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# T281 Graded Assignment

## Chosen Topic

# 3. Republic Polytechnic’s Help-IT

Design a (Phygital Solution) to improve the experience that students face while visiting Help-IT to resolve their IT issues

# Project Planning: Stakeholders

## 1. Republic Polytechnic Students

- They are the primary users for Help-IT (Help-IT is used everyday during school days)
- Solutions must be kept in mind to help Students
- Will be directly affected when solutions/changes are implemented

## 2. Republic Polytechnic Principal

- Has the final say in approving permission
- Have authority in allocating resources e.g. budget

# Project Planning: Requirement

## 1. User Requirement

Students need clear and easily visible directions to locate the Help-IT service from various points on campus, especially from common areas like the library or their school's building.

## 2. Business Requirement

The phygital solution should be able to increase efficiency in the process of booking and finding the Help-IT service

## Chosen Research

# 1. Field Studies (Covert Observation)

To gain natural and unbiased data research of how Republic Polytechnic students behave when going to Help-IT

# 2. Interviews

To gain opinions, experiences, and knowledge from Republic Polytechnic students about the Help-IT

# Interview Questions

## Demographic Questions

1. What is your name & age?
2. What year are you?
3. Which school are you from?
4. How often do you go to Help-IT
5. What did you need help with?

## Research Questions

1. Was it easy to find the Help-IT during your **first** visit? Why?
2. Walk me through the process of you visiting the Help-IT
3. Did you face any challenges during the process?
4. Was there any particular moment that affected you?
5. What improvements do you think could be made?

# Research Summary

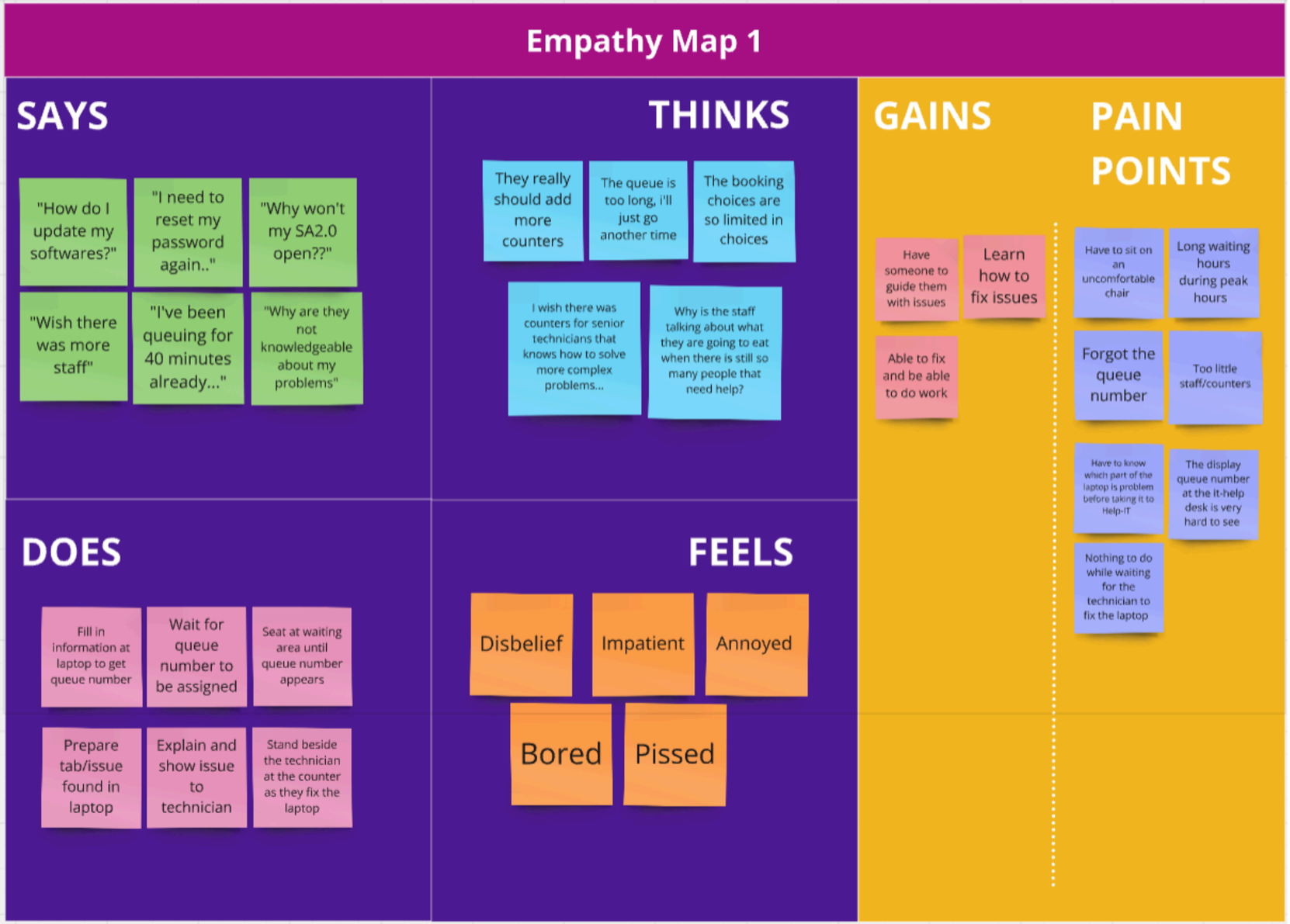
## Demographic Questions

1. Most students were around ages 18-19 with outliers age 17 or 21
2. Most students are either year 1s or 2s
3. Most students were but not limited to STA
4. Frequency visits vary from once a year to once per semester
5. Most students have problems with WiFi issues, SA2.0 or software problems

