



GRIFFITH COLLEGE DUBLIN

Assignment Cover Sheet

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1.0 Introduction

This document delivers in-depth information about the Edoo mobile application development. It entails the User Investigative report, Problems the application seek out to solve and Detailed design validations.

Edoo is proposed to become a student productive mobile application that helps students achieve their goal swiftly. It will be used by Griffith college students in achieving their problem-solving day to day academic goals. These goals include: accessing course materials, assignment brief, submitting assignment, timetables, grades, past questions, among others. Edoo is available on iOS and android, there achieving the benefit of operating system flexibility for Edoo.

2.0 User Analysis

2.1 Competitor Research

Edoo's major competitors include Moodle, Mycourse, openSWAD, Chalkup and so on. Moodle is currently used by students of Griffith college and outcome of the research shows that student's perception (awareness, attitude and usage) of Moodle website is negative and the number of student that are aware of the Moodle mobile application is relatively low. Students negative perception is indicated by the look and feel of the website, Navigation, Information congestion and complexity. Therefore, Edoo is being developed to solve that problem.

2.2 User Research

Edoo mobile application users are mainly Griffith college. During the research process, users outlined the set of goals that they achieve daily on Moodle, problems that are prominent as well as the difficulty they encounter on the website. The set of goals users want to achieve are to access timetable, courses materials online, assignments deadline reminder, submit assignments when due, access grades, access past questions when exams are approaching, communicate with course mates and lectures for inquiries as well as to check if any class has been cancelled through the announcement tab.

Clarke Alfred: Undergraduate Student.

“I just want to graduate with good grades”



Quick Take on Alfred

Computer Skills:	Expert
Educational Level:	Undergraduate
Devices:	PC and Mobile phone
Computer tools:	Email and Web browsing
Apps Used:	Evernote, PDF reader, Lynda, Twitter, YouTube, Instagram, Snapchat.

Key Goals

Alfred's key goals are to access his timetable, courses materials online, remind himself of assignments deadline, submit assignments when due, access his grades, access past questions when exams are approaching communicate with his course mates and lectures for inquiries as well as to check if any of his class has been cancelled.

Fraustrations

Alfred finds it difficult to listen in class which makes him rely on Moodle for his course materials. He finds it difficult navigating through the website and when he tries the alternative of searching thorough the webpage, search box is nowhere to be found. Alfred sometimes want to access Moodle on his mobile phone because he doesn't carry his computer everywhere and accessing the website on mobile phone seem tight as there are too much information.

A Day in The Life

Alfred is an undergraduate at Griffith college and has parallel everyday routine in his life. He is a computer enthusiast and wants to do everything right to achieve his bachelor's degree in interior design. Everyday whether he has morning classes or not, Alfred wakes up at 7am to prepare for school. He takes his bath, prepares breakfast, packs his lunch and leave home by 8am. He lives 45 minutes away from school and he always want to be in school as early as possible because most of classes starts by 9am.

When Alfred get to school he attend his classes and when he doesn't have class he studies and does his assignments in an open lab. When Alfred is in class he opens the Moodle website to access his course materials which includes: notes, worksheets and assignments. He also makes some jottings using the Evernote desktop app.

After class, Alfred have his lunch with friends and prepare for the next class and do exactly the same thing listed above but when he doesn't have any other class, he goes back to the open lab to study and do his assignments. Sometimes, Alfred might miss his bus which make him come to class late and he might be feeling sick at times which eventually might make him miss a class. When he does, he communicates with his lecturer about his condition and usually access his notes from his house and submit assignment at the due dates.

Alfred's studying habit includes: reading through his course materials, accessing tutorials on YouTube and Lynda. And the applications/resources that assists him in studying are: Moodle, library materials, Evernote and Lynda.

2.4 Problem Statement

The problems students expressed during the research process when using the moodle website cannot be overemphasised. Based on the result of the research, the problems that are prominent to users include;

- Series of dead hyperlinks: some links lead to nowhere
- Information congestion: too much information which leads to the complexity of the webpage
- Absence of Search box: there is no search box.
- Poor user interface (graphics): the graphic of the website is unappealing
- Navigation: user navigation is complex
- Diversity: there is Moodle application Lectures and MyGCD for exam information and to pay fees online.

2.5 Vision Statement

The Edoo mobile application will help student achieve their goals swiftly and might replace Moodle in the long run. Edoo will present students the features they need most at their fingertips. The major tabs include: homepage, courses, assignment, calendar and student profile. The Edoo application also solve the problem of diversity for the students as the application brought together the academics, exam information and finance services.

2.6 Context Scenarios

The outline of how students will achieve their day to day academic activities on Edoo are as follows.

Firstly, when the Edoo mobile application is opened, the homepage is the School news section and Bookmarks. where students are presented with events happening in campus. The news is highlighted based on the news story and the student can read more on it by tapping on the highlights. The student can also search the homepage by clicking on the search icon located at the top right of the application. If Alfred logs into the Edoo app, the homepage is presented to him and he can access his favourite courses and assignment brief in seconds.

If students want to access their lecture notes, they will click on the book icon located next to the homepage icon on the left. On this tab, the student can access their subject, lecture notes of

each subject and Assignment. When the student wants to access assignment brief and submit assignment, the student will click on the assignment tab and access the assignment page of their choice and if they want to download the assignment brief they can do that by clicking on the download button on each assignment tab.

If student wants to message their classmate, lecturer or programme administrator, the student will click on the message icon located beside the homepage icon on the left. In the message page, the student can also add a chat by tapping on the floating icon which takes the student to a contact list depending on the department of the student and classmates. The notification and reminder options are not left out. The message page is also divided into two tabs, the second tab is tagged notification. If student want to add a reminder, access reminder or is being notified about a class reschedule, the student will tap on the notification tab. In the notification tab, students can see the list on upcoming events which includes; class reschedule, upcoming assignment due dates and their personalised reminder. In addition, if the student want to add a reminder, the student will click on the floating icon located at the down left of the screen. To add alerts, the student will click on a particular date and add the necessary info.

To access exam number, on the Edoo app, to access exam number is made easy and handy. The student will click on the profile icon located beside the course icon on the right. The student profile is characterised with student academic number, exam number, student timetable, student handbook, access grades and online fee payment

If a student wants to access their webmail, the student will click on the “more” icon beside the message icon on the left. The “more” page is characterised with links useful to the student but not every time.

Every academic year, students are advised to update their profile pictures which will be printed on their new Student identification card. To update profile picture on Edoo, students will tap on the profile icon to go to the profile page and select the edit info option. In the edit info option, student will then click on the current picture to upload a new one from their mobile device.

