



Group 2 Presents...

Search



# Shuttle+

Up and Away

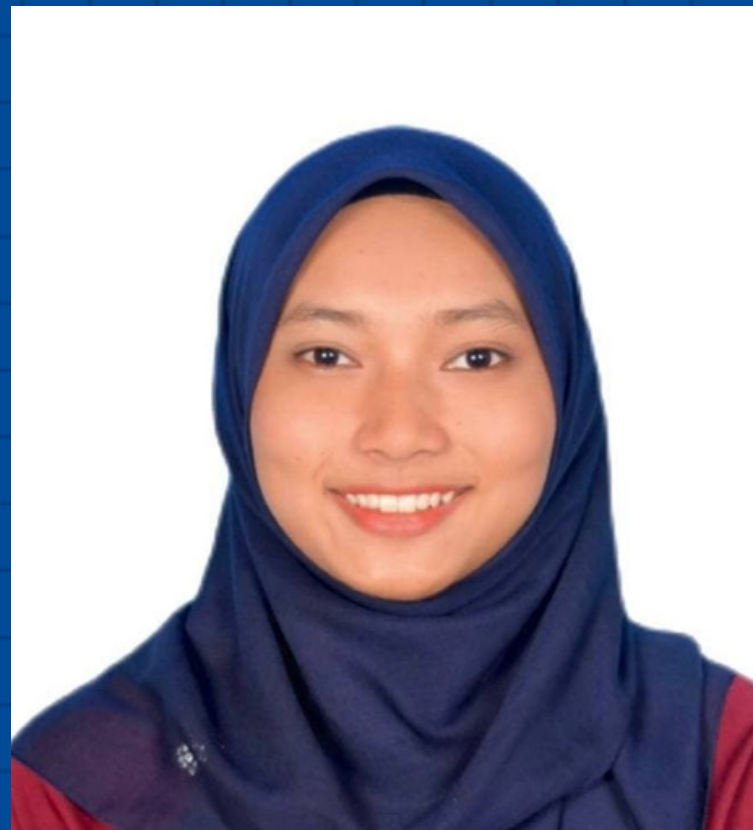


# Meet the crew!



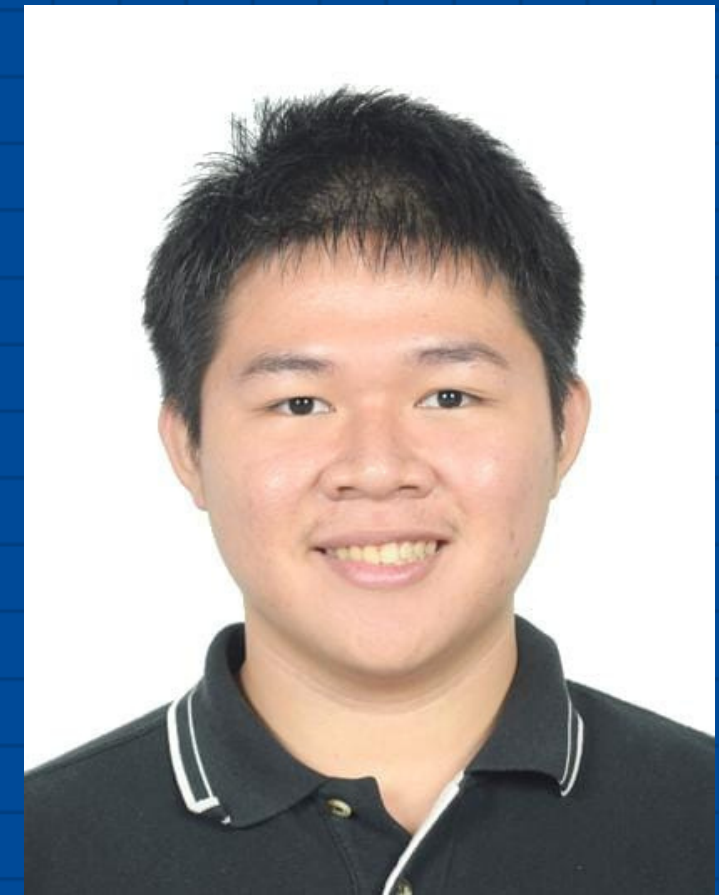
Nur Athira Nabila Bt  
Lukman

A21EC0109



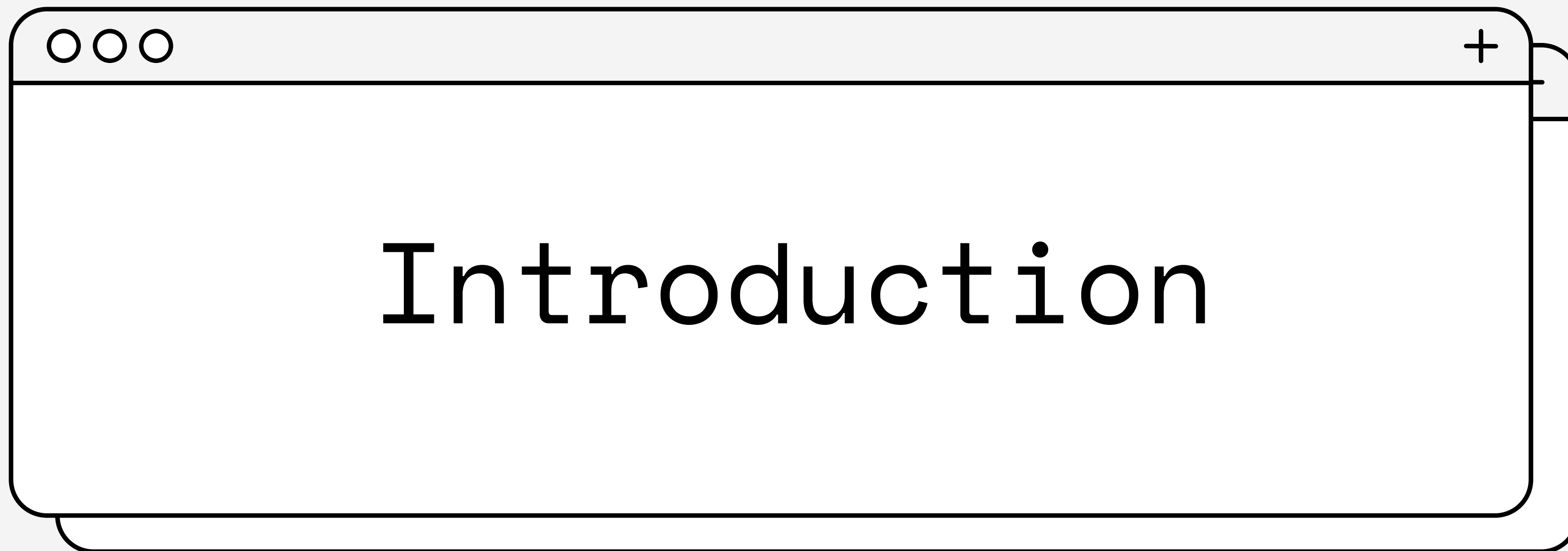
Norain Bt Mohd  
Sulaiman

A21EC0106



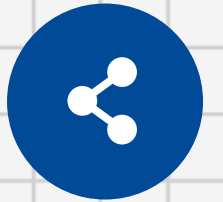
Amos Keagan  
Hosea

A21EC0161

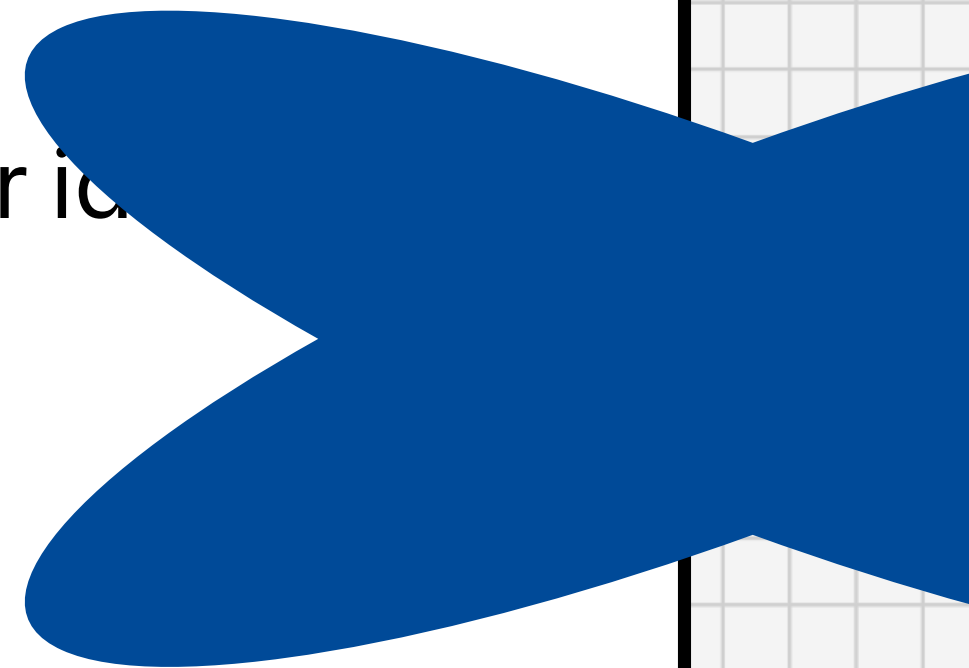


# Introduction

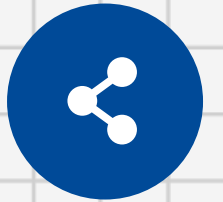
# Prototyping and its role in UX design



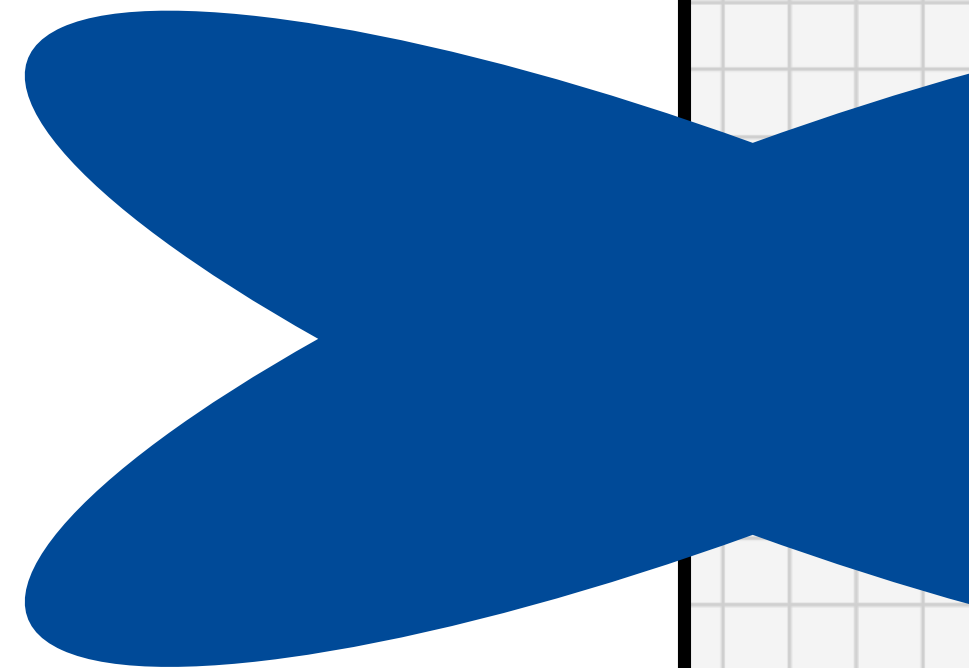
- User experience (UX) design is crucial.
- Prototyping is an important aspect of designing a good UX.
- Prototype :
  - Simple statement of design intent.
  - Helps designers demonstrate and test their ideas.
  - Replicates a full app or one interaction.
  - Working model of a finished product.