## Research Questions

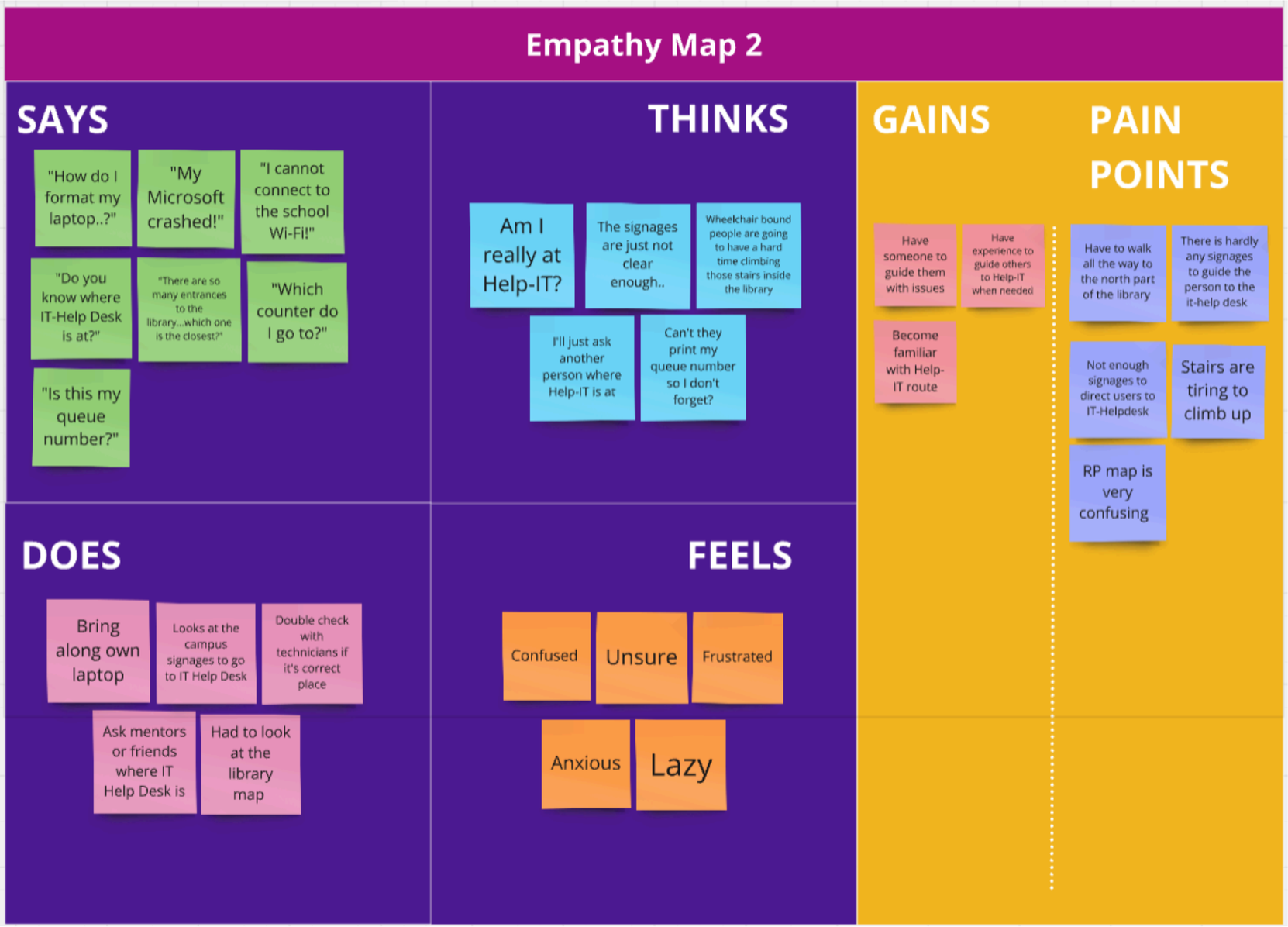
1. Around 50% had difficulty finding the Help-IT due to confusing wayfinding or due to not visible location
2. Go to counter, -> Queue no. -> Wait turn -> Fix problem
3. Common issues was with wayfinding, instructions clarity, & waiting process
4. Some students noted staff unprofessionalism occurred
5. Suggestions such as better signages & queue display, booking, staff training and more counters were noted.