For security reasons, students are advised to always sign out when they are not using the Edoo mobile application. In other to do that, the student will go to the profile page and click on the log out icon located at the top left of the profile page.

2.7 Requirement List

Homepage

The homepage is the screen presented to users when they open the Edoo application. It will be embodied with news

Bookmark

Alfred needs a page where he can include his favourites lectures notes and assignments, so he can access them as soon as possible. The bookmark tab will solve the problem of ease of access.

Courses

One of Alfred's key goal is to access his courses and assignment brief which make it a necessity. Here, users should be able to access their lecture notes according to each subject as well as assignment briefs.

Download and Upload

The download button is required in situation where users want to download lecture notes, assignment brief and so on, while the upload button is required when they want to upload assignments and change their profile pictures.

Message

Message will allow users to access their classmates contacts including the contact of key administrators on campus which include; programme administrator, IT department, international office, Admission office and so on.

Alerts

Users need the alert feature, so they can be notified about assignment due date, class reschedule as well as their personalised alerts.

Profile

The user's profile will entail his/her student number and exam number, the edit profile option, and other academic materials. The profile will solve the problem of diversity bringing users all the information they need.

Grades

Users need to access their grades at some point in their academic session which is usually when they are on holidays without their PCs. Users need to be able to access their grade on their mobile phone

Search

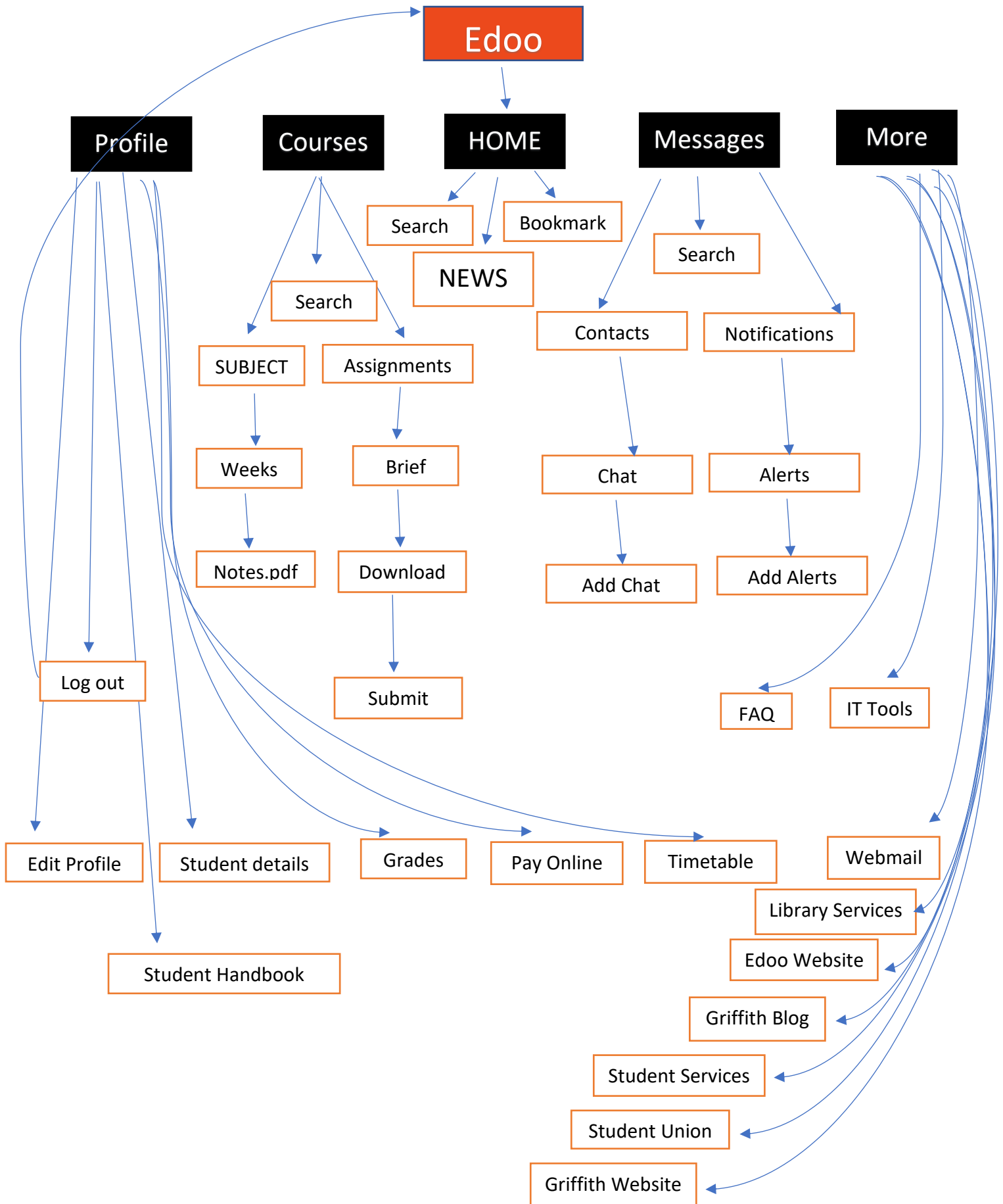
This is a key requirement to Alfred as he finds it difficult to search for contents in his current academic application. “Search” will allow users to search for keywords when they are unable to locate some of their academic contents.

Others

Based on the outcome of the research, users categories some function as unnecessary while a low number of users disclose that they make use of it but not all the time. “Others” will be embodied with those links and features users categorise as unnecessary.