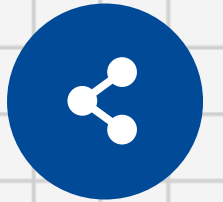
# What does "Fidelity" mean?



- Refers to how close a representation to the final result.
- Two types:
  - Lo-fi (Low Fidelity)
  - Hi-fi (High Fidelity)



# Benefits and Explanation of using Lo-Fi Prototyping

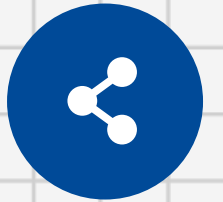


- Quick and easy technique on how to materialize the idea into a real product
- Used to sketch out the flow and test the product's utility whether it's fully functioning and its usability
- Can be done digitally or on paper
- Low cost
- Encourages group work
- Doesn't require any special expertise

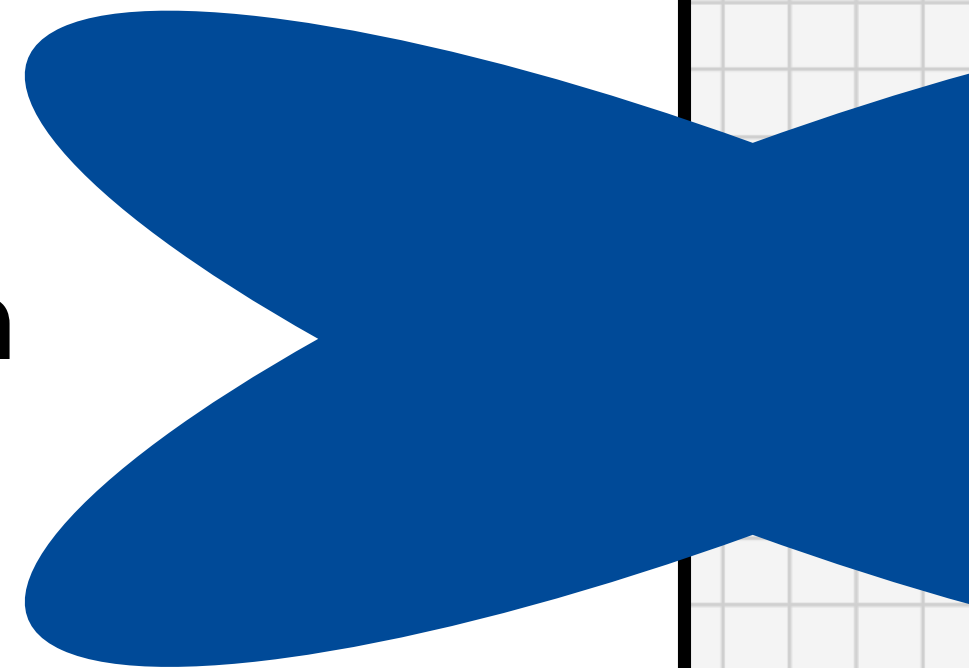


# Shuttle+ : Integrated Bus System

In this day and age in Malaysia...

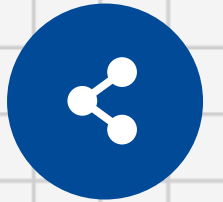


- Manual routines, systems and activities are still used to complete daily tasks.  
(Inefficient and time-consuming)
- Manual systems are still used today :
  - The inability to adapt and lacking tech knowledge.





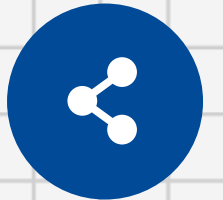
## Situation in the UTM campus



- Public transport is crucial for the first-years and for those who uses them for daily commute.
- Those who chose for daily commute will have to wait for more than 30 minutes for the bus to arrive.
- If they are to wait sooner for the bus to arrive sooner, it'll be a waste of time.

As a result, our group agreed to create a prototype of an integrated shuttle bus service system.

# Goal and features of our prototype



Our goal :

- Convert manual routine of shuttle bus booking into a computerized system.
- Serve as a communication platform between drivers and students.

Features:

- Allow users to book tickets and drop off point.
- Allow bus drivers to see the list of bus stops for ease of dropping off and picking up passengers.
- Allows public bus users in UTM to trace the location, ETA and ETD of the bus in real-time.

*\*ETA : Estimated Time of Arrival, ETD : Estimated Time of Departure*

# THE PROBLEM



unpleasant  
environment in UTM

wasting time  
to wait for the  
bus .

inefficient  
booking  
express bus  
system

complicated process  
to book for bus for  
special occasions


# THE SOLUTION



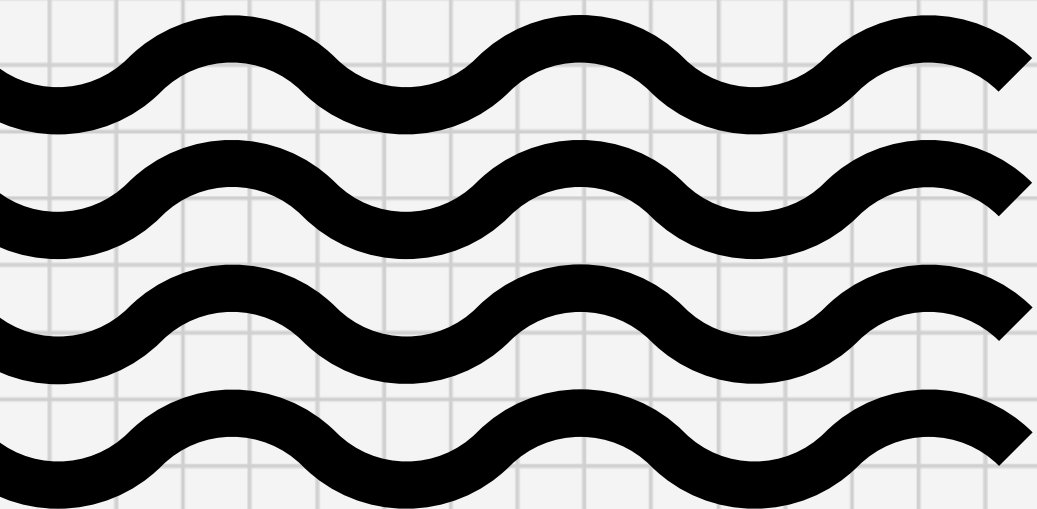
provide real-time  
location ,ETA and  
ETD

promote the upgraded  
system of shuttle bus to  
lessen cars on the road

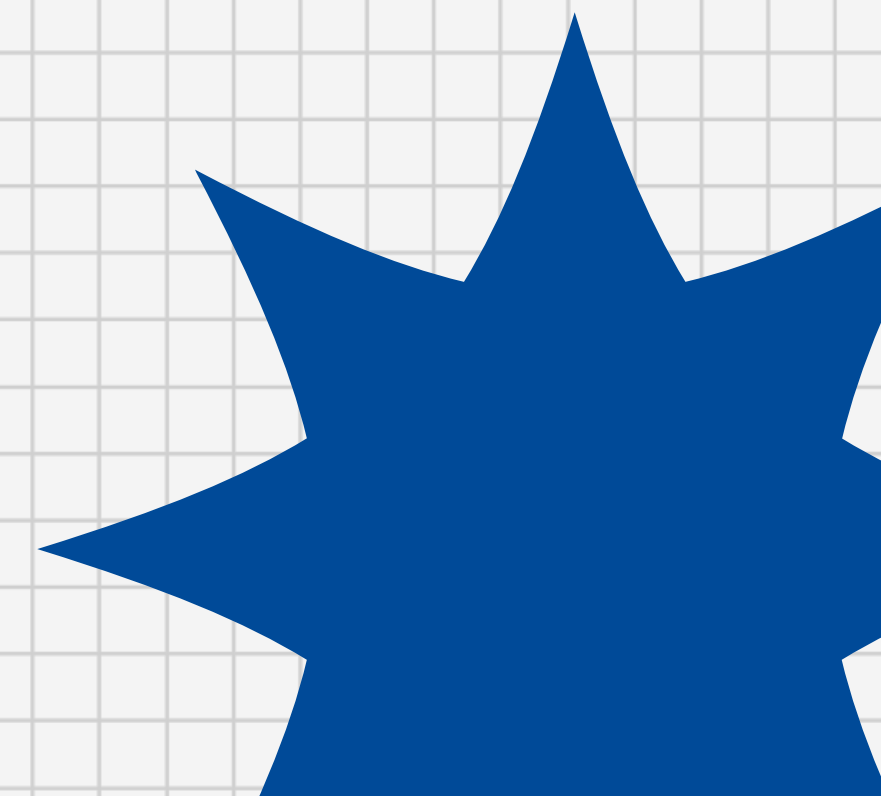
allows users to  
book express bus  
without using  
public websites

A small icon representing a web browser window, with three buttons (minimize, maximize, close) in the top right corner.