# Empathy Map 1




Miro link: https://tinyurl.com/mirot281

# Empathy Map 2




Miro link: https://tinyurl.com/mirot281

## Problem Statement (HMW)

How might we streamline the Help-IT experience at Republic Polytechnic for students so that their laptop issues are resolved efficiently?

# Persona 1

## Student's Persona 1

### Demographics

**Name:** Samuel Ahmad Nair
**Age:** 19
**Occupation:** 2nd Year student
**Main Building:** STA
**Personality Traits:** Impatient, Easily bored, Responsible, Assertive
**Technology experience:** Basic

### Behaviors & Habits

**How they navigate to Help-IT:**

1. They go to South Entrance
2. They climb the stairs
3. Turn left and go to Help-IT

**Frequency of going to Help-IT:** Once a year

### Pain Points & Frustrations

**Frustrations:**

1. Dislikes sudden interruptions
2. Dislikes insincerity
3. Dislikes waiting

### Needs & Goals

**Goals:** Requires SA2.0 software on laptop to be fixed

**Needs:**

1. SA2.0 software to be fixed
2. Issue to be fixed as soon as possible
3. Attend an examination using SA2.0 software

**Preferences:**

1. Fast & quick transactions
2. Using lifts or ramps

Miro link: https://tinyurl.com/mirot281

# Persona 2

## Student's Persona 2

### Demographics

**Name:** Jia Ying
**Age:** 17
**Occupation:** 1st Year Student
**Main Building:** SOI
**Personality Traits**: Absent-minded, Short-tempered, Detail-oriented
**Technology experience:** Basic

### Behaviors & Habits

**How they navigate to Help-IT:**

1. They go to North Entrance
2. Walk pass Cafe
3. They go down the stairs
4. They go to Help-IT

**Frequency of going to IT Help-Desk:** First time

### Pain Points & Frustrations

**Frustrations:**

1. Dislikes inconvenience
2. Dislikes physical exertion
3. Dislikes being in doubt

### Needs & Goals

**Goals:** Requires Wi-Fi Issue to be fixed

**Needs:**

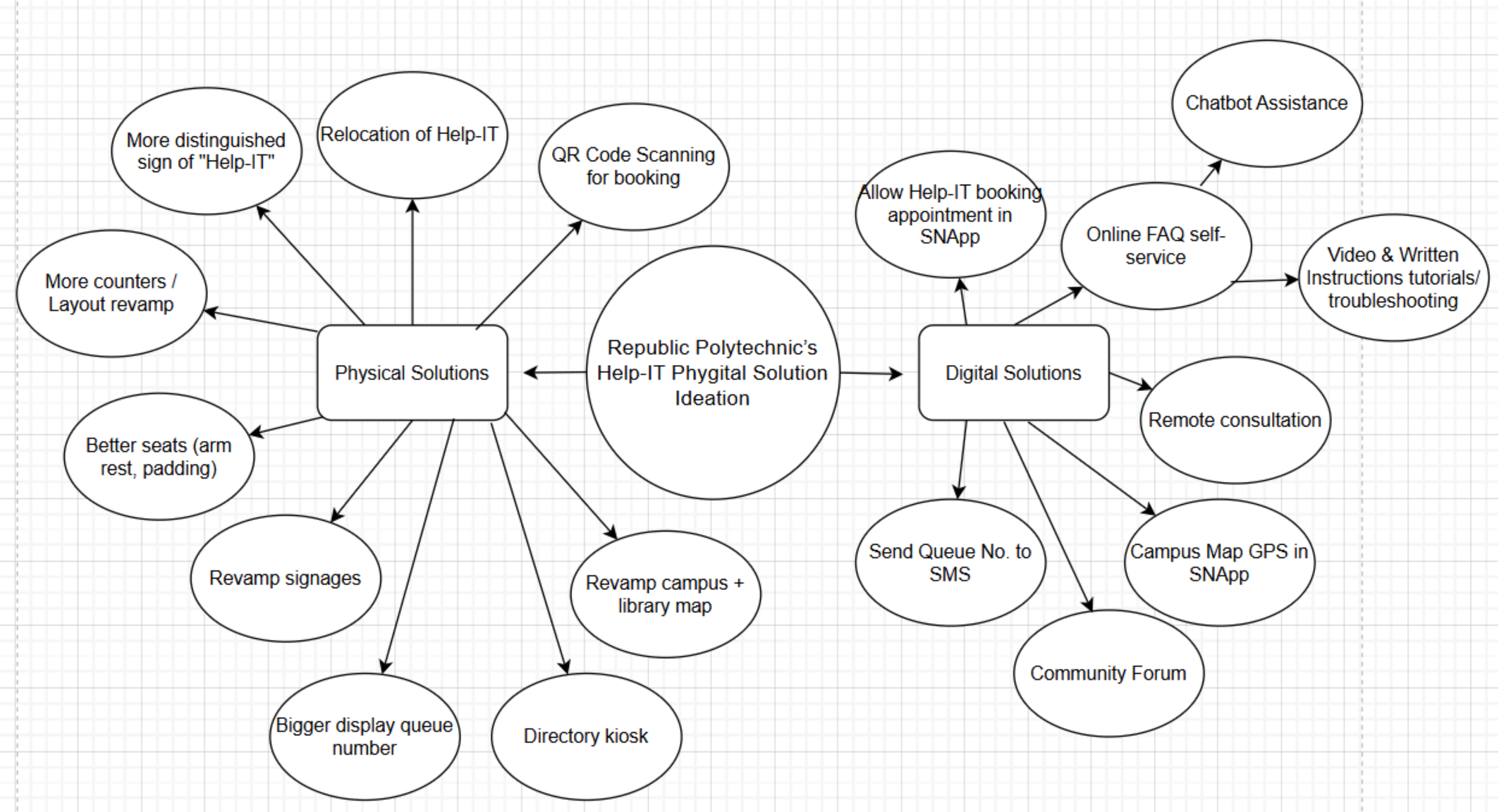
1. Better maps and signages given to Help-IT
2. Laptop to be connected to Wi-Fi to access to LEO2.0
3. Complete assignments during school hours