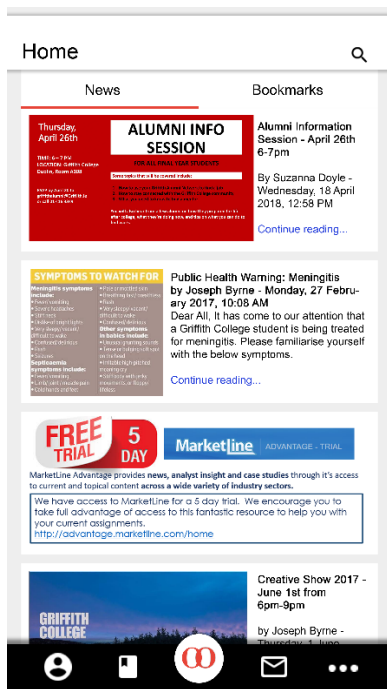
3.0 Design Framework

3.1 Sitemap

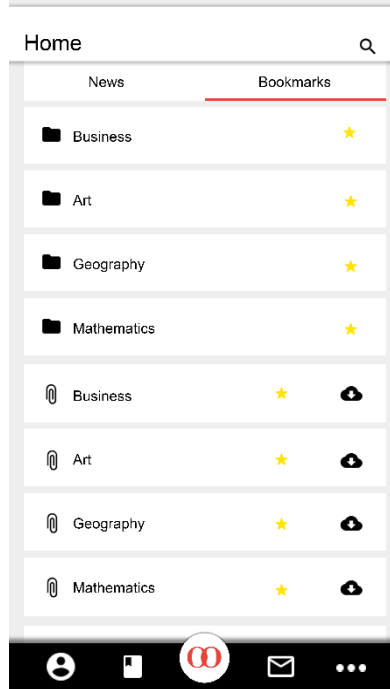


3.2 Key Path Scenarios

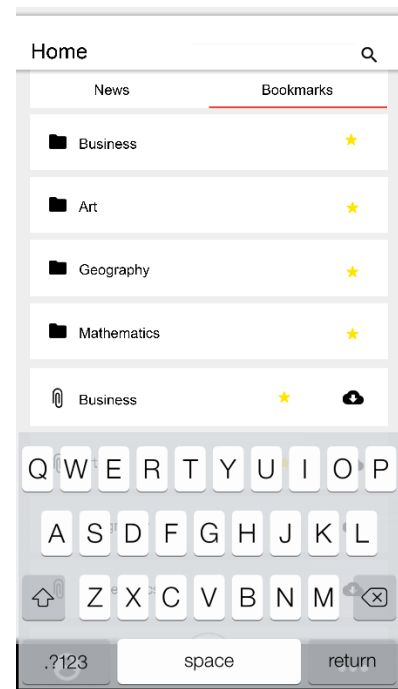
Accessing Bookmark



Logged in; Home - News

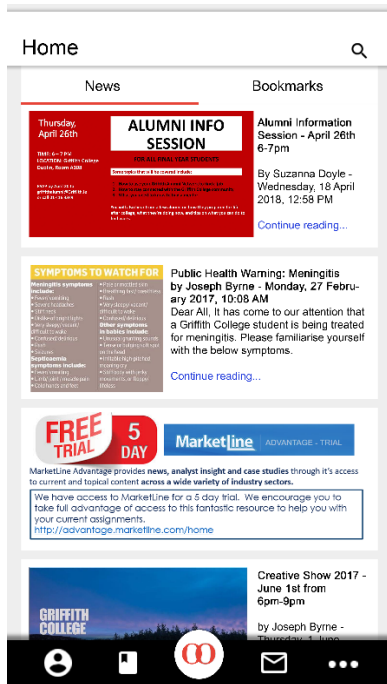


Home - Bookmark

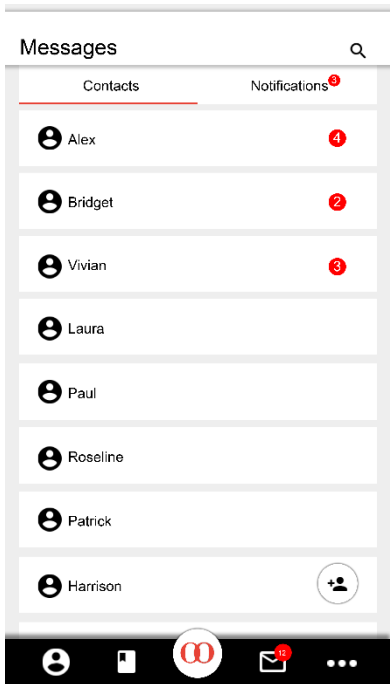


Home – Searching the bookmark

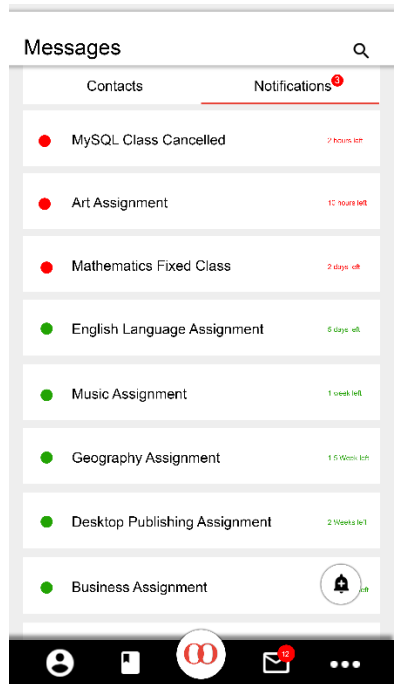
Adding Alert



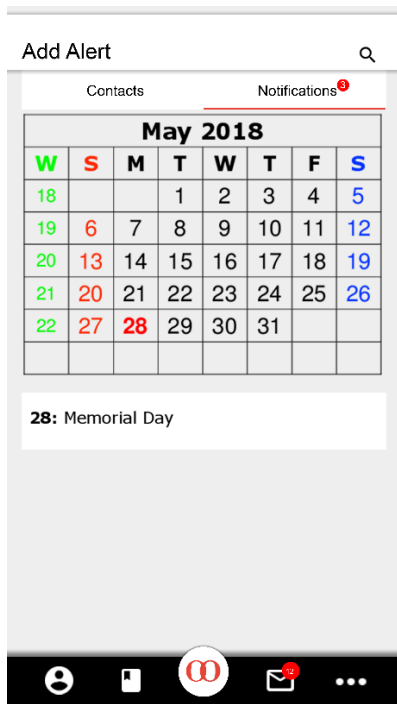
Logged in; Home - News



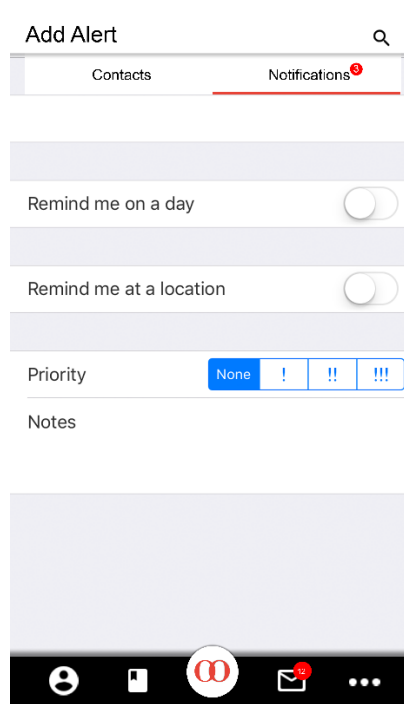
Messages



Notification