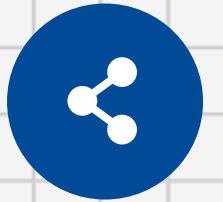
provide a simpler  
and fast process  
for special events  
bus booking



**TEAM WORKING**



# AMOS

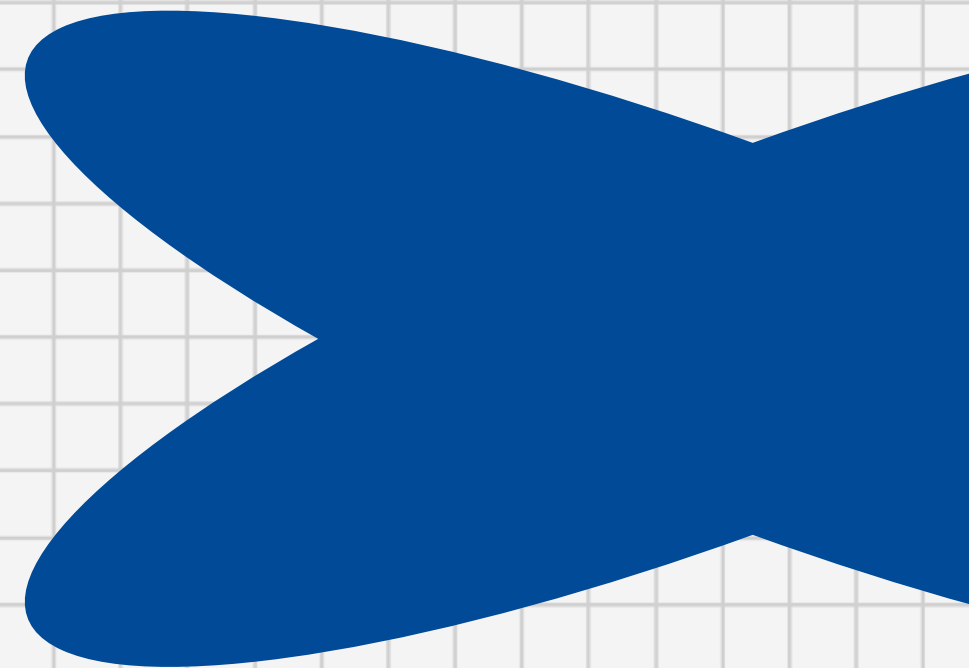


+ responsible for task assignments

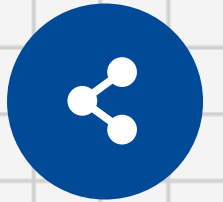
+ designing cloud computing architecture

+ designing prototype

+ representative for the group



# ATHIRA

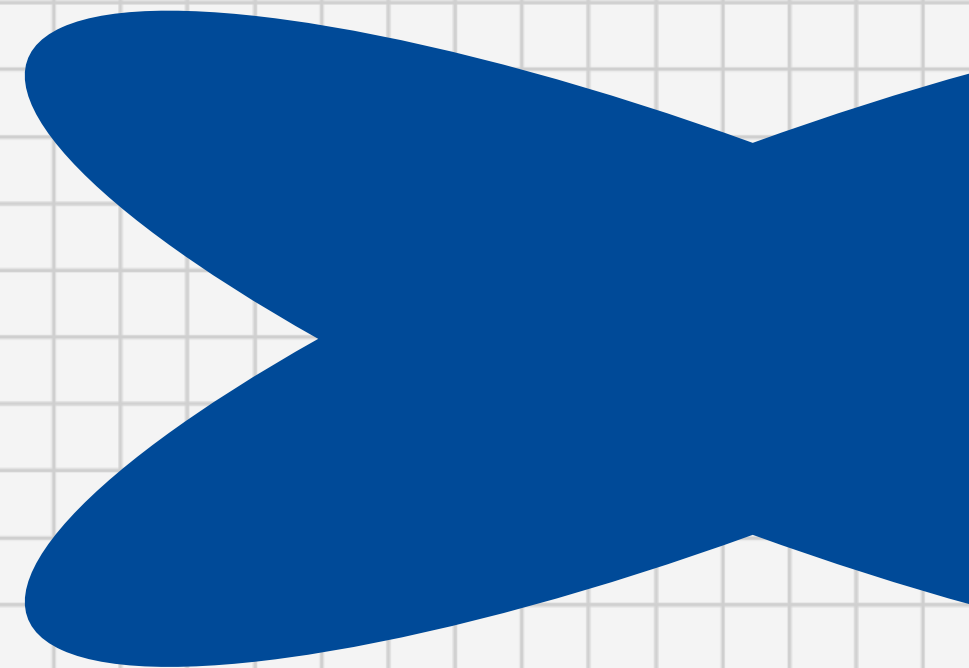


+ thinking on potential client

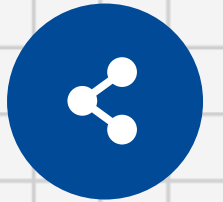
+ create google form

+ analyse the data

+ managing workflow



# AIN

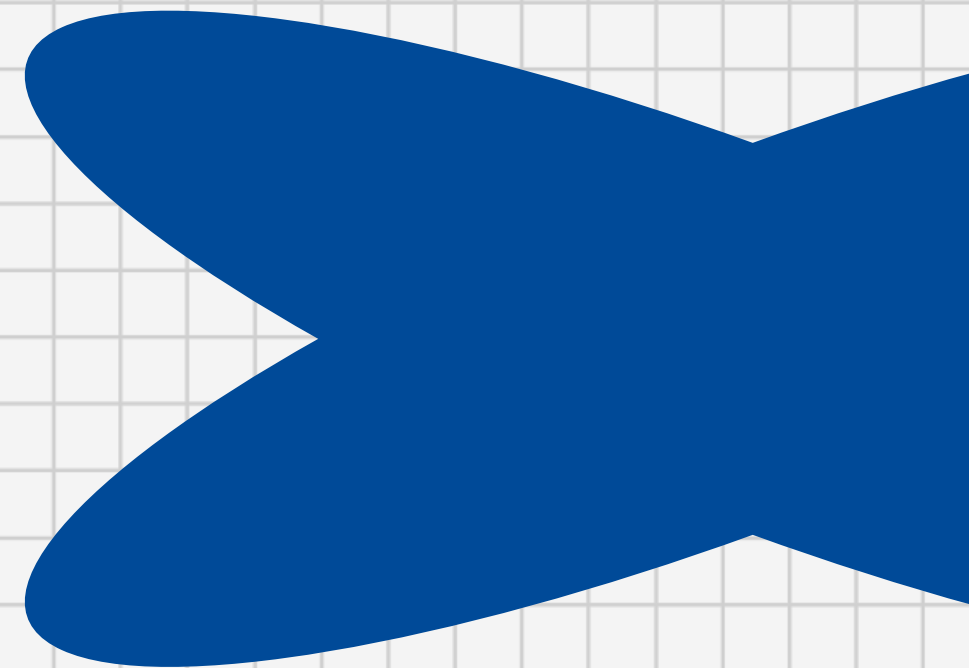


+ selecting the suitable IR4.0 technologies

+ exploring the mock-ups software

+ develop idea and work on the video

+ work on the problem , solution





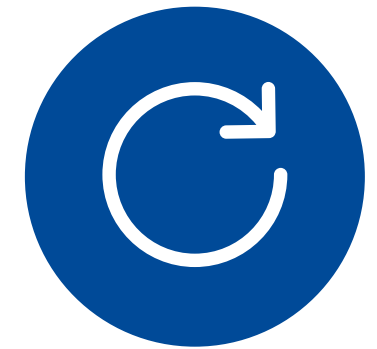


# Details Steps and Description

Journey of making Shuttle+ project becomes a success.



- Scheduled the plans, steps and goals
- Problem and solutions
- Research and survey



**1**

**EMPHATISE**

**2**

**DEFINE**

**3**

**IDEATE**

**4**

**PROTOTYPE**

**5**

**TEST**

# EMPHATISE & DEFINE

Search

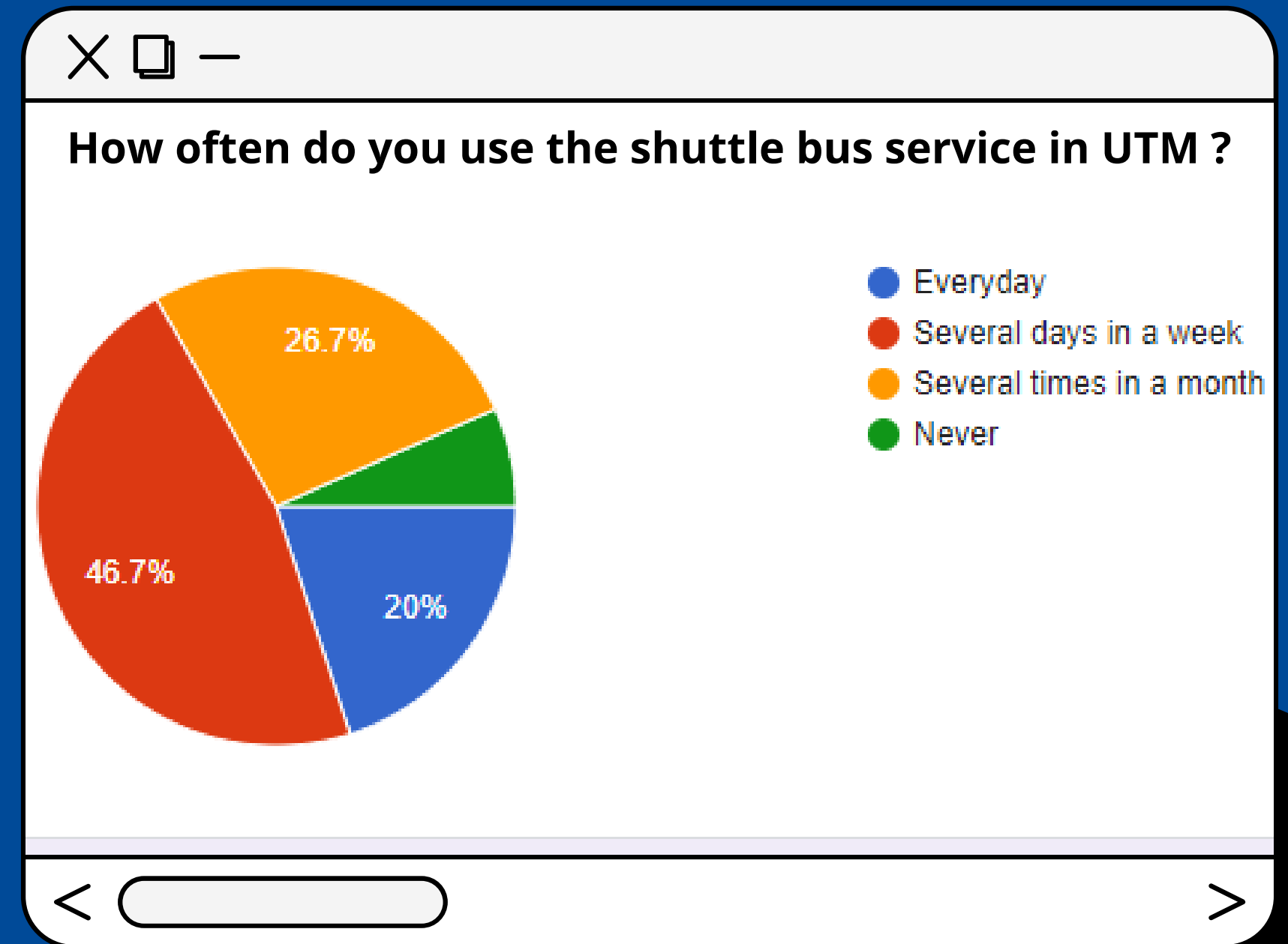
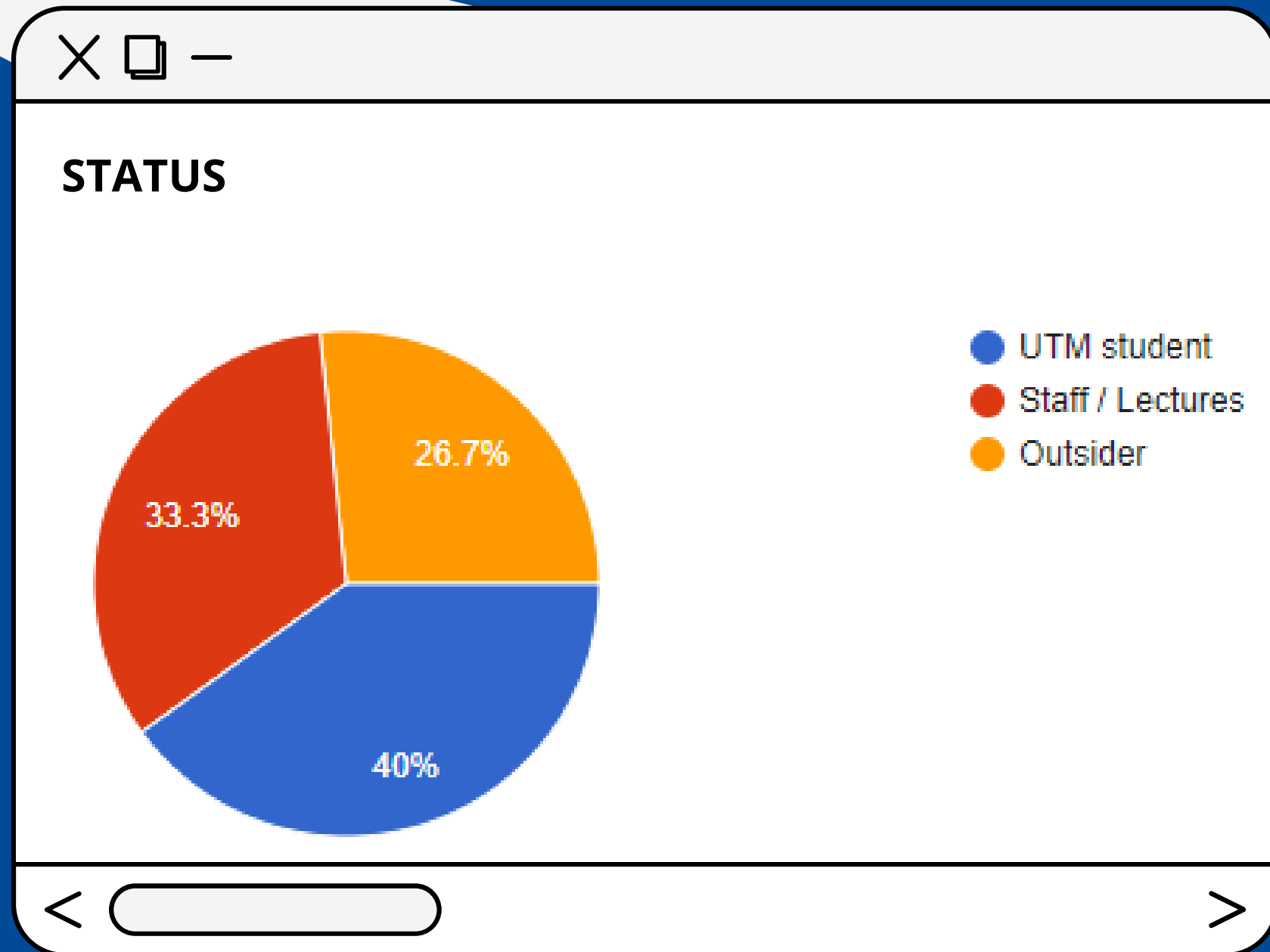