**Preferences:**

1. Fast & quick transactions
2. Using lifts or ramps

Miro link: https://tinyurl.com/mirot281

# Mind Map




Miro link: https://tinyurl.com/mirot281

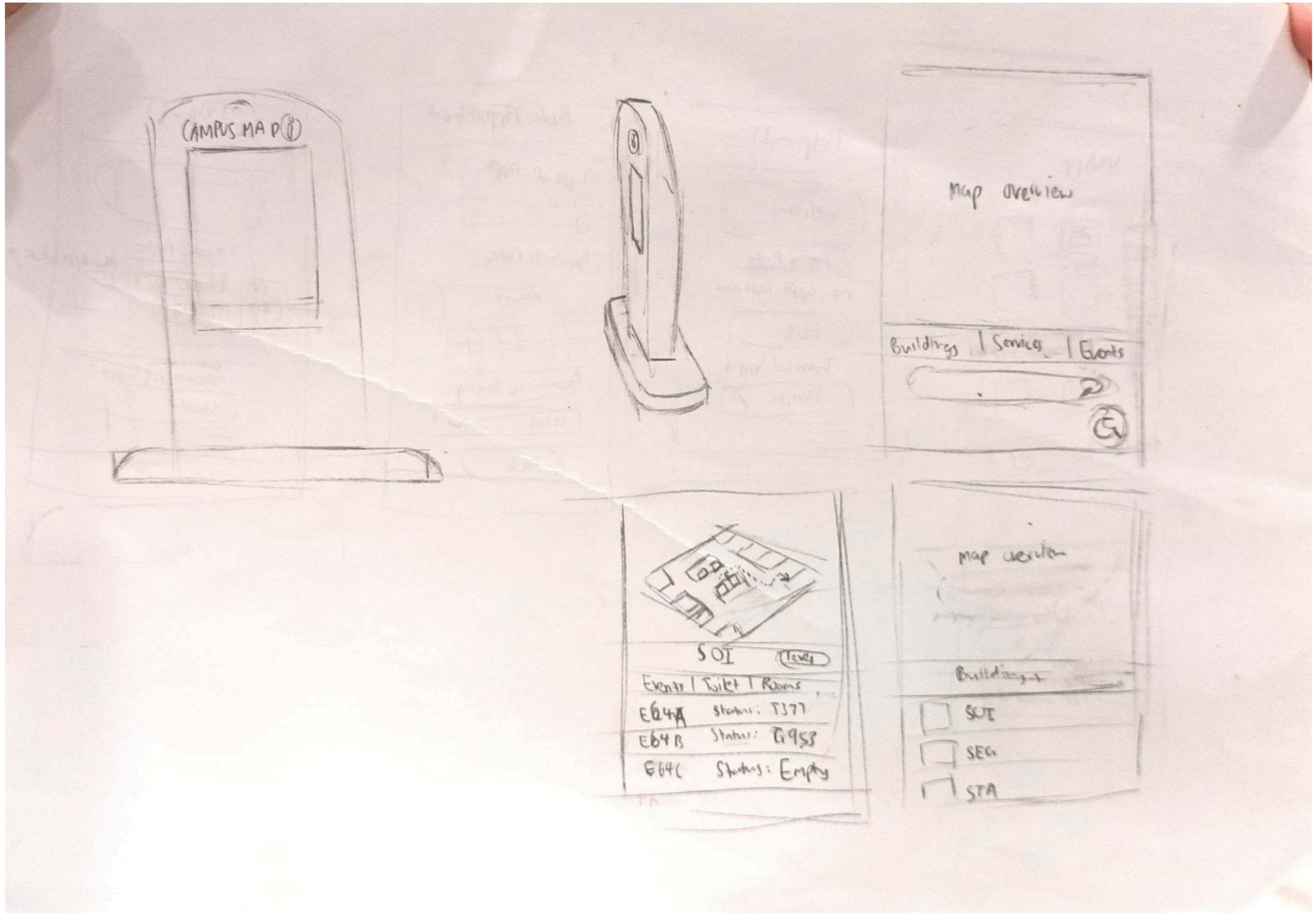
