MEETING ROOM BOOKING MOBILE APPLICATION DESIGN

Introduction

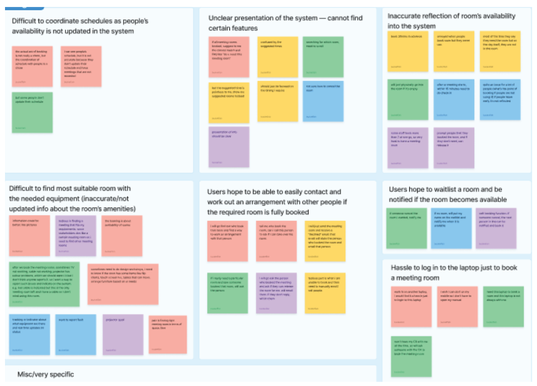
In the modern workplace, efficient meeting room booking is essential for productivity. Organizations often grapple with challenges like double bookings, ad-hoc reservations, and a lack of transparency in room availability. This project aims to design a user-friendly mobile app that addresses the issues with the current booking system and streamlines the process for DSTA Employees.

Double Diamond Method

1. Discover

User interviews
- Five users interviewed, 30 minutes each
- Includes observations of how users interacted with the existing system

Affinity mapping
- Grouping of interview responses and key insights



2. Define

How Might We statement: Goal of project

How might we create a meeting room booking system that fosters collaboration among staff, while ensuring a streamlined and intuitive design that reduces the tediousness of booking meeting rooms and creates a smarter office?

User journey map

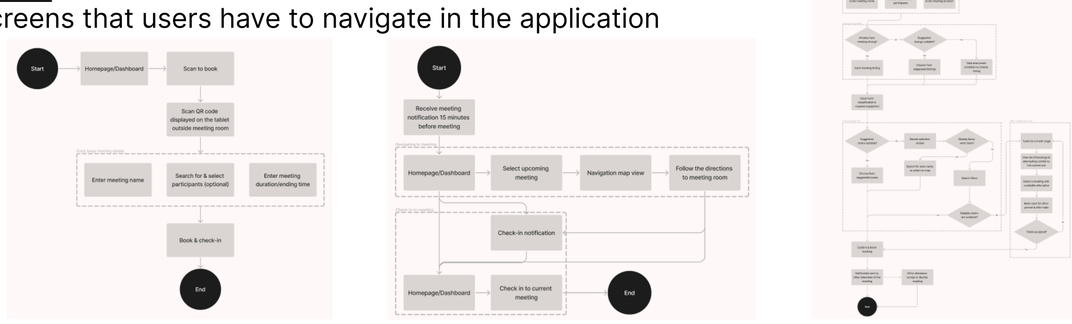
Phase	Pre-Booking	Booking				Pre-Meeting	Meeting				Post-meeting
User Action	Finding a common time for the meeting	Fill in meeting name	Add involved people	Find suitable room	Message those who booked rooms, if there are no available rooms	See upcoming meeting for the day	Make way to the meeting room	Ask previous meeting to leave if they are overrunning	Hold meeting	Find faulty equipment	End meeting	Book next meeting
Touchpoints	Slack/Whatsapp/Other communication device Polls features Outlook week view	Outlook	Outlook	Outlook Room view/ scheduling assistant	Outlook Email Those who booked the room previously	Outlook calendar	-	People involved in previous meeting	Meeting participants	Meeting participants	Meeting participants	Outlook
Emotions	Annoyance Difficulty in finding a common time Tired (having to set up the poll and list all available timings, or cross-reference own calendar while filling in the poll)		Annoyance, if the person needed doesn't show up in the search immediately	Annoyance due to not knowing which room is suitable	Difficulty finding and hunting down who the person is Annoyed at people who might have booked the room but no longer intend to use it		Frustration if they cannot find the meeting room	Slightly annoyed, if the previous meeting runs way overtime	-	Irritated since they cannot use the equipment despite booking a room with them	Happy that meeting is over? :)	Slightly tedious while re-inputting everyone's names and details again
Pain Points	Tedium of a poll to find a common time	-	No easy way to search for people	Not seeing at one glance the details of each room	Difficulty finding the person and no quick way to contact them		Difficulty finding the meeting room	Inefficient scheduling leading to clashes	-	Faulty equipment that they are unaware of	May forget to turn off certain appliances May run over time	Tedious to schedule another similar meeting
Opportunities	Common place to keep updated schedules for easy access Connect app to other services to quickly generate polls/suggest timings		Intuitive people-searching system Suggested people based on existing selected ones	Provide the most important details of each room while choosing room Add photos of the room	Built-in "request room" function to contact the person who booked the room with a message to check whether they still need it Reminders in-app for people to cancel their meetings if they are no longer using it		Show map/directions to the meeting room in the app	Notify meeting participants to leave the room at least 5 minutes before the next meeting commences Show to current meeting participants when the next group is coming in	-	Include equipment reporting in the app so that it can be seen when booking the room	Checklist in app after meeting ends + Notifications so they do not run overtime	Functions to quickly book another similar meeting

As-is user journey map: identifies existing pain points and opportunities

Phase	Booking							Pre-Meeting		Meeting			Post-meeting	
User Action	Input meeting name	Input participants	Select common time for all participants	Select from suggested rooms based on classification; OR	Select required equipment and filter rooms	Message those who booked the rooms if there are no rooms available	Other participants accept meeting invite	Look at calendar view for meetings for the day	Make way to meeting	Check-in/confirm meeting	Hold meeting	Receive notification to end meeting	Report faulty equipment	Schedule next meeting
Touchpoints	Meeting app - booking screen	Meeting app Other meeting participants	Meeting app - booking screen	Meeting app - booking screen	Meeting app - booking screen	Meeting app Those who previously booked the room	Meeting app or email	Meeting app - overview	Meeting app - overview/ directions	Meeting app/ notifications	-	Meeting app/ notifications	Meeting app	Meeting app