Survey on shuttle bus service system in UTM

1. Status
2. How often do you use the shuttle bus service in UTM ?
3. How long do you have to wait for the bus referring to the time scheduled?
4. Does the bus often arrive and reach the destination on time as per schedule ?
5. Do you want real-time updates on the whereabouts of the bus?
6. How do you prefer to know the shuttle bus service info ?
7. Do you have any difficulties booking an express bus to go back to your hometown ?
8. If yes, why ?
9. Are you satisfied with the booking system for the facilities provided in UTM ?
10. Do you prefer a booking service that does not need any paperwork or approval from the administration ?

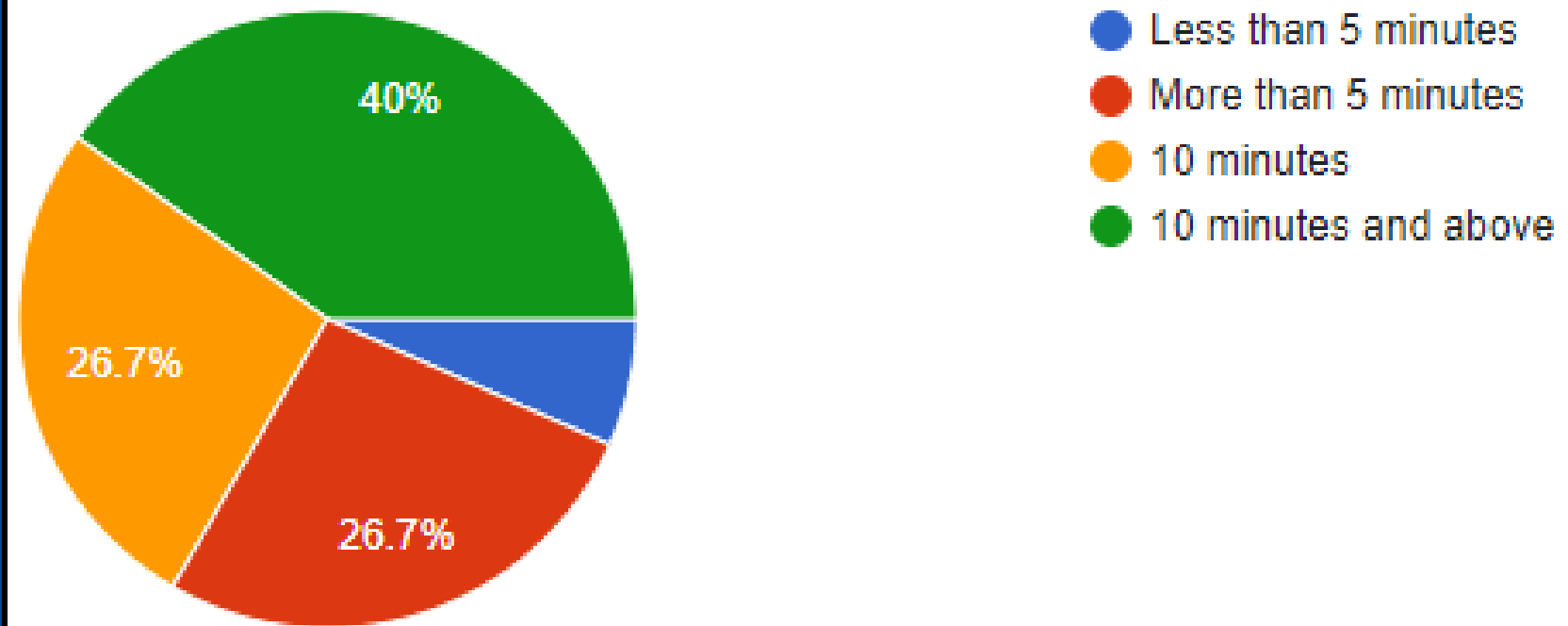
Save

Cancel

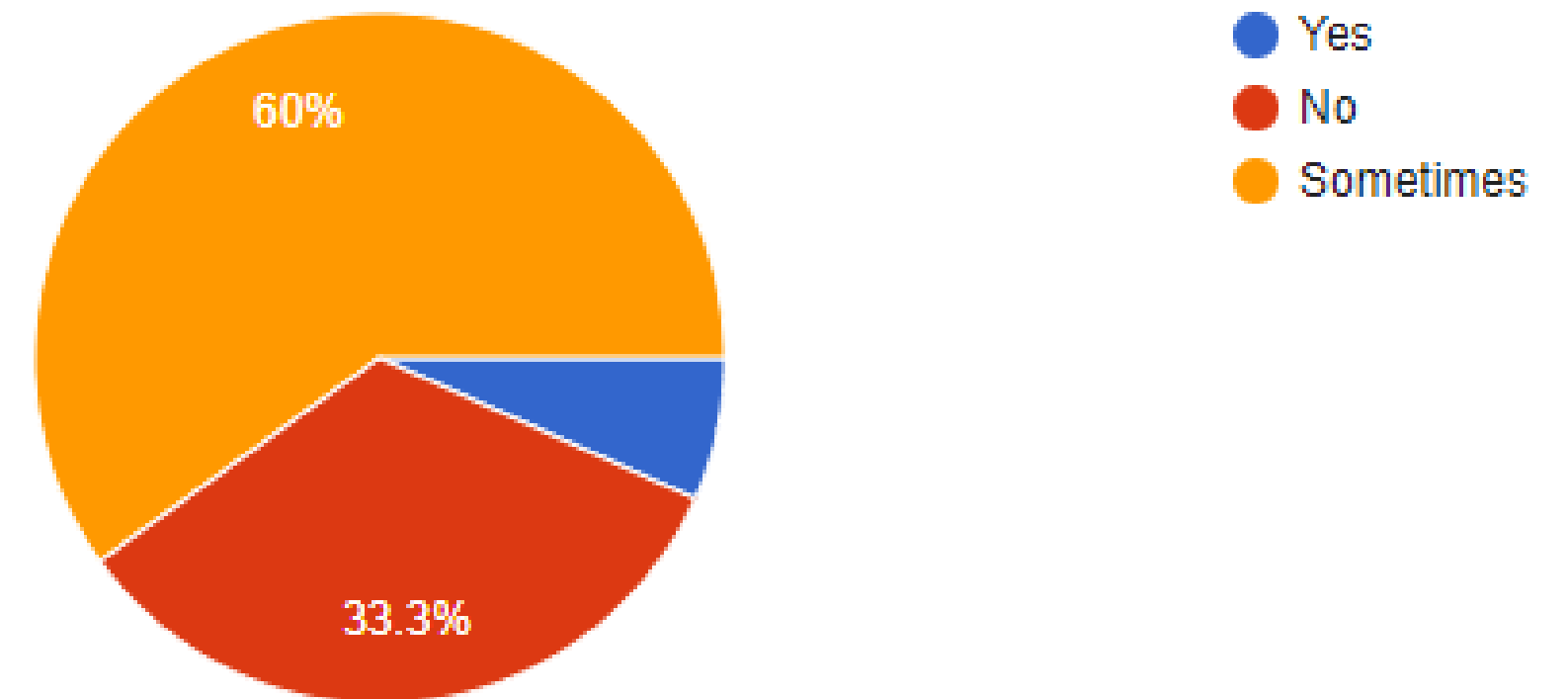


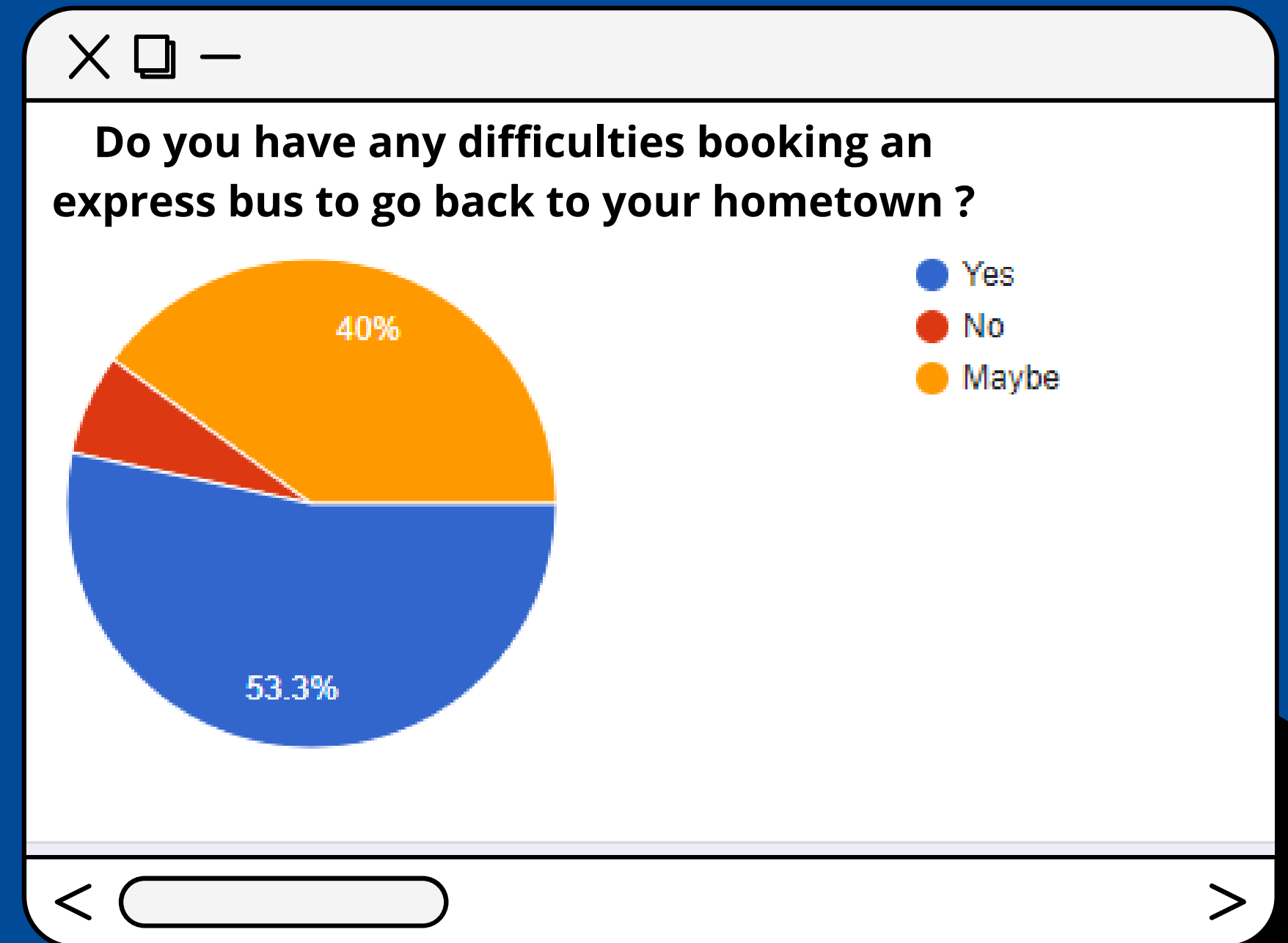
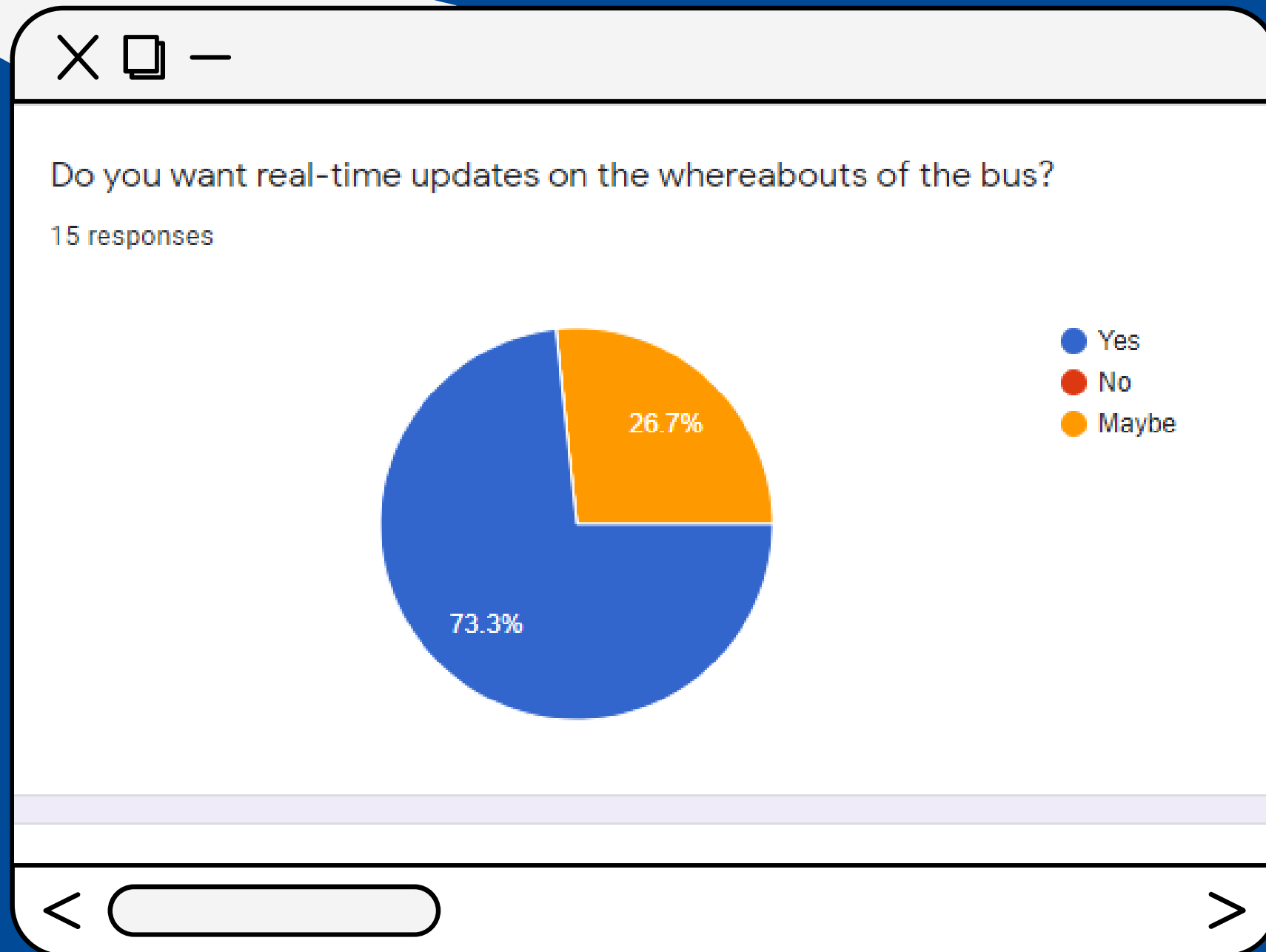


**How long do you have to wait for the bus referring to the time scheduled?**



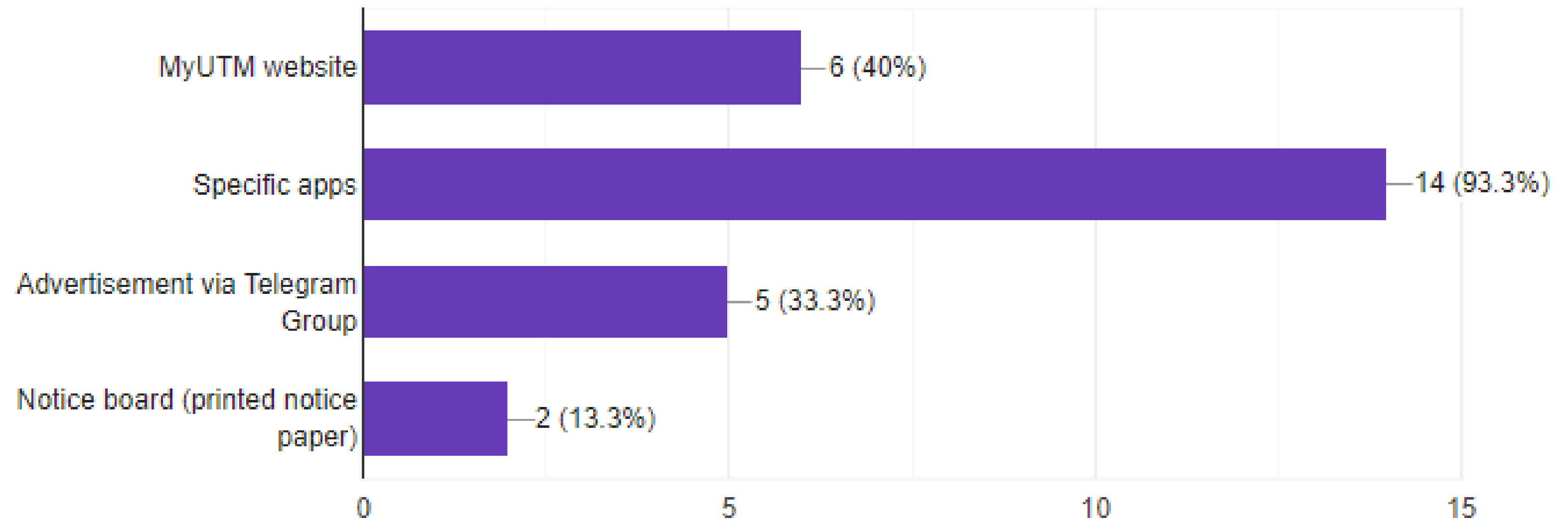
**Does the bus often arrive and reach the destination on time as per schedule ?**