## Chosen Idea

Map directory kiosk
SNApp app Help-IT service integration

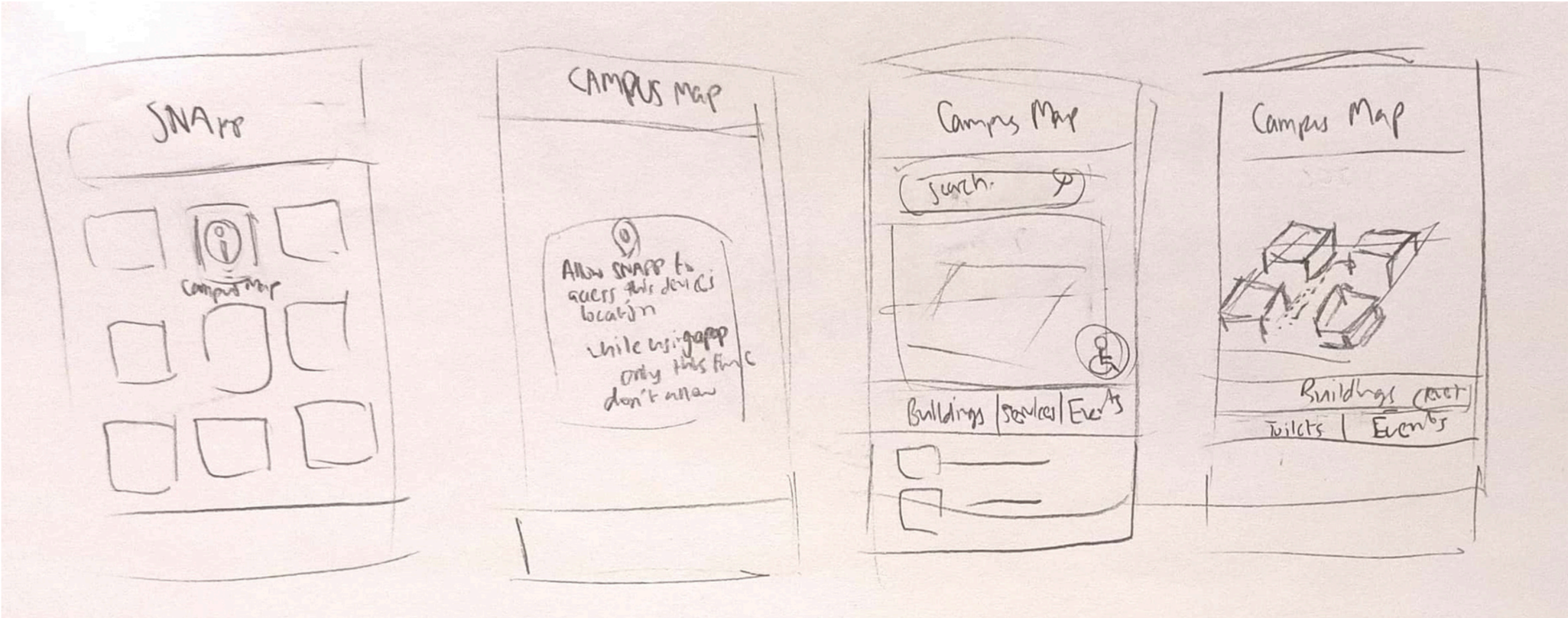
- Booking/Queue number
- Online FAQ/consultation/Forum

