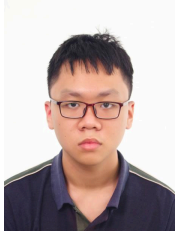# FACULTY OF COMPUTING
UTM Johor Bahru

Report on Design Thinking Project

Subject : TECHNOLOGY AND INFORMATION SYSTEMS (SECP 1513)

Section : 5

Name of Lecturer : DR. AZURAH BINTI ABU SAMAH

Date : 18/10/2023 - 30/11/2023

Title of Design Thinking Product
: 'CLUBBI', EVENT MANAGEMENT APPLICATION FOR UNIVERSITY SOCIETIES

Video Link (youtube). : https://youtu.be/dX_0P9aj9WQ?si=gD-WylE5wOFj2vKW

Group Profile

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Comments by Grader:

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1.0 Introduction

Design thinking is a widely-used problem-solving technique that focuses on acknowledging people's needs, generating appropriate solutions and testing these ideas to develop a final solution that can satisfy the target group's needs and solve current issues. This technique is used in our project and is documented in different stages. The issue that our group would like to tackle is as follows.

New students at our campus face challenges in accessing timely information about various clubs and societies, hindering their ability to explore and engage in extracurricular activities. The campus group messages, intended for communication, are flooded with commercial spam, making it difficult for students to find relevant club information. This information overload leads to missed messages about club events. Additionally, there is a lack of exposure for many clubs, making it challenging for students to discover the diverse options available on campus. To address these issues, we employed design thinking to develop innovative solutions that enhance the accessibility and visibility of club and society information for all students.

2.0 Empathy

The first stage of design thinking is empathy, which is a process of understanding the needs of people that are impacted by this issue. This involves the active initiative from us to reach out to our targeted group, observe, engage and empathize with their experience.

2.1 Respondent Background & Interview Findings

Respondent	Name	Age	Background
1	Mavis Lim	19	Software Engineering student
2	Chong Lun Quan	19	Software Engineering student
3	Micheal Partogi Siahaan	19	Software Engineering student

Question 1: Do you often join extracurricular activities in university?

Respondent 1: Not really because I am actually an introvert.

Respondent 2: Not yet, currently I haven't found any club or societies that I am interested in joining.

Respondent 3: Yes, I joined two student clubs: GDSC and AIROST.

Question 2: What do you think about the current extra-curricular system in our university?

Respondent 1: Sometimes I find it not really efficient and very troublesome to check for information.

Respondent 2: Personally, I think it is a messy system since it is difficult to find interesting activities.

Respondent 3: I think it is already quite good but I don't like looking up information about the clubs.

Question 3: How do you currently find information about club activities on campus?

Respondent 1: Usually in the Telegram group when the club wants to propose their event and often mixed with a lot of advertisements and spamming.

Respondent 2: Sometimes, I will just refer to Telegram or Whatsapp to gain the information about club or extracurricular activities in UTM.

Respondent 3: I find the information from banners at the side of the street and I also go to their club exhibition to look for the clubs that are currently available in our university.

Question 4: What kind of obstacles have you faced while trying to search for extra-curricular activities to join?

Respondent 1: Personally, I find it very difficult to read through all the messages every day because it could accumulate like 100 a day due to the spamming or the advertisement.

Respondent 2: Since the spamming messages are flooded in Whatsapp or Telegram, I am too lazy to scroll up until I can find the information about extracurricular activities.

Respondent 3: Looking for information that is hard for me to know what clubs are currently available, how many clubs there are here and how to join the club.

<u>Question 5: If there was a brand new system to organize everything related to extracurricular activities, how would you like it to be? Any features you'd like to see in it?</u>

Respondent 1: Focus on the club event and activities only without spamming of all the advertisements.

Respondent 2: The system must contain one most important feature, which is to show the detailed event to its user about the time,the venue and the activities planned.

