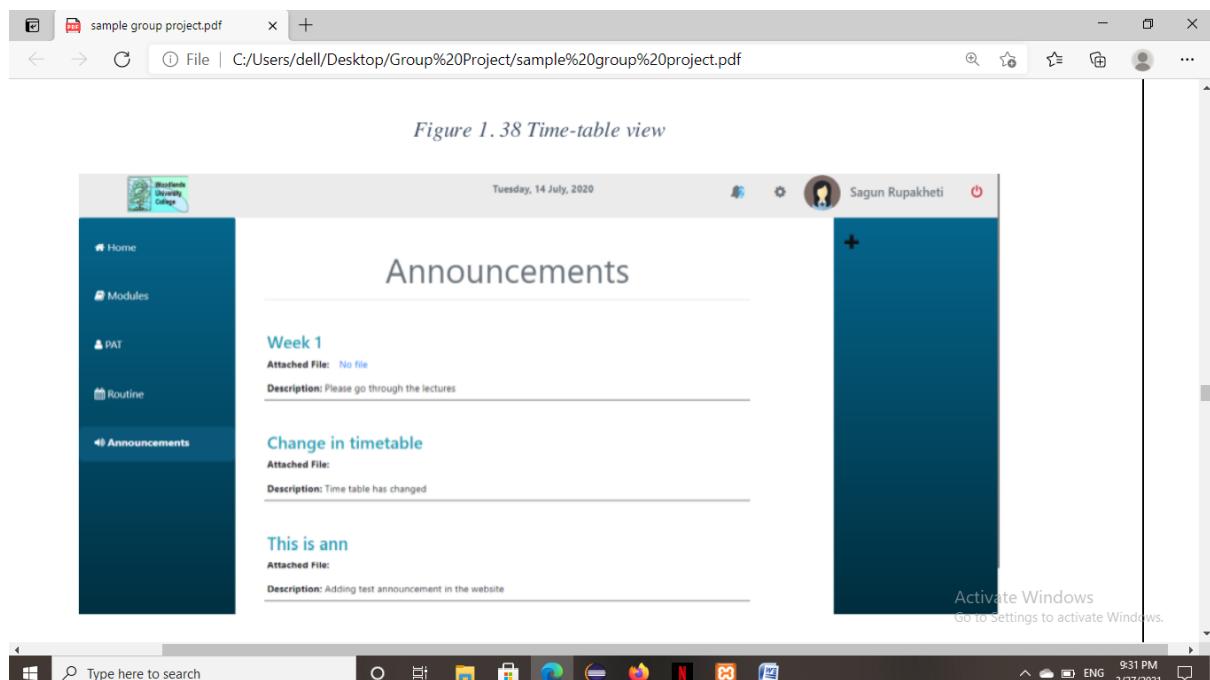


Figure 1.36 PAT communication

The screenshot shows a web browser window with a URL of <C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf>. The main content area displays a 'Time Table' grid for the week. The grid has days of the week (Sunday to Friday) as rows and time slots (9:00-10:00 to 4:00-5:00) as columns. A single entry 'CSY3020 Lecture' is listed for Sunday at the 9:00-10:00 slot. The sidebar on the left contains links for Home, Modules, PAT, Routine, and Announcements. The top right corner shows the user profile 'Sagun Rupakheti'. A watermark for 'Westfield Secondary College' is visible in the top left of the page.

Figure 1.38 Time-table view

The screenshot shows a web browser window with a URL of <C:/Users/dell/Desktop/Group%20Project/sample%20group%20project.pdf>. The main content area displays an 'Edit Profile' form. The form includes fields for Personal info: First name (Sagun), Middle name (Middle Name), Last name (Rupakheti), Email (rupakhetisagun@gmail.com), Contact Number (9813665815), and Birthdate. There is also a section for 'Manage Your Account' with a placeholder 'Upload a different photo...'. The sidebar on the left contains links for Home, Modules, PAT, Routine, and Announcements. The top right corner shows the user profile 'Sagun Rupakheti'. A watermark for 'Westfield Secondary College' is visible in the top left of the page.

Figure 1.37 Profile view

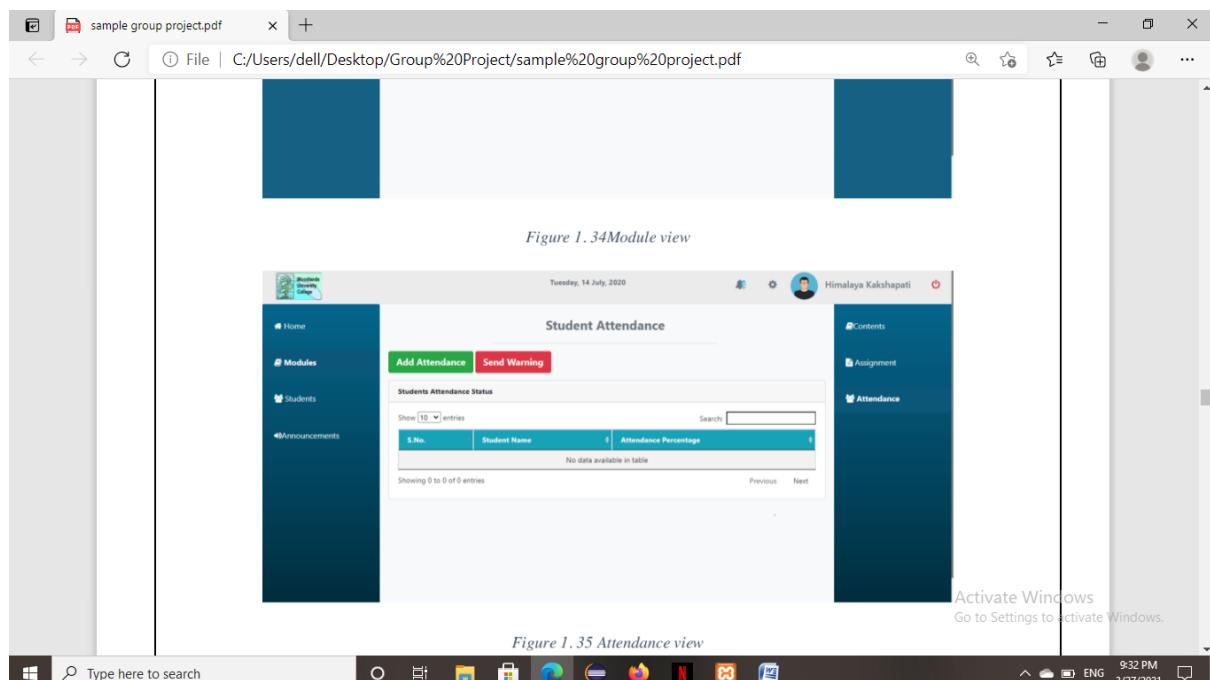


Figure 1.34 Module view

This is a screenshot of the 'Student Attendance' module. At the top, it shows the date 'Tuesday, 14 July, 2020' and the user 'Himalaya Kakshapati'. Below this is a table titled 'Students Attendance Status' with three columns: 'S.No.', 'Student Name', and 'Attendance Percentage'. A note at the bottom says 'No data available in table'. To the right, there's a sidebar with 'Contents', 'Assignment', and 'Attendance'.

Figure 1.35 Attendance view