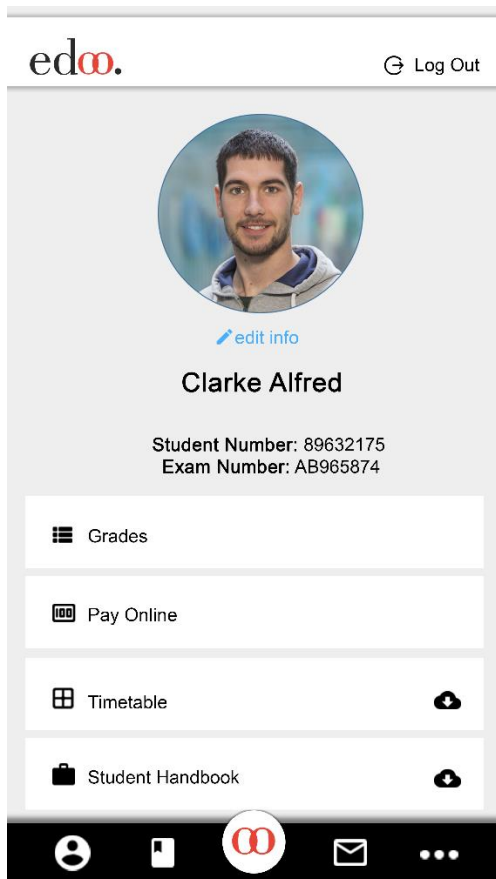


Add alert; by clicking on a date.



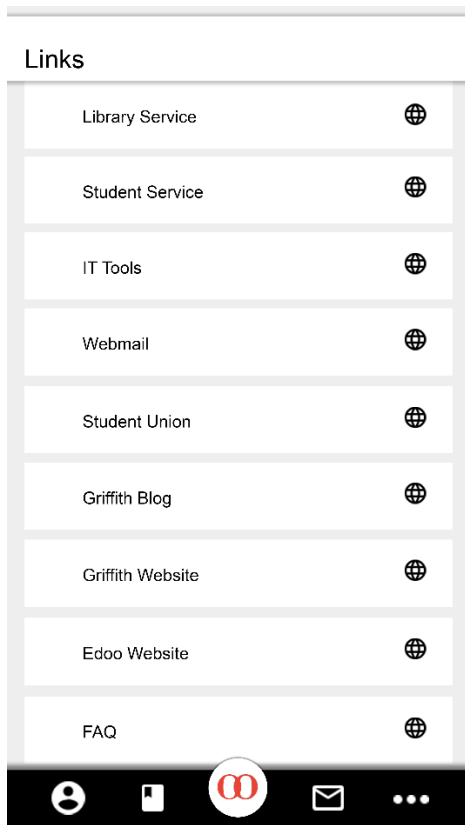
Adding Alert Screen

Accessing Profile.



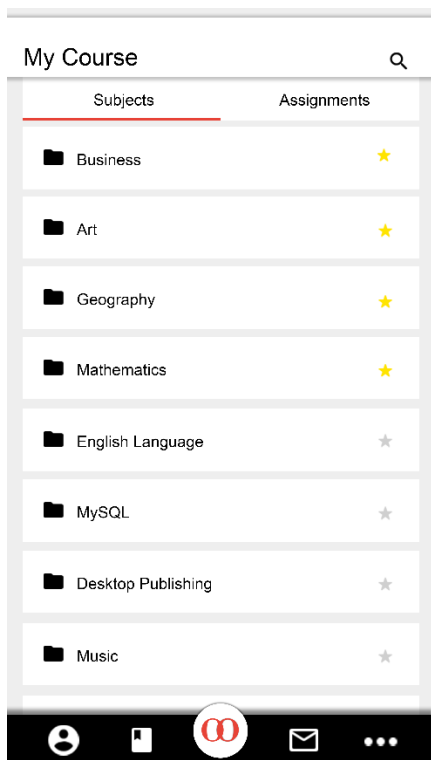
Time-table, Student Details and other Personal details

Accessing Important Links

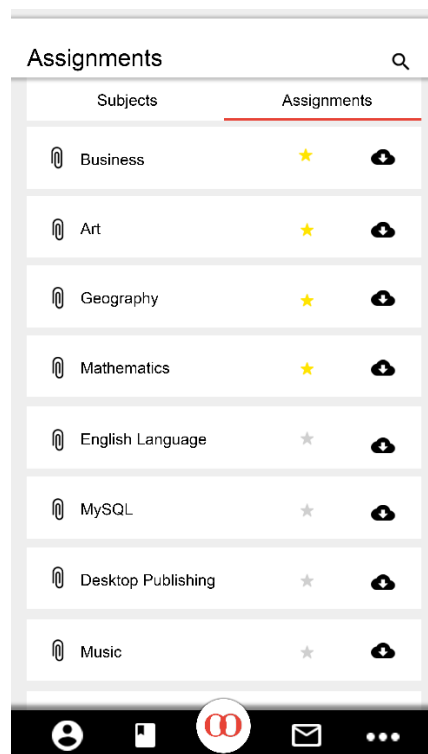


More

Downloading Assignment Brief

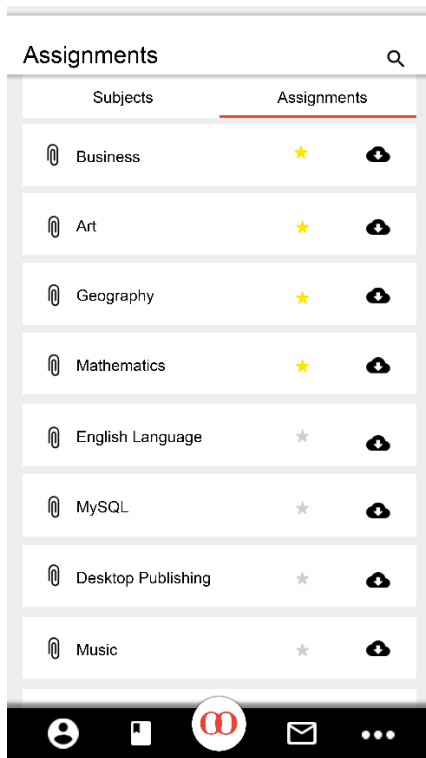


Course then tap on the Assignment tab

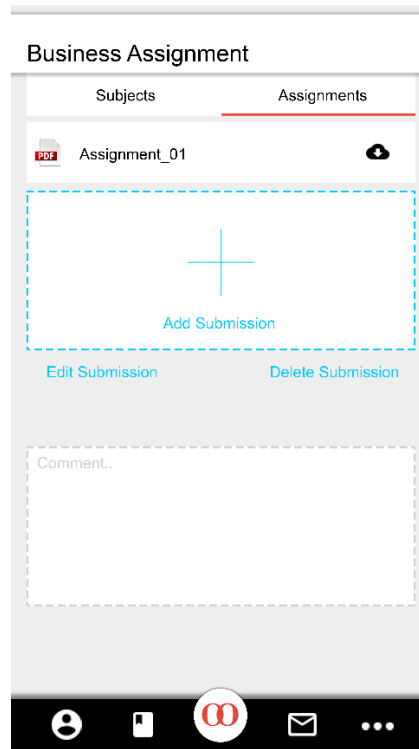


On the assignment screen, you click on the download icon.