Respondent 3: Maybe they could ask for help to post their clubs in the official instagram account UTM, so students like me can look for them in just one instagram account, rather than having to search for them in each of their accounts.

3.0 Define (Problem)

In this stage, we have recorded our interview with several respondents and have identified and concluded problems faced by students in their attempts to explore and engage in extracurricular activities.

3.1 Identify Problem

The following problems are identified during the interview with our respondents and from our observation.

Problem 1: Campus group messages are flooded with spam

Event details obtained from social media groups are often time consuming and unsatisfactory as it is often flooded with spams and advertisements, causing students to miss some of the important event promotions. Too many social media groups that are requested for students to join shares the same information and spam messages that causes students to take much time in

identifying useful information.

Problem 2: Uncentralized platform for communication of information

Many school announcements and information are communicated through the same social media group that is being used as the means to promote club events, at the same time advertising for student businesses. This creates a confusing situation for students when they come across different types of information in the same group and makes it difficult to trace back certain useful information about club events in the future.

Problem 3: Lack of exposure to niche clubs

As information fails to reach students on a daily basis through social media groups, it is almost certain that a lot of smaller clubs and societies might not be able to get much event information out when they're hosting an event. The lack of exposure for these clubs is also a key reason why many students are not able to join the events hosted around campus as they are not aware of the existence of these clubs.

4.0 Ideate (Solution)

After identifying the key problems faced by students, we have discussed and generated a range of creative approaches in an attempt to solve the identified problems in the previous stage.

4.1 Idea Brainstorm

Idea 1: Build a centralized platform to gather all information regarding clubs and societies in campus

Idea 2: Create a social media page that only curate posts about different clubs and societies in campus

Idea 3: Create a telecommunication group that only allows clubs' leaders to

promote club activities

Idea 4: Introduce a notification system to ensure users receive timely alerts about new and pertinent extracurricular opportunities.

4.2 Final Solution

In the end, we came up with an idea for a new mobile application that focused on club activities within the campus. This new application will have the following features:

1. Provides a centralized platform

   The app provides a centralized platform for clubs and societies to promote various activities. The application will be solely purposed for spreading awareness of diverse events and activities held in the university.

2. User-friendly

   Clubs or societies' leaders are allowed to publish details of events hosted by them. Eager users who are excited to search out for interesting events won't be subjected to repeated ads and irrelevant promotions.

3. Special section featuring clubs

   Clubs and societies may also create their own section on the application, where they can include the history of the club, the purpose of the club, the number of members, the activities they have conducted and more. Users may also directly apply to join the clubs through the application.

4. Past records saved

   Clubs that have hosted multiple events in the past will have those records saved under their club account. They can be easily accessed in the forms of pictures or reviews by participants. Students who have joined the activities in the past would also be able to access records of their past participation in their account.
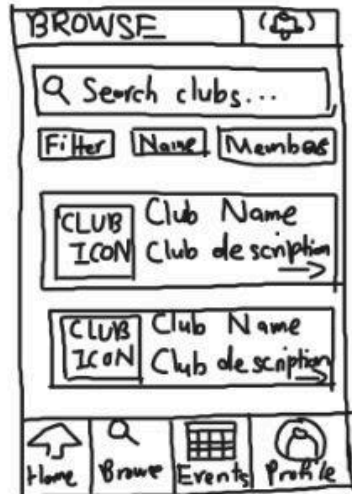
5.0 Prototype