Ideate

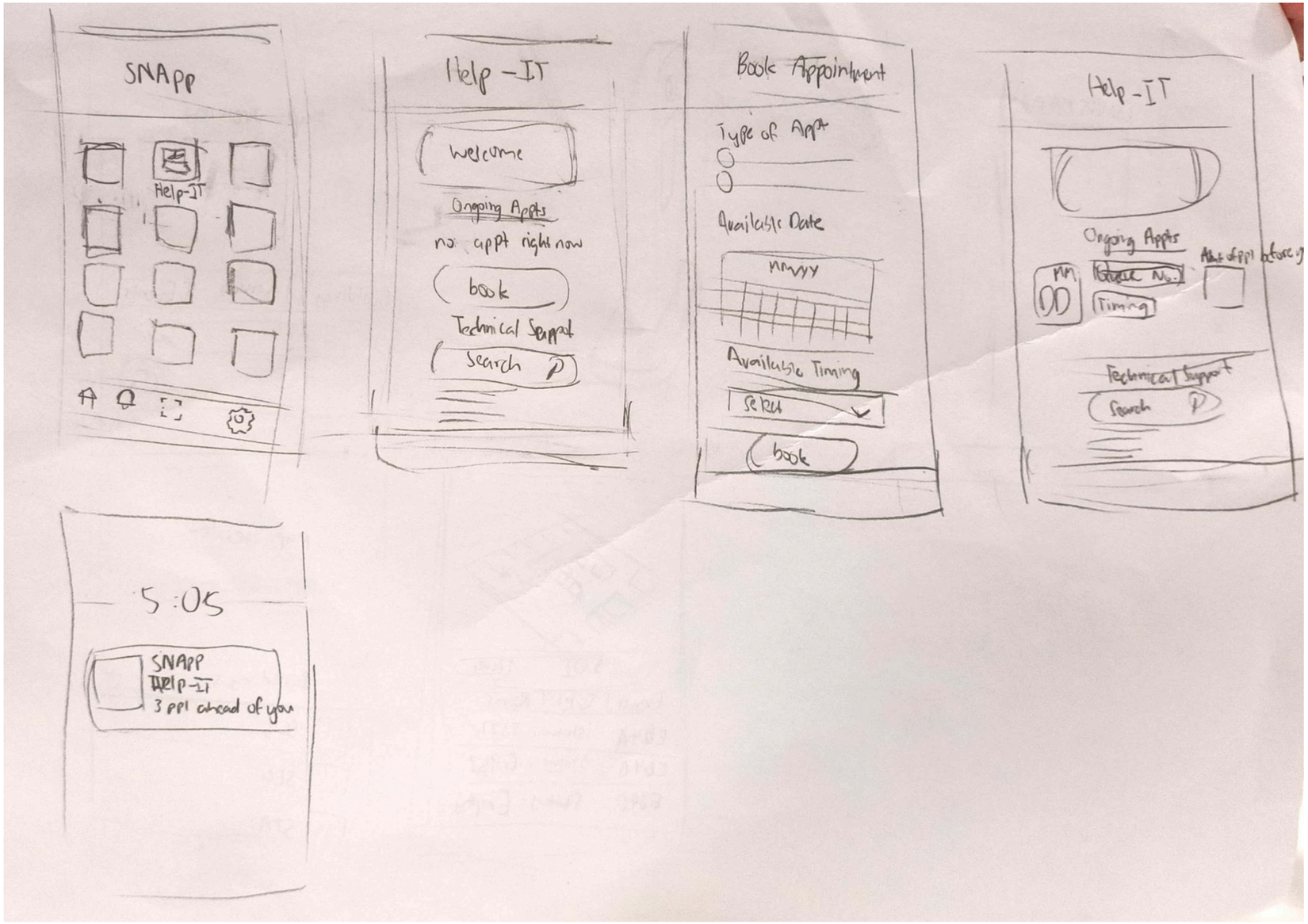
# Sketch 1



# Sketch 2


SNAPP
Campus Map
CAMPUS MAP
Allow SNAPP to access this device's location
while using app
only this time
don't allow
Campus Map
search
Buildings
Services
Events
Campus Map
Buildings
Toilets
Events

# Sketch 3


SNApp
Help-IT
Help -IT
welcome
Ongoing Appts
no appt right now
book
Technical Support
Search
Book Appointment
Type of Appt
Available Date
Available Timing
select
book
Help -IT
Ongoing Appts
Timing
Technical Support
Search
5:05
SNAPP
Help-IT
3 ppl ahead of you

# Storyboard

# Storyboard

I'll just go next time....
Help-IT SNApp Booking
Booking?
SNAP
Book!
12pm
STA
CAMPUS MAP
Help-IT
Scan & input Q no to join queue

# Storyboard

# Rationale

**Map directory kiosks**

1. From research many respondents said map had unclear directions and was confused. Having a digital map kiosk that shows visualisation of where to go may be more clear and helpful.
2. Secondary benefits may help prospective students / non-students / visitors coming to Republic Polytechnic

**SNApp integration**

- Booking / Queue Number

1. From research it was observed that there was long queue lines and may even get crowded during peak hours. Having availability to book for appointments can allow priority when queuing as well as notifications on how many people to wait for. This allows students to do other more productive tasks than just sitting and waiting for queue.

# Rationale

SNApp integration

- Online FAQ / Consultation

1. From research, many respondents had common issues e.g. Wi-Fi issues / reset password which could be resolved easily. Such issues should be displayed in SNApp as FAQ to avoid increase of people in-person. The online consultation can also be a good alternative to FAQ if students wants guidance for a simple issue or if they are unable to go to the Help-IT location

# Project Planning: Gannt Chart

1. Link to SmartSheets
https://tinyurl.com/smartsheett281

# Low Fidelity Prototype: Physical

**Directory kiosk**

- Will be placed at various locations (Near entrances/exits of buildings and campus)
- Have an "i" icon to signify that its a directory
- SNApp QR code to the map
- SNApp sign "Scan this QR Code to access the School Map on SNApp app" beside the QR code
- *Note: UI of Map Directory will be similar to SNApp School Map. Only difference is that the marker would automatically move while for the mobile version it uses location GPS

# Low Fidelity Prototype: Physical

## Locations of Directory Kiosk

The “i” icon symbolises the directory kiosk

# Case scenario - Physical Prototype

Scenario: Jia Ying has just enrolled to Republic Polytechnic. She needs to configure her windows 10 to 11 but is not tech-savvy. She decides to go to Help-IT in order to solve this problem before going to class.