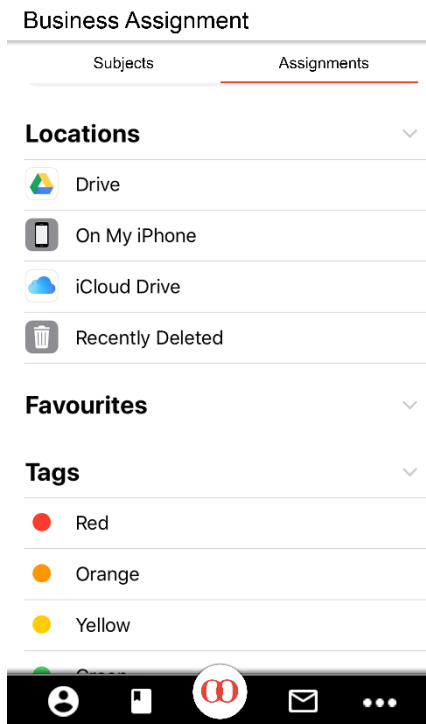
Submitting Assignment



Click on the assignment to submit



Click on add submission to upload file



Browse the file to upload

3.3 Validation Scenarios

What if Alfred wants to reply a message from one of his course-mate while he is going through his course notes?

He can click on the message icon to reply his course-mate as the option bar are always on screen.

What if Alfred wants to add alert for an upcoming assignment?

He wouldn't need to that as deadlines are automatically added to the upcoming event list in the notification tab.

What if Alfred wants to get notified when his grades as been uploaded at the end of the semester?

He automatically gets notification about his grades.

What if Alfred wants to access his time-table while texting one of his course-mate?

Alfred can click on the profile icon to access time-table as the option bar are consistently on the screen.

What if Alfred selected the wrong file while trying to upload an assignment?

Alfred can edit his submission by deleting the first submission and then click on "add submission" to upload the correct file.

3.4 Detailed Design

3.4.1 Design Appearance

edoo.

edoo.

edoo.