In this stage, we have created a tangible representation of our chosen solution for this issue and presented it to the group in the form of simple models and sketches.
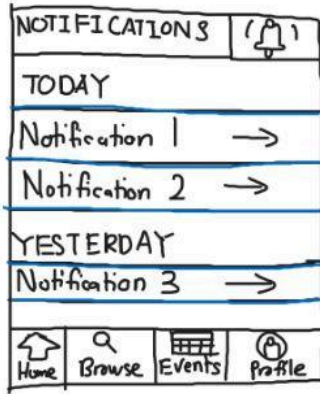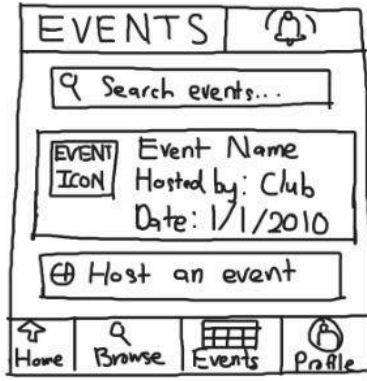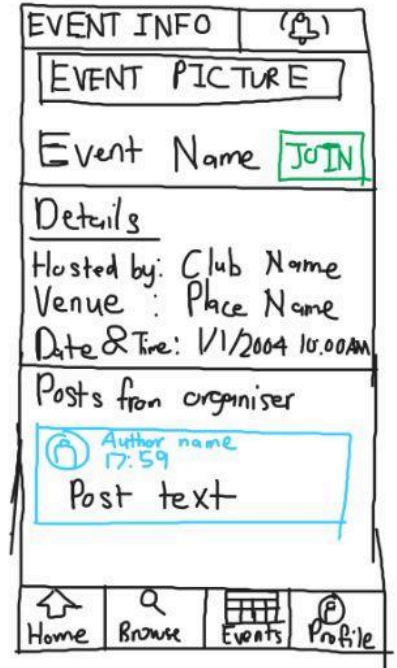
5.1 App Interface

Home page

Browse clubs

Club info

Notifications page

NOTIFICATIONS 🔔

TODAY

Notification 1 →

Notification 2 →

YESTERDAY

Notification 3 →

Home | Browse | Events | Profile

Notifications page

Browse events

EVENTS 🔔

🔍 Search events...

EVENT ICON | Event Name
Hosted by: Club
Date: 1/1/2010

⊕ Host an event

Home | Browse | Events | Profile

Browse events

Event Info

EVENT INFO 🔔

EVENT PICTURE

Event Name | JOIN

Details

Hosted by: Club Name
Venue : Place Name
Date & Time: V1/2004 10.00AM

Posts from organiser

Author name
17:59
Post text

Home | Browse | Events | Profile

Event Info

Profile

PROFILE 🔔

USERNAME
username@email.com

User info

First name: User [Edit]
Last name: Name [Edit]
Age : Age [Edit]
Contact : 011-1111-111 [Edit]

Clubs joined →

Events attended →

Home | Browse | Events | Profile

Clubs Joined

CLUBS JOINED 🔔

CLUB 1

CLUB 2

CLUB 3

Home | Browse | Events | Profile

Events attended

Events attended 🔔

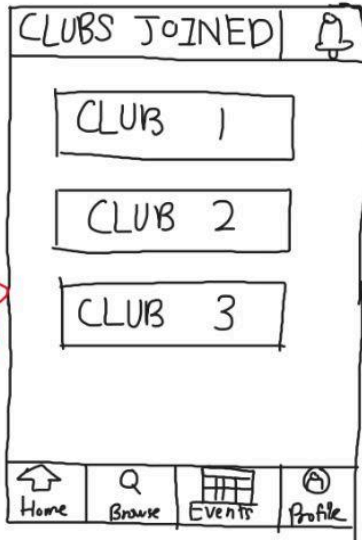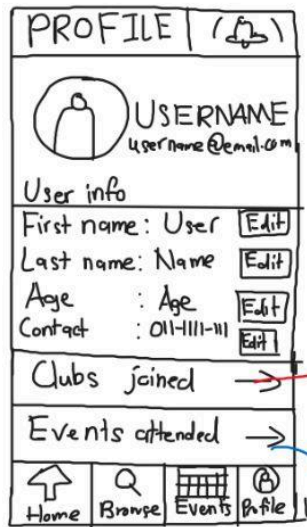EVENT ICON | Event Name
1/1/2007

EVENT ICON | Event Name
1/1/2006

Home | Browse | Events | Profile

6.0 Test (Assessment Points)

After demonstrating our prototype, we have subjected it to testing and gathered useful feedback and used this criticism to improve our model.