User Goal: Find Help-IT with ease

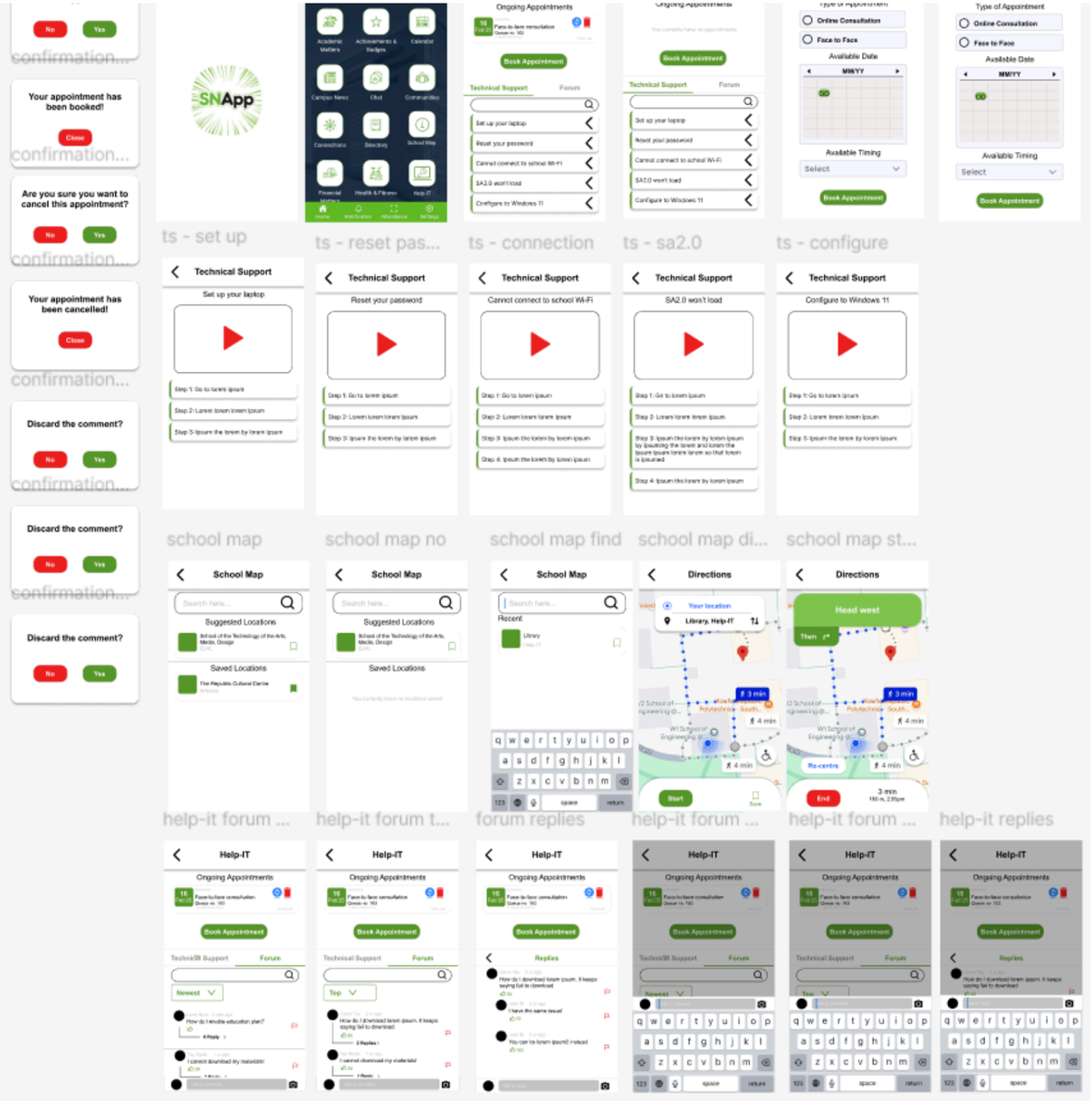
Prototype Focus:

- Relevant locations to put the school map directory
- Obvious indication it is a school map directory
- Clear & large enough screen to see the UI

# Low Fidelity Prototype: Digital

Prototype link:
https://tinyurl.com/figmaprototypehelpit

Design File line:
https://tinyurl.com/figmaprototypedesignfile



# Low Fidelity Prototype: Digital

**Help-IT:**

- Booking function (online/face-to-face consultation)
- Ability to remove appointment
- Ability to reschedule appointment
- Online resources of FAQs provided with both text/video instructions
- Forum community chat to allow for more complex questions / unique situations
- Ability to create comments
- Ability to reply to comments
- Ability to delete comment/reply
- Ability to sort by top liked / newest posts
- School Map Directory:
- Ability to save locations
- - Ability to start/end GPS
- - Will suggest/put recent locations
- - Ability to re-centre directions
- - Ability to change for a wheelchair route

# Case scenario - Physical Prototype

Scenario: Samuel Ahmad has an exam in 2 days only to find out his SA2.0 software does not seem to open. He’s been trying to fix it for the past 3 hours at home to no avail. He decides go to SNApp’s Help-IT online resources; booking an online consultation asthe last resort.