Colours



#db434



#ffffff3



#00000



#d9d9d



#a6a6a



#00b0f0



#ff0000



#00b05



#ffd966

Icons



Font

Font name: Arial

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

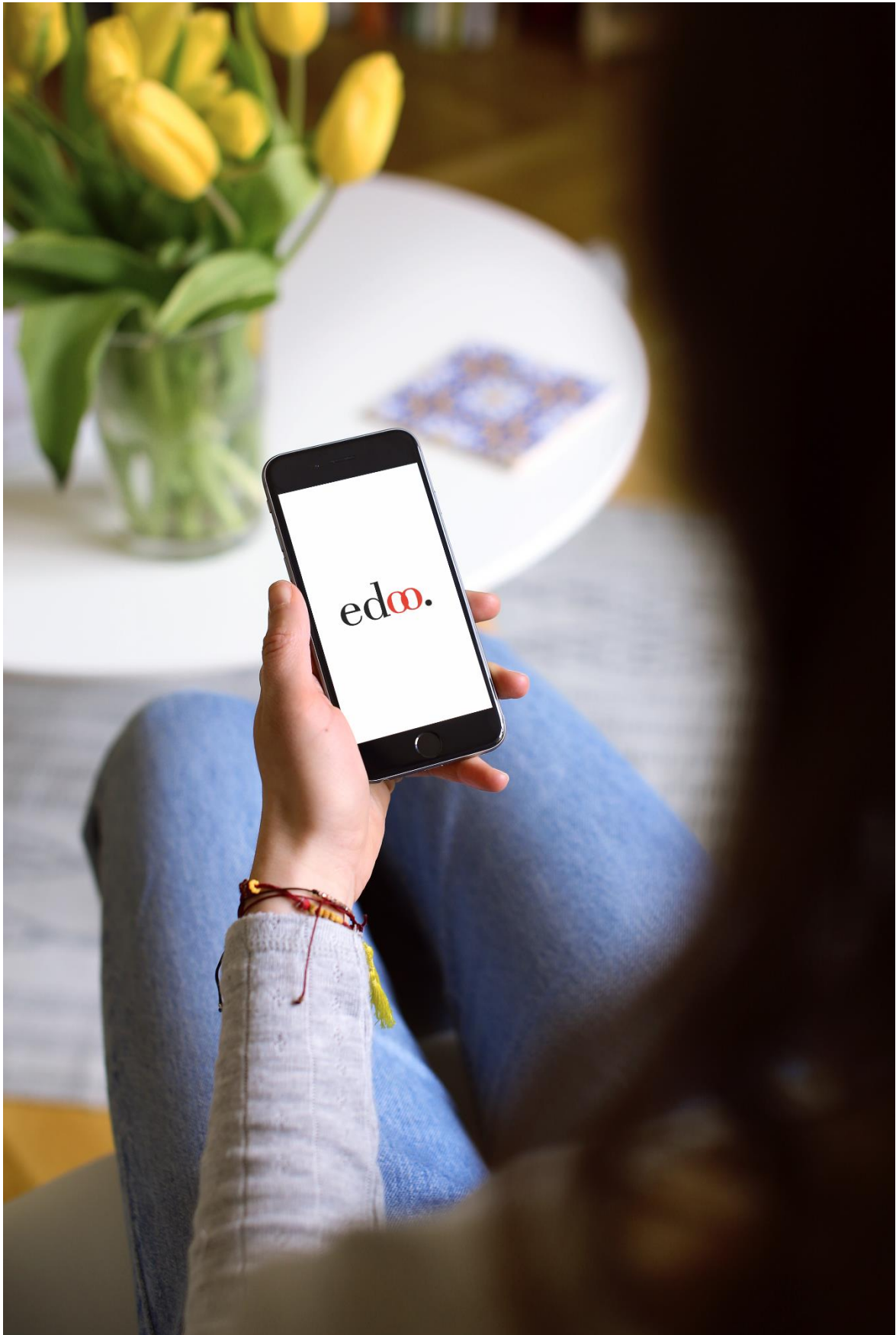
0123456789

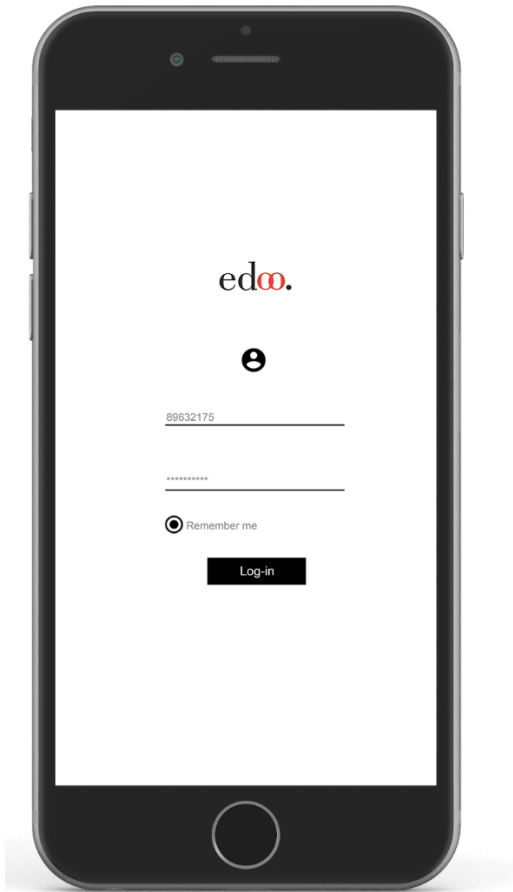
ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

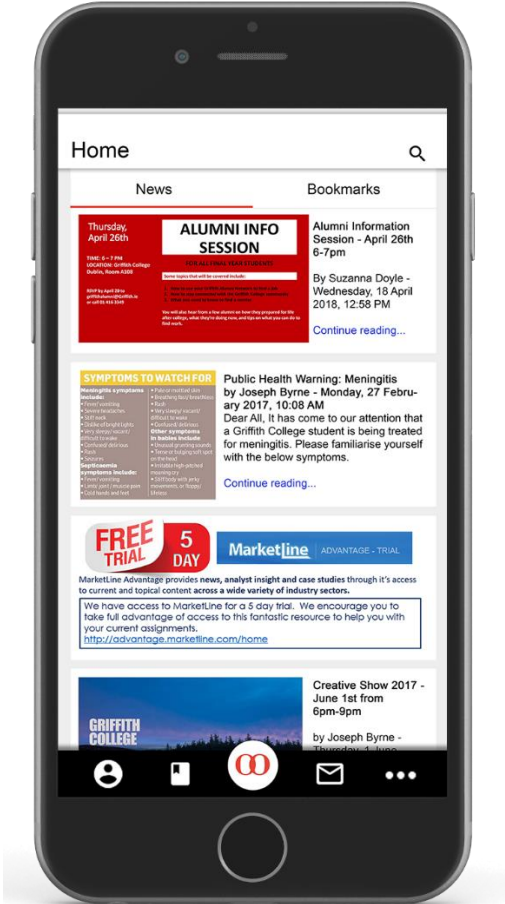
0123456789

3.4.2 Key Screens

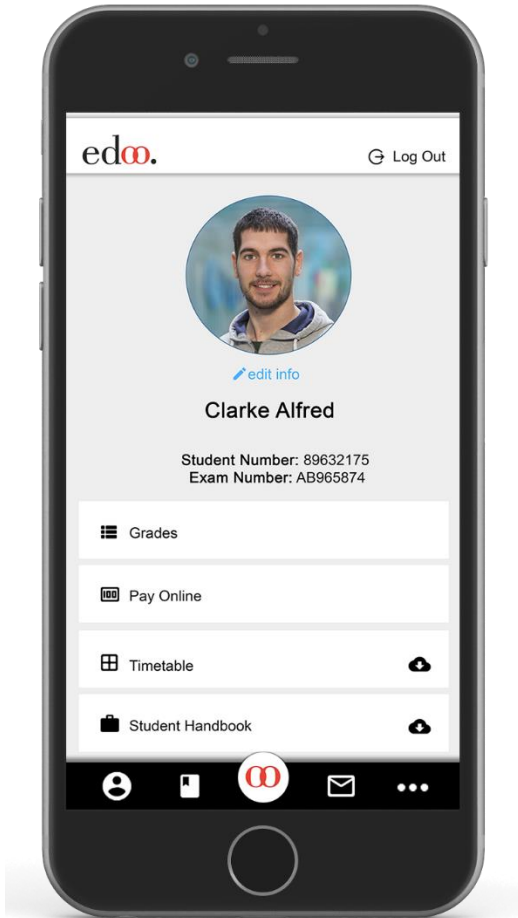




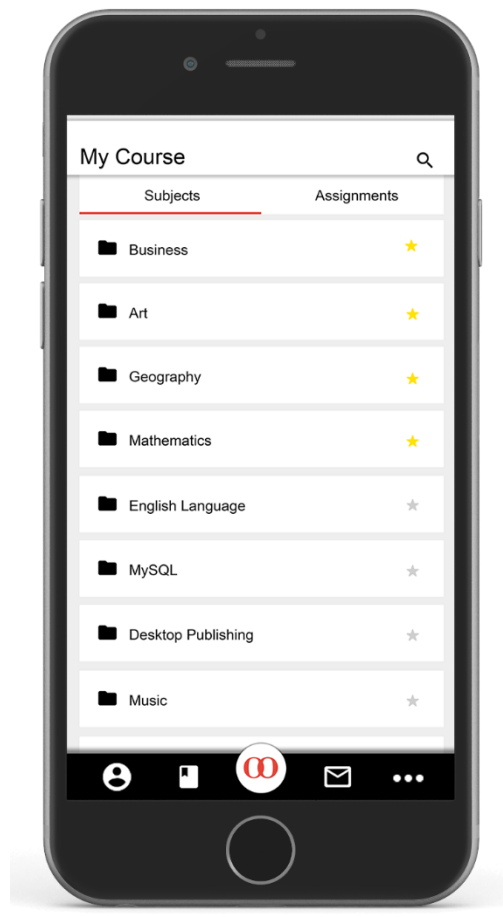
The Log-in Screen; Users type in their student number and password.