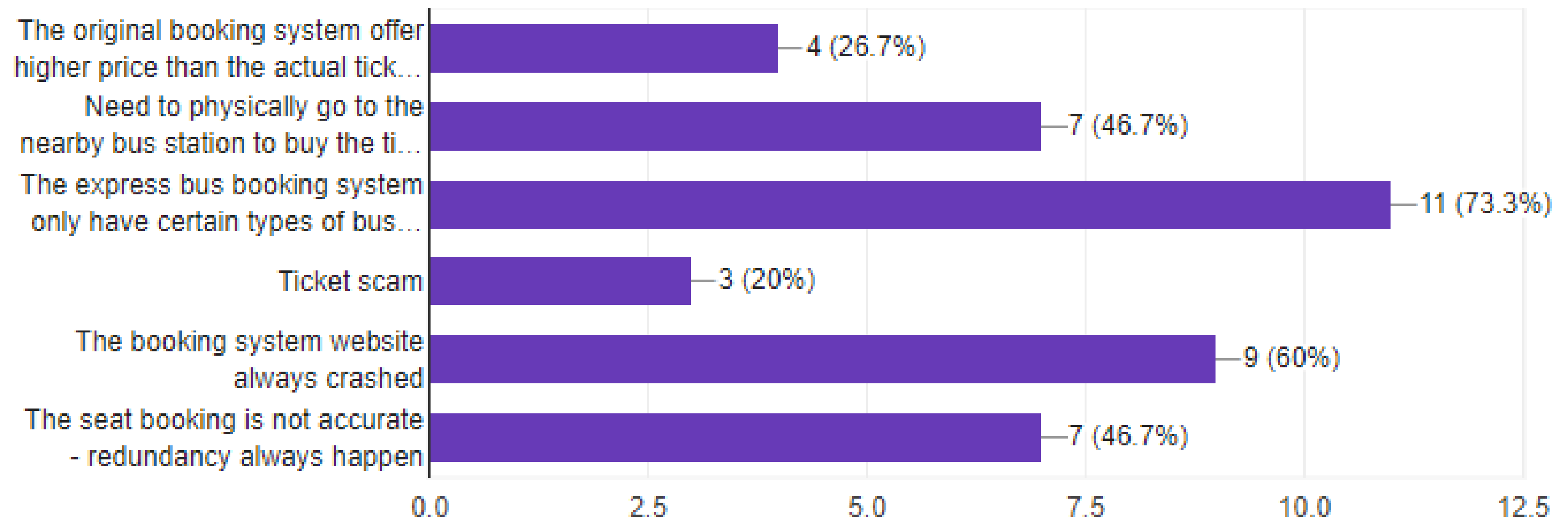
## How do you prefer to know the shuttle bus service info ?

15 responses



## If yes, why ?

15 responses





# IDEATE

Search



Telegram group + Google Meet



IR4.0 technology :  
system integration technology



improvements and features



basic sketches of the prototype on paper



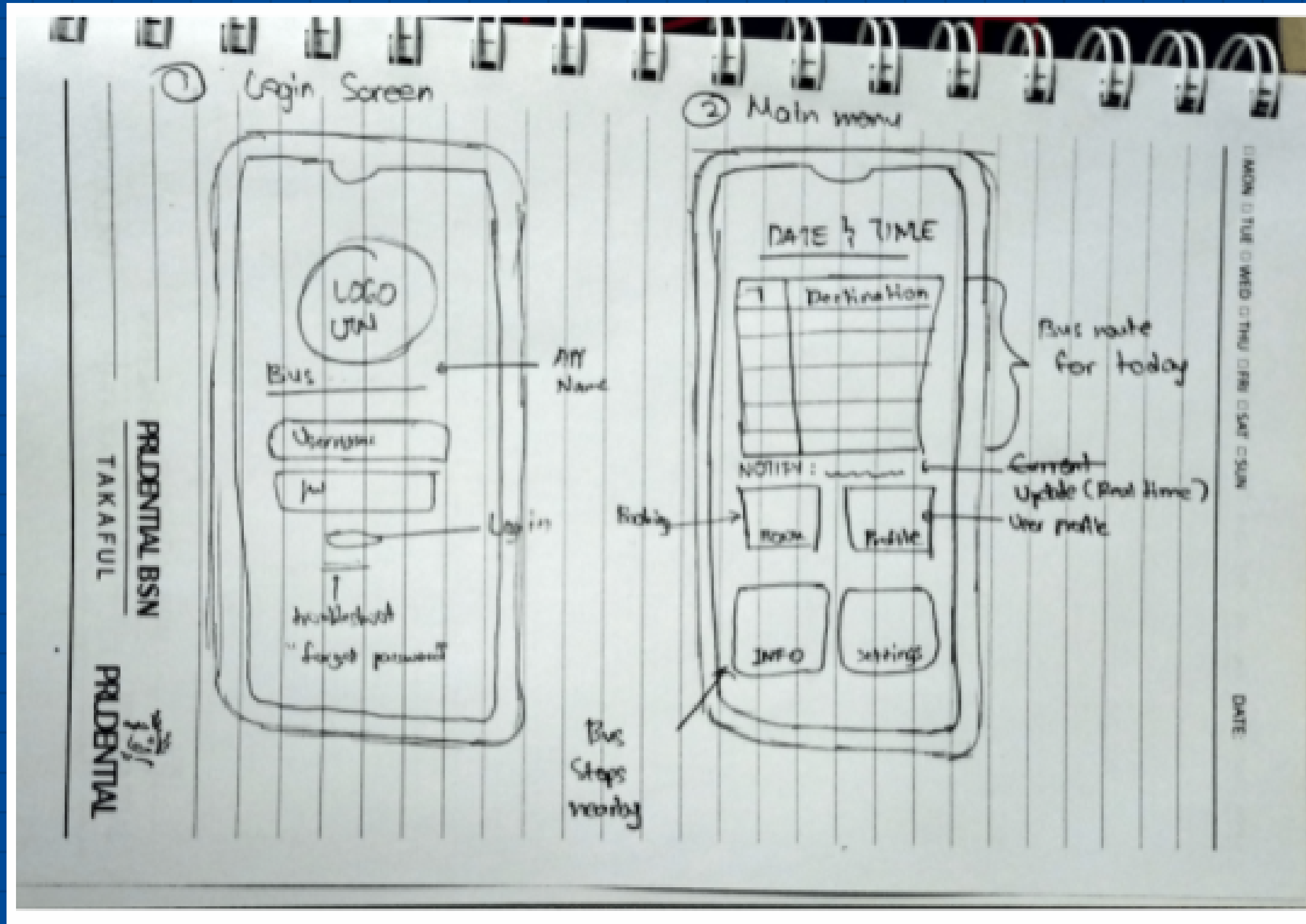
low-fidelity prototype using PowerPoint

Save

Cancel

# SKETCHES

Search



Save

Cancel

# SKETCHES

Search



EXPRESS BUS  
TICKETS

NAME

NO. TEL

☐ ☐ ☐

date

submit button

choose what kind of bus we want. (KKKL, Mayang Sari)

choose date

choose destination

drop-off location

Save

Cancel

# SKETCHES

Search



(Bus Booking for special occasion)

Person In Charge  
Name:

Total passengers

Destination

Date  Time/Duration

name of lecturer or student who is in charge

number of estimated passengers

main destination of the occasion

how long to use the bus.

Save

Cancel

# PROTOTYPE

Search



Login & Info Page



Main Menu



Bus Ticket Booking



Shuttle Bus Schedule



Special Bus and Bus Locate

Save

Cancel

# TEST

Search



## List of feedback questions:

1. Status
2. Are you satisfied with the login interface ?
3. Do you think which option is the most beneficial to you ?
4. Do you think the real-time bus location is beneficial to you ?
5. Do you think adding express bus ticket booking features would be beneficial for you ?
6. Do you think access to facilities booking in UTM through Shuttle+ app is beneficial to you ?
7. Any feedback or suggestions to us ?

Save

Cancel

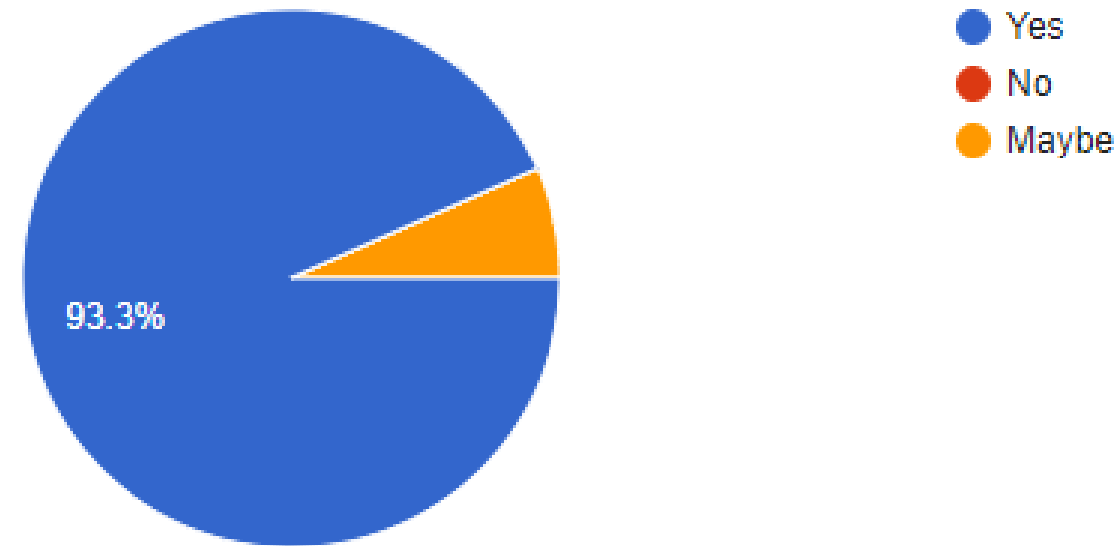
# FEEDBACK RESPONSE

Search



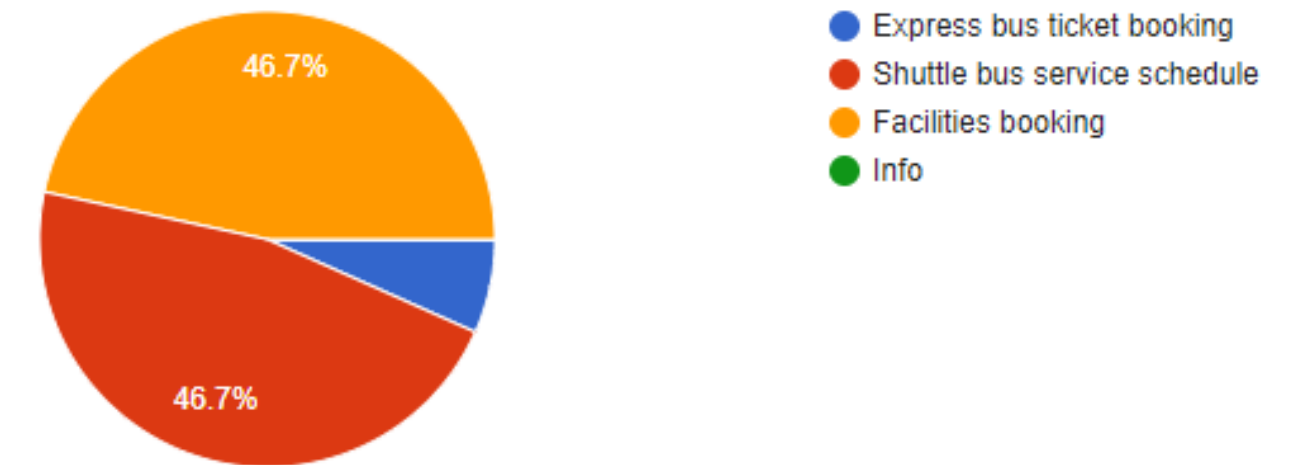
Are you satisfied with the login interface ?