User Goal: Find help online with ease & book appointment in SNApp with ease & efficiency

Prototype Focus:

- Clear & intuitive UI to book an appointment
- Easy to understand layout
- Ease to find the topic he requires

# Rationale writeup of Prototypes

The physical prototype helps new students and visitors find their way around campus by placing directories in useful spots like building entrances and exits. The “i” icon shows it’s for information, and the QR code lets users open the SNApp map on their phone. This makes it easier to find places like Help-IT or the café inside the library, which aren’t easy to spot. It also gives a clearer view of routes and helps users search for specific locations instead of just big buildings.

The digital prototype makes getting IT support easier. Users can book online or face-to-face consultations, so they don’t have to visit in person unless needed. This also helps reduce crowding at Help-IT. FAQs with text and video guides help users fix common problems on their own, so they don’t always have to ask for help.

The forum allows users to ask and answer IT-related questions, reply, like, report, and sort posts. This helps with more unique problems, allows users to learn from each other, and reduces the number of people going to Help-IT. It also helps staff understand what issues users face.

The School Map Directory UI helps users find their way by letting them save locations, see recent searches, and re-center the map. GPS helps them find exact places, and there’s a wheelchair-friendly route option for accessibility.

# Test Scenarios

Test scenario 1: Use the map directory to find Help-IT
User goal: Can easily get in and out of app
Task: PressSchool Map-> Press search bar -> Press library bar -> Press start -> Press end

Test scenario 2: Browse setup your laptop FAQ & book an online consultation
User goal: Can go to online resources before booking an appointment
Task: Press Help-IT -> Press Book appointment -> Press Face to Face radio -> Press book appointment -> Press Yes

Test scenario 3: Create a comment and discard it mid-writing
User goal: Can find the comment page & ease of discard confirmation instructions
Task: Press Help-IT -> Press Forum -> Press Add a comment -> Press on black transparency -> Press Yes

Test

# Critique of Prototype - Physical

User 1:

- Too Many Kiosks: There are too many kiosks, especially around E4 (two kiosks outside), making it feel crowded. E4 and E3 kiosks could possibly be shared to reduce redundancy.

User 2:

- Kiosk Quantity: Too many kiosks in one area. A centralized kiosk for each NSEW direction may be sufficient, reducing overcrowding.
- QR Code vs. Paper Map: Consider using printed paper maps instead of QR codes. It might be more cost-effective, time-efficient, and reduces the risk of malfunctions.

User 3:

- Has not much to say. No errors observed

Test

# Critique of Prototype - Digital

User 1:

- School Map Page: Cannot go back to the previous page.
- Directory Visual Clutter: Too much text between colors makes the directory look cluttered at a glance.
- Booking Appointment Issue: Both online and face-to-face options can be selected at the same time, which shouldn’t happen. Only one option should be allowed at a time.
- Calendar Dropdown Misalignment: The calendar dropdown (DD) is not properly aligned.
- Photo Icon: The photo icon is not centered.
- Forum Display Issue: There's a floating "60" at the top of technical support when accessing the forum.

Test

# Critique of Prototype - Digital

User 2:

- Face-to-Face Consultation vs. Online: If you display the number of people ahead for face-to-face consultations, it might be confusing for online consultations since users don't need to know this.
- Forum Risks: Potential for spam or off-topic posts. How frequent will the technicians reply and if their responses will be consistent. Moderation and clear guidelines are necessary to keep the forum useful.
- Red Flag Icon: Not clear to save, mark as important, or report. Use real-world icons or labels for better understanding.
- Timing Alignment: The timing display is not centered.
- Back Button Functionality: The back button leads to the same place as the end button. Reconsider its functionality or remove it if unnecessary.

Test

# Critique of Prototype - Digital

User 3:

- After removing RP Cultural Centre from saved locations, the user cannot navigate back to the Snapp App page.
- Green squares on the map feel empty—missing logos or unclear in purpose.
- The Remove icon on "Remove Ongoing Appointments" stays light red after selecting "No" on canceling an appointment.
- (No additional issues noted.)
- The number 60 floats above the Technical Support button on the forum page.
- In Ongoing Appointments, "Face-to-Face Consultation" has an uneven gap between the word appointment and the number of people ahead.

Test

# Improvements for Prototype

## 1. Improvement 1 (Digital)

Find a way to make it so that booking details is relevant to type of appointment booked. e.g. online consultation -> exact timing, face to face -> number of people before you

## 2. Improvement 2 (Physical)

Minimise amount of kiosks & research more on high traffic areas to ensure full efficiency of placing the map directory kiosks

# Project Planning: Risks & Contingency plan

Risk 1: Community forum may not be active or may be subjected to spams/unrelated topics

Contingency 1: Put Help-IT employees to respond once a day at a certain timing. Put in moderation censorship / moderator to ensure forum do not stray away

Risk 2: Reduced usefulness of map directory in SNApp app after student familiarises themselves with the place.

Contingency 2: Allow directory to also pinpoint event/festival locations to ensure non-new students still find usefulness of it

# Thank you