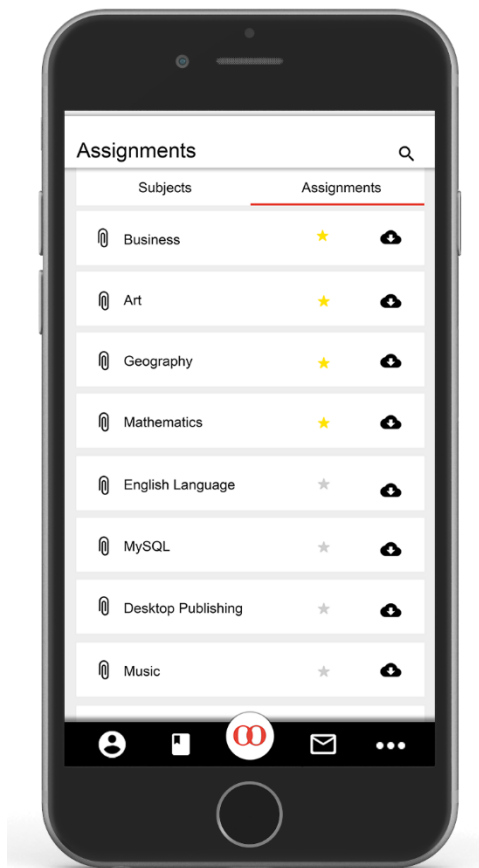
The Home page; Users can access News and Bookmarks.



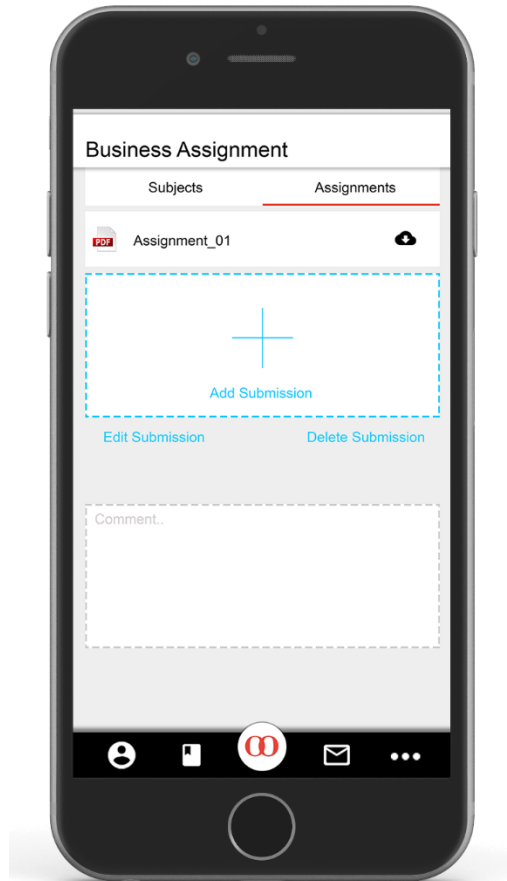
Profile; Users can access their personal details which include student number, exam number, grades, timetable and online payment option.



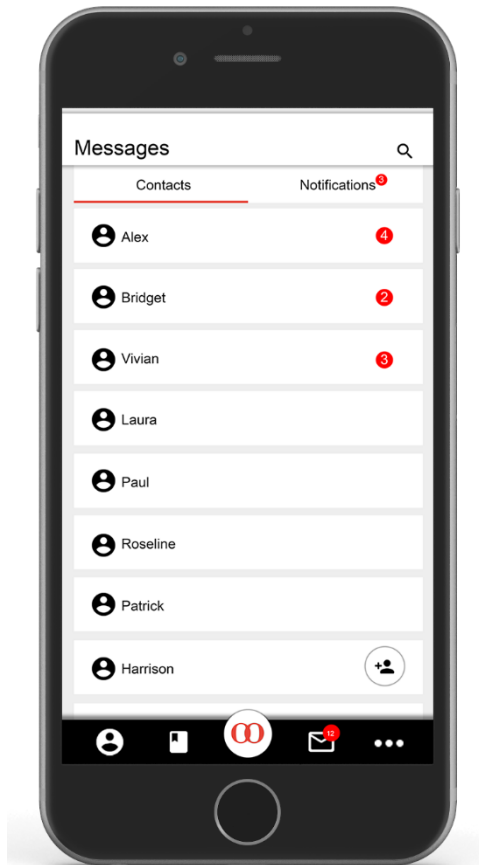
My Course; Users can access their lecture notes week by week according to their subject (module).



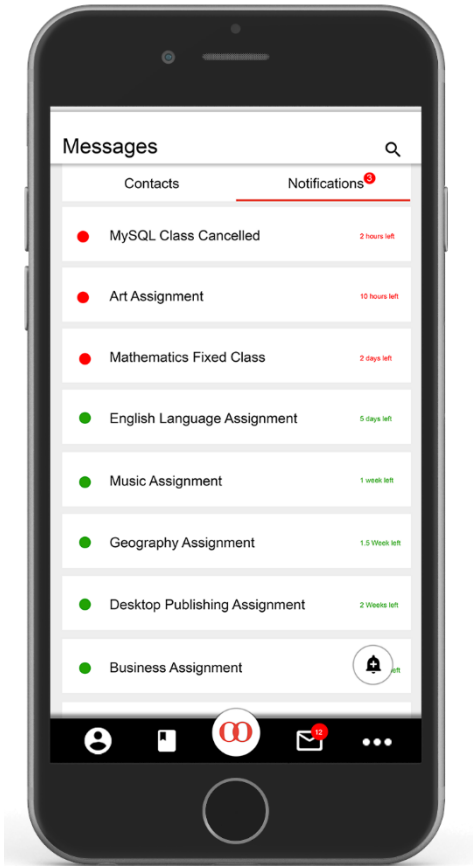
My Course; Users can also access the assignment tab here. Assignment brief and submission can be accessed here.