15 responses



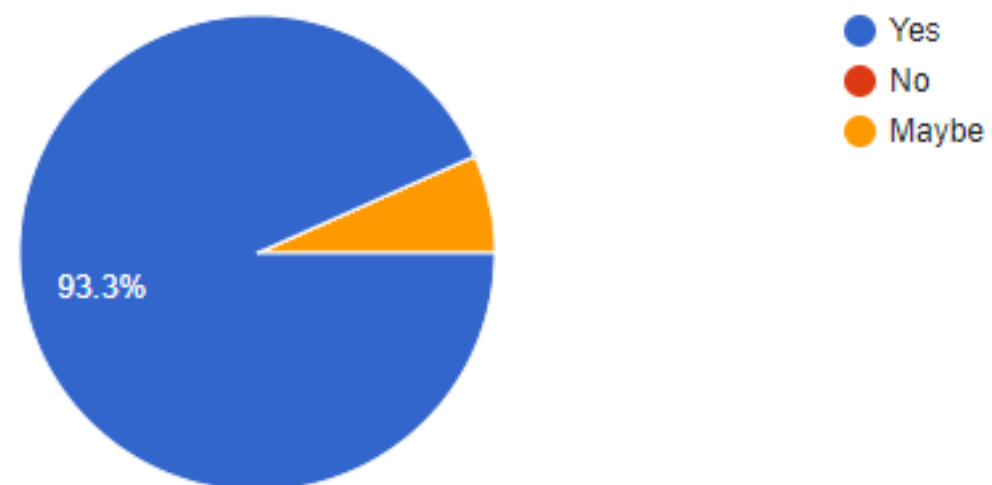
Do you think which option is the most beneficial to you ?

15 responses



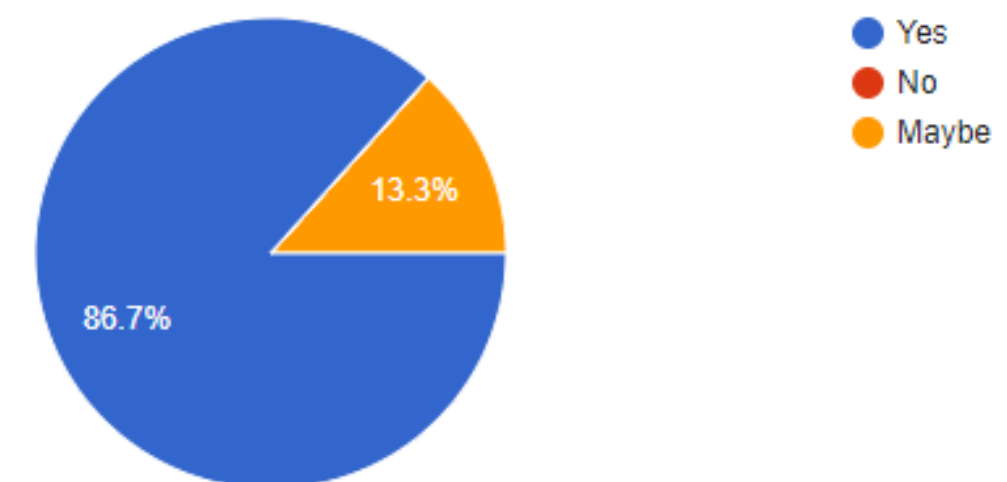
Do you think the real-time bus location is beneficial to you ?

15 responses



Do you think adding express bus ticket booking features would be beneficial for you ?

15 responses



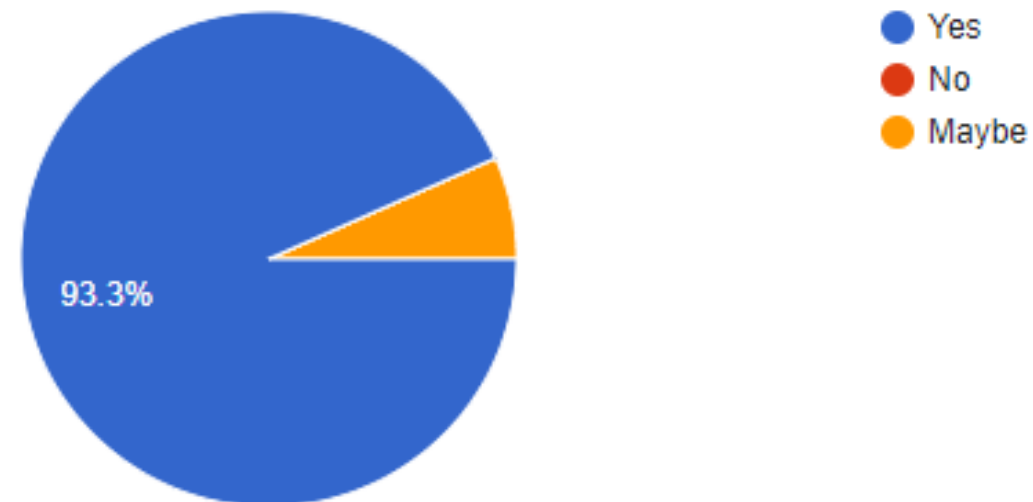
# FEEDBACK RESPONSE

Search



Do you think access to facilities booking in UTM through Shuttle+ app is beneficial to you ?

15 responses



Any feedback or suggestion to us ?

i cant wait to use this apps 😊

i hope this apps is free because it is good !

add a finger print detection

use finger print identification . moree faster log in

create a face identification to access the app

face identification

use finger print to log in

limit the transaction amount per day

make sure there is some kind of authorization of the apps


i suggest to use the fingerprint to approve the transaction

excited to use this Shuttle+



# Login & Info Page

Search



SHUTTLE+  
UP AND AWAY


USERNAME

UTM ID

→

Information

User Profile



Amos Keagan Hosea

A21EC0191

Faculty of Engineering

School of Computing

1/SECRH

Official Email  
amoshosea@graduate.utm.my

Secondary Email  
amoskeaganhosea02@gmail.com

012-3456789

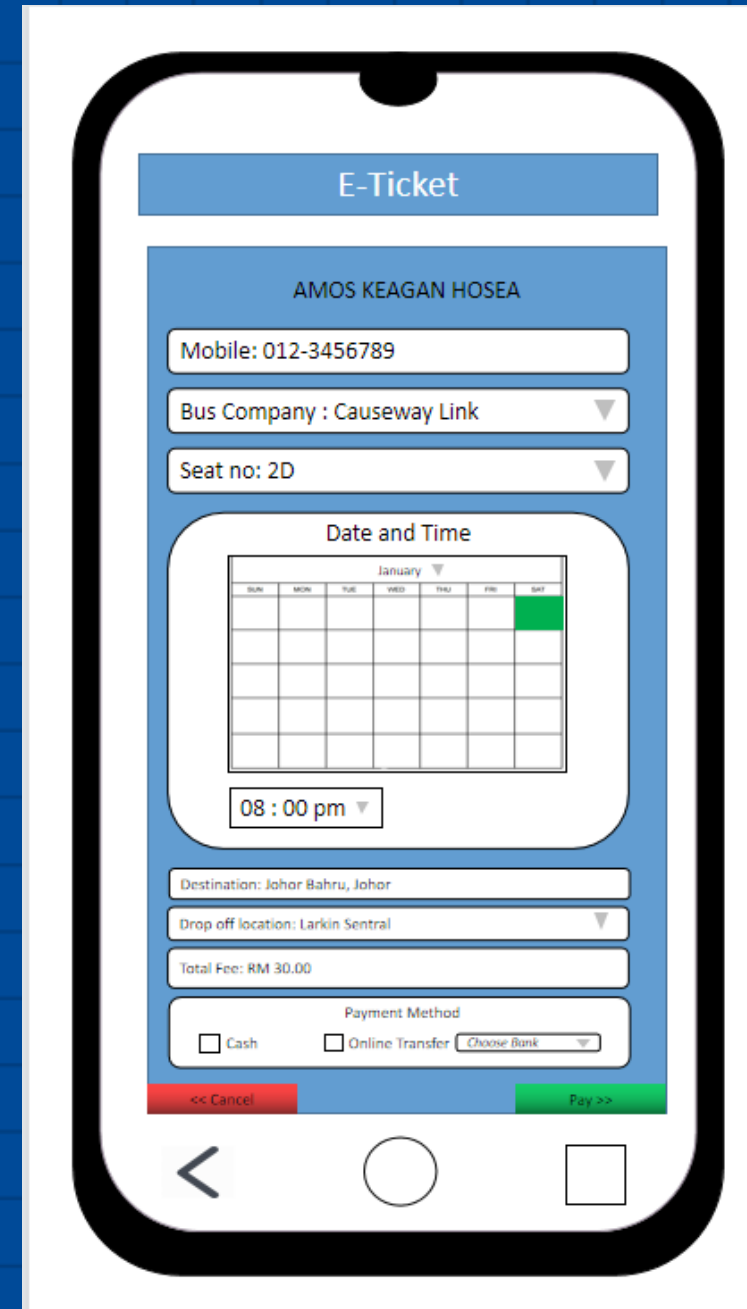
DISMISS

Save

Cancel

# Main Menu and Ticket Booking

Search



Save

Cancel

# Shuttle Bus Schedule and Special Bus

Search



Bus Schedule

Today's Schedule

Johor Bahru

Mon

08 : 00pm

Batu Pahat

Tue

08 : 45am

Johor Bahru

Thu

11 : 00pm

Senai

Thu

12: 30pm

DISMISS

SPECIAL BUS

Person In Charge :

No. of Total Passengers :

Destination :

Date and Time

08:00 pm09:00 pm

Payment Method

☐ Cash ☐ Online Payment :