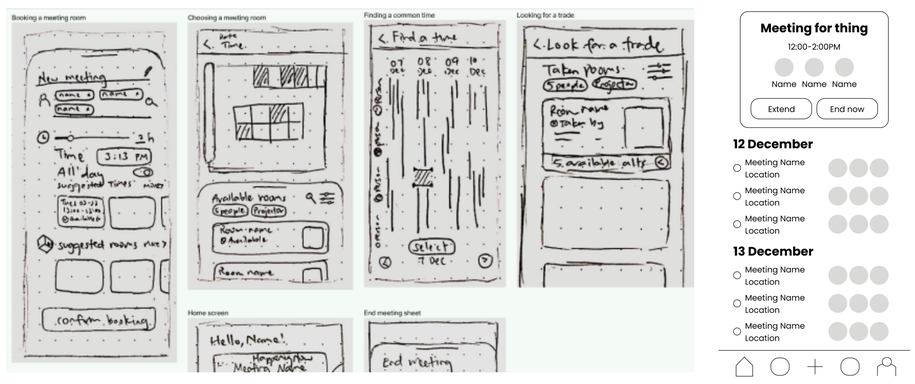
To-be user journey map: improves to refine user experience

User flow
- Screens that users have to navigate in the application

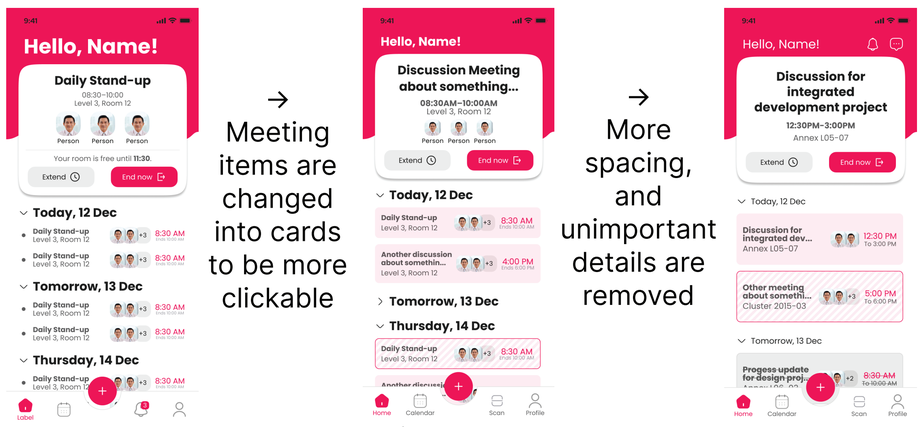


3. Develop

Lo-fi mockups & wireframes



Mid-fi prototype & iterations



Meeting items are changed into cards to be more clickable

Version 1

More spacing, and unimportant details are removed

Version 2

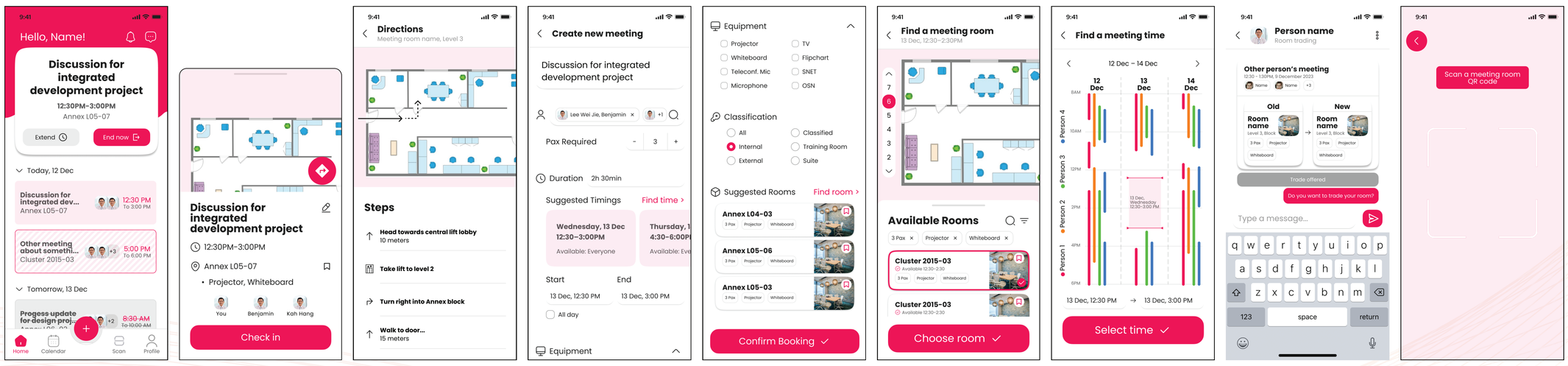
Version 3

4. Deliver

User testing
- 4 users carried out a series of tasks using the prototype

Task 1	You need to meet with Lee Wei Jie Benjamin and Lee Kah Hang to discuss the "Integrated Development Project". Use the app to book a 2.5h meeting in an internal room for this discussion. You will need a projector and whiteboard for the meeting.

Prototype Demo



Homepage & upcoming schedule

Details of meeting & navigation

Booking new meeting

Finding a meeting room

Finding a meeting time

Trading chat

Scanning QR code

Member:
Jiang Tongyu, Raffles Institution
Mentors:
Eileen Leong Yi Qing, Defence Science and Technology Agency
Goh Jun Rui, Defence Science and Technology Agency

YDSP Young Defence Scientists Programme

DSTA Defence Science & Technology Agency

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