6.1 First Test

After presenting our prototype to our user, we received generally positive feedback from them about the app. It was user friendly and contains all of the features they expected. However, some further improvements could be made to refine the application better. One of the more specific criticisms we received is the complicated interface that causes our respondents to feel confused when navigating it.

6.2 Second Test

After refining and modifying our prototype by simplifying the interface, creating a cleaner and less crowded look for the app, we have shown it to our test user as well. Our respondent was satisfied with the modification.

7.0 Reflections (individual)

7.1 LEE LAI QUEEN

In this course, I was hoping to get a deeper understanding about the technology and information system by going through different timelines of technology development. This project has impacted me greatly by helping me understand how to implement the design thinking technique in this field and acknowledging the issues and solutions that can be affected by the development of technology. I will continue taking the initiative to understand more about this industry and relate the newest development of technology into my life and find ways to implement design thinking when faced with a problem.

7.2 OW YEE HAO

In this course, my overarching goal is to establish a robust foundation of technical knowledge, with the ultimate aspiration of contributing innovatively to the field. This design thinking project significantly influences my approach by providing a structured and creative problem-solving methodology. By integrating design thinking into my learning journey, I aim to not only gain technical proficiency but also cultivate a mindset essential for addressing complex challenges in the tech industry. To improve my potential in the industry, I plan to actively engage in practical projects, participate in coding competitions, build a strong professional network and stay abreast of industry trends.

7.3 THANG WEI JIE

The overall goal I want to achieve in this program is to have a broad understanding about the different aspects of information systems and technology. This design thinking project has helped me learn and improve a lot of different skills and knowledge, such as the process behind the development of a system. It also helped me a lot with my creative thinking skills. I will continue to learn and acquire many more skills that I believe will be useful to me in the future so I can be more competitive in the industry.
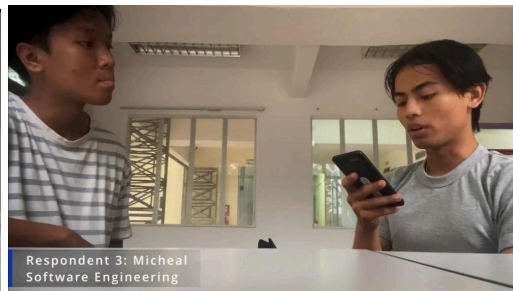
7.4 JABAR ARYA LOKANANTA

Regarding the course, I would like to expand my understanding about many aspects in design thinking projects. There are viewpoints from the first until the final base to execute how to develop and manage a development of systems behind the technology not only in terms of the individual skill but also as a team project management. Therefore, we can establish our knowledge in the future to prepare for the tech company which follows current market growth.

8.0 Work Distribution (Teamworking)

Stage	Subtask	Lee Lai Queen	Ow Yee Hao	Thang Wei Jie	Jabar Arya Lokananta
Introduction					
Empathy	Interview	▓	▓		▓
	Edit Video			▓	
Define	Identify Problem (group discussion)	▓	▓	▓	▓
Ideate	Idea Brainstorm (group discussion)	▓	▓	▓	▓
Prototype	Create prototype sample			▓	
Testing	First test			▓	▓
	Second Test	▓	▓		
Reflection	Conclude design thinking project	▓	▓	▓	▓

9.0 Evidence

Phase 1: Empathy (interviewing)

Respondent 1: Mavis
Software Engineering Student

Respondent 3: Micheal
Software Engineering

Respondent 2: Chong
Software Engineering

Phase 2: Define & Phase 3: Ideate (google meet)

Phase 4: Prototype (Refer 5.1 App Interface sample)

Phase 5: Test (test with user)