Total Fee : RM 69.42

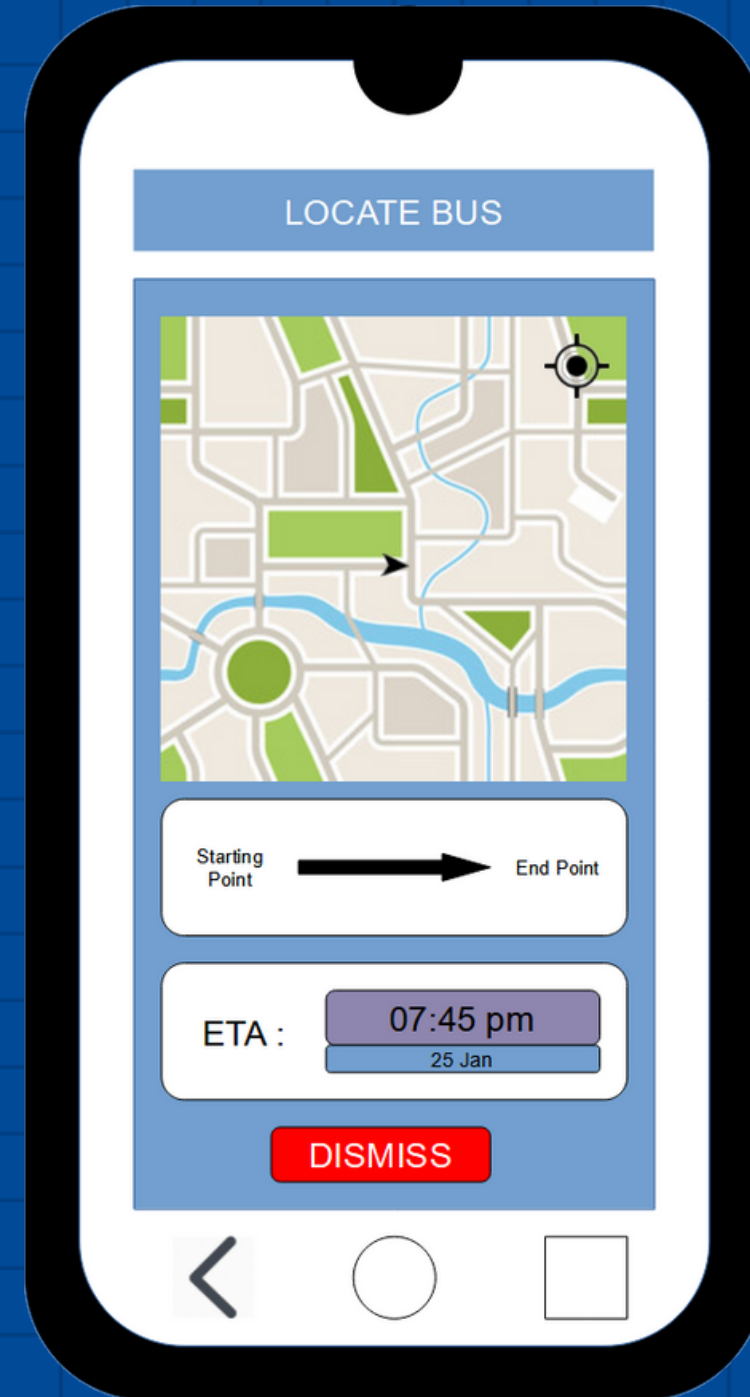
ACCEPTDISMISS

Save

Cancel

# Bus Locate

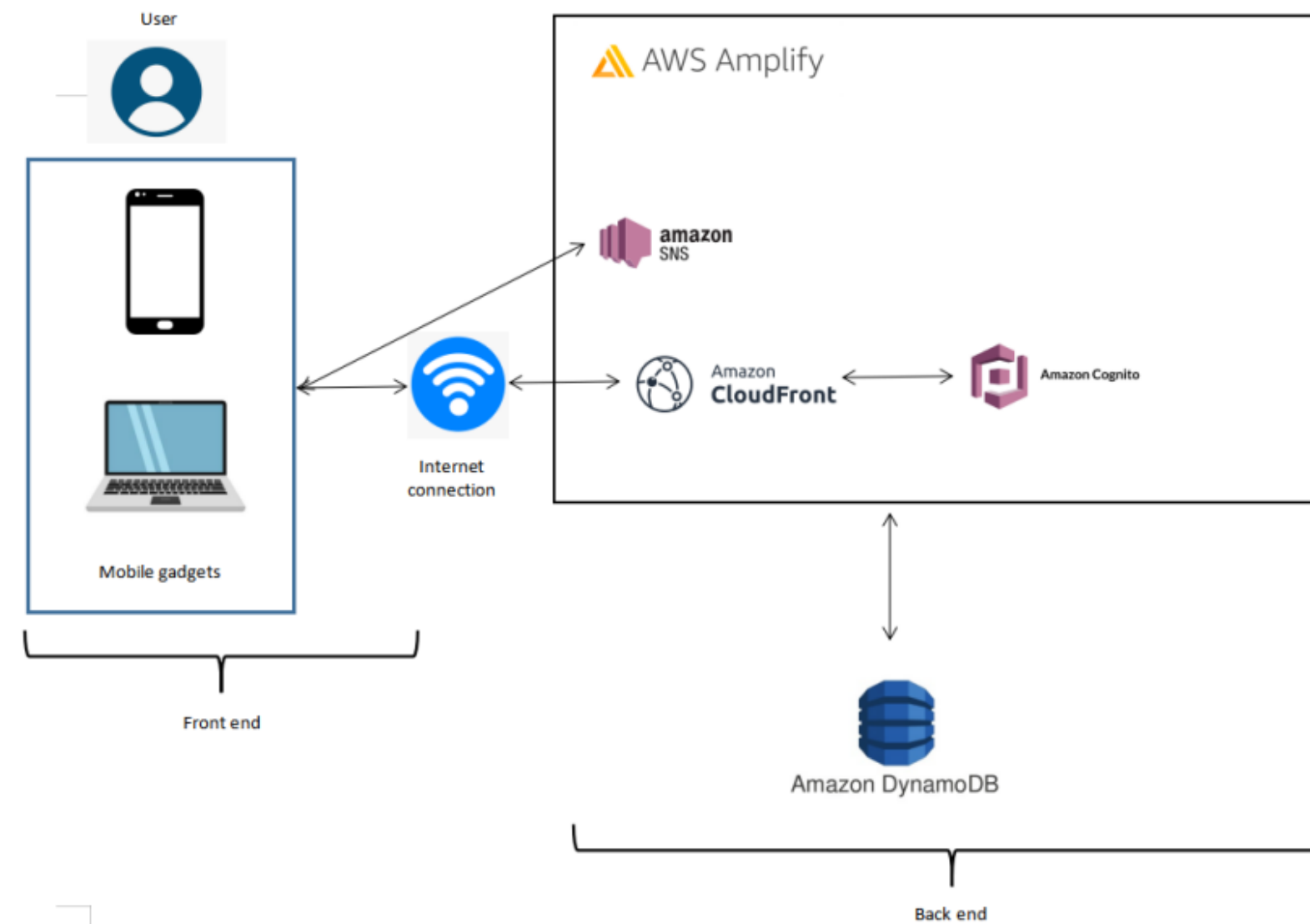
Search



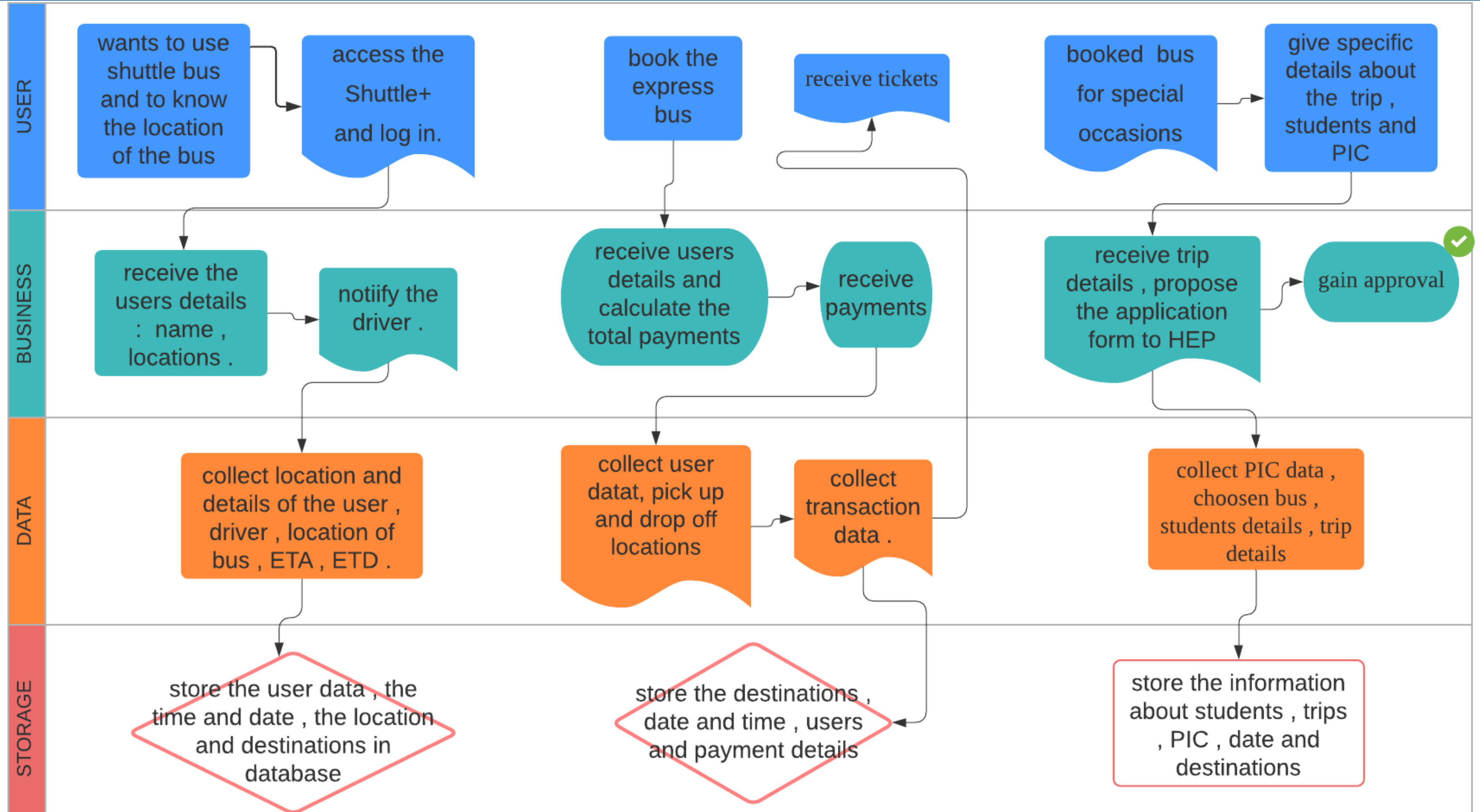
Save

Cancel

# AWS Architecture Design



# Flow Diagram





# Thank you!

Until our next petty debate!