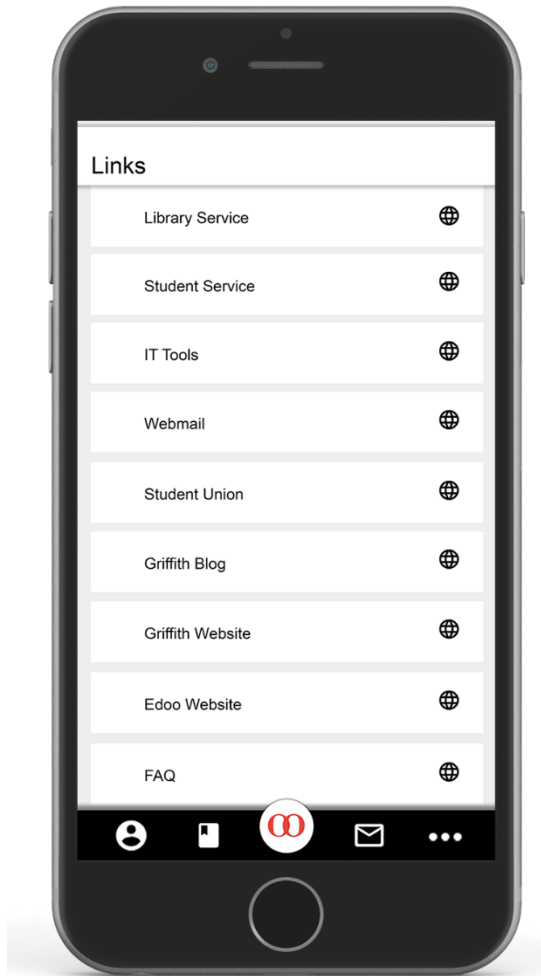
My Course>Assignment; Users can upload their assignment, edit the file they submit and also comment on their submission.



Messages; Users can chat with their contacts here. They can also add chat by clicking on the add chat button floating on the screen.



Message>Notification; Users can access notification where upcoming events and assignment deadline is placed.



Links; Users can access FAQ and other hyperlinks that are relevant.

4.0 Analysis

4.1 Review of Process

For the development of the Student productivity application which christened “Edoo” which will help students of Griffith college in their studies which include accessing time table information, class notes, college news, course information and so on, we carried out and investigation using the research process in identifying our users and they problems they encounter. Firstly, we identified our users which are students of Griffith college from different ethnic backgrounds and nationality. They we developed a research objective which reflects the research question to be answered by the identified users. Using the qualitative research method (interview) and a random sampling technique in other to be objective as possible, students of Griffith college are selected at random and asked about a day in their life, day to day experiences, goals and problems encountered.

After the problems the users encountered has been identified based on the outcome of the research, this result was used in creating the “Edoo” productivity application with the view of solving the users’ problems. Adopting the Goal directed design model, a persona was developed to better understand the kind of users we were dealing with virtually. Then finally, they application was prototyped using photoshop and inVision after enumerating the list of requirements and Site map in creating application.

4.2 Successes

At the end of the project, it was discovered that all problems identified based on the result of the qualitative research carried out was solved and Edoo student productive application Version 1 is ready for advance production. Based on the Site map developed, the benefit of Ease of Use was best exploited to the benefit of the application and the application is straight forward that new users do not need any form of tutorial to use the application. Navigating through the application is quite outstanding as switching between tabs and screen was made easy with the feature of the consistent menu bar where profile, courses, homepage, messages and more is located. The menu bar consistency makes switching between screens a tap away for the users.

Users can easily access content by using the search box or adding their most relative documents to bookmarks. Users also complained about information congestion and

deadlinks, this was solved by minimizing the content/feature of the Edoo application as much as possible and at the same time retaining the most important features. The more options are also in place for users to access relevant links to other campus departmental websites like the student union website, it department, library website and so on.

Students after class interaction was ultimately infused with application. Every student can aquatically access the contact of their classmates, lecturers and key departmental heads on campus like the programme administrator and so on. This feature allows students to virtually brainstorm on school works and at the same time reinforce classmate social interaction.

4.3 Failures

The main failures that can be identified is on the part of the research process, more research should have been done in other to further understand they users. More research in terms of interviewing more people as well as the combination of the qualitative research with quantitative research method. The other failure that can be identified is that based on the result of the research, users complained about the poor visual of their existing educational application but compared to the design of the Edoo educative application there seem to a little or no level of variation between the visual experience of both application.

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Appendix

Interview Questions

- How often do you use Moodle?
- What do you do with Moodle?
- Do you find it satisfying?
- What do you think should be added to make it better?
- How long have you been using the Moodle?
- Your experience?
- Have you had a discussion about Moodle with your friends?
- Apart from the regular features what do you use other features?
- What you this is of great essence for you in Moodle?
- The features on any previous school application you have used ?

Interview 1

I use it everyday

Mostly to check for my college materials like lecture slides and assignment

Well to some extent I find it useful because I can find what I want.

Rearranging the site will help very much, removing dead links because , it is always frustrating having to click without result, adding to that clicking on a link shout open a new tab.

The site is too clustered

Interview 2

Yes I use Moodle couple of time a week

Mostly for school stuffs

I get satisfied.

Student profile should be worked on materials that relate to the student course should be found in

his or her profile making it unique and less tiring for example getting your exam past question you

need to look closely unless you wouldn't find it.

Making it more attractive.

Interview 3

Not every day but when I need to

I get what I want after much trial and error

Most for school stuffs

The main change I will like is being able to search, because the search box doesn't work properly I

never get what I want. I fill it should be more sociable meaning we should be able to interact with

other student.

Interview 4

Every single day.

I use it to check on my note, assignment. The forums useful so like if we have an assignment, and

someone has a problem, they can post it on Moodle and get help from their pairs.

It is handy everything is just there, for example if I miss a call I can easily get the lecture slides.

I have been using the Moodle for four year.

It has gotten really better since my first experience with Moodle, because I do computer science, like

the layout was not user friendly before but now is has been upgraded.

I haven't really had a discussion with my friends I remember when I first came, we didn't need

student email to log on. The only time I have discussed is when it got changed.

Me personally I don't have everyone in my class on social media, so I can easily send messages to

them on Moodle.

I can't do without my lecture slide because I never pay attention in class.

Interview 5

I use Moodle as many time as possible, sometime depends on the class or probably when I want to

get something from it.

I use mostly the note feature, with my own experience the Moodle is not user friendly, secondly it is

not unique mostly because it is not uniform.

The issue of submitting assignment some lecturers say you turn it in but most time the link isn't provided because the turn it in doesn't show you your scores.

The features on the site, information can be passed through the Moodle.

It wasn't easy to access during the snow storm.

There you be a mobile and web, because mobile is more comfortable, and you can you it from anywhere.

Interview 6

I you Moodle every day, like three times a day.

My main challenge with Moodle is navigation and getting information.

I features I use the most is the course slide, calendar and messages. I hardly us other features on the

site. Getting information is hard because for navigation.

My user experience if I score is 35%. Mostly because getting information is hard for example trying

to get the past question for you course the names are not written well most times you miss your course. Probably they should me it more defined.

Too much dead links.

Moodle is not easily to learn, talking about learnability because you forget how to get around

I don't want use the app, meaning I would rather have Moodle on the web.

The website is not graphically appealing.

If I want to rate my experience I will say 60%.

They need to work on the grouping.

One thing I have to on Moodle and which is a most it uploading my assignments and the lecture slides