Jamalot

Low-fi Prototyping & Pilot Usability Testing Report

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Introduction

1. Mission Statement / Value Proposition

Smarter Music Practice

2. Problem / Solution Overview

Problem: People find practicing an instrument a lonely task that requires a lot of self motivation.
Solution: By making practicing a social activity, people will not feel that they are sacrificing their social life for practicing an instrument and will be socially motivated. This can be achieved by helping people find jams nearby of right level to join and helping people host jams.

Sketches

1. overview image of the 15-20 sketches you made

We had 4 different design ideas (iPhone App, kiosk, Smart watch and web app) and we did 4-8 sketches for each design idea.

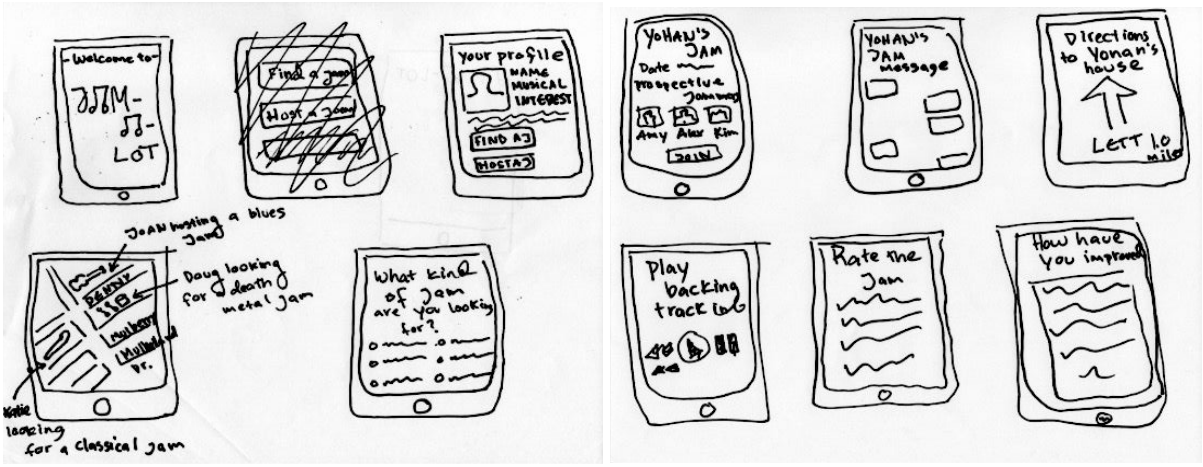


Figure 1. iPhone App

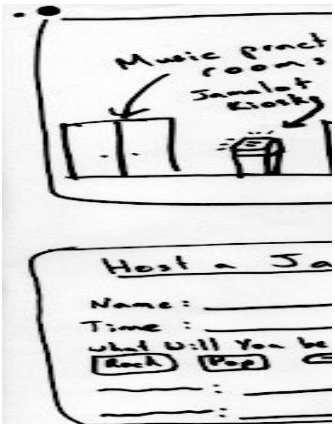


Figure 2. Kiosk

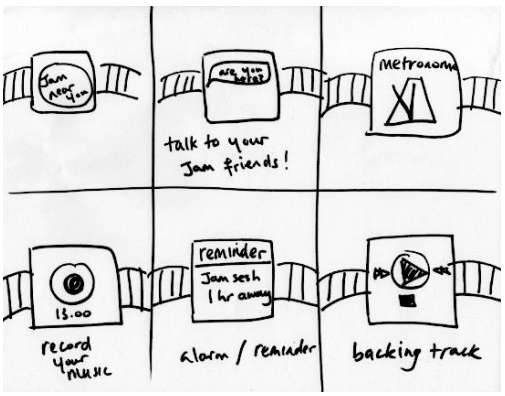
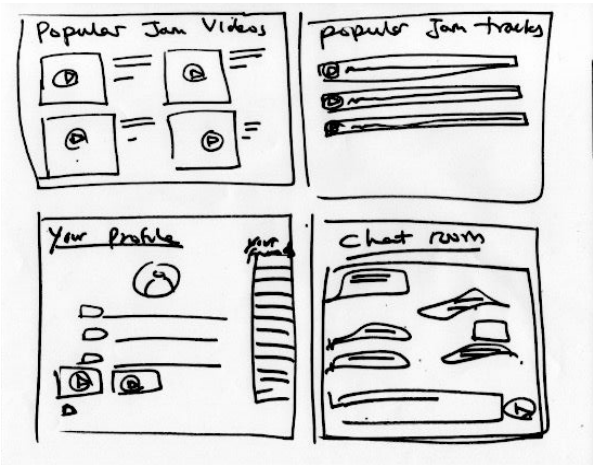


Figure 3. Smart Watch



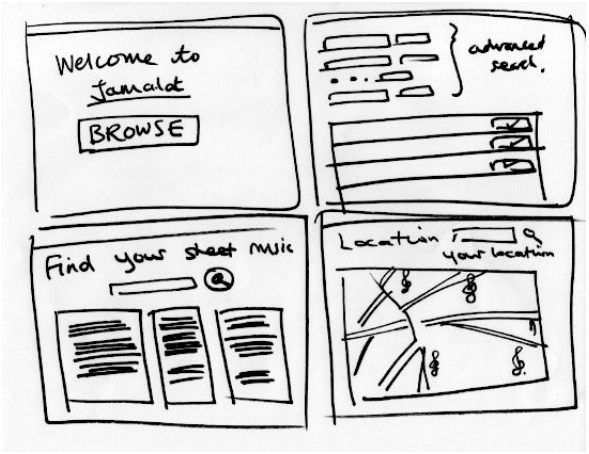


Figure 4. Web App

2. top two sketches storyboarded

We chose a kiosk and iphone app concept sketches as our top two. We chose them because the two media of interaction were very different and made us think about how we want to frame the experience spatially. Kiosks are communal and physical objects and requires the user to be present at a very specific setting (i.e. practice rooms), while a phone apps are personal and virtual objects and are within users' reach at almost all times.

Figure 5. Kiosk interface design storyboard
We imagined the kiosk to be situated outside the music practice rooms. The most basic function of the kiosk would be to book an available room. The most interesting function of the kiosk would be to introduce the user to different joinable jams. This storyboarded interface

designs shows the basic workflow of finding a jam happening at the moment and finding a jam in the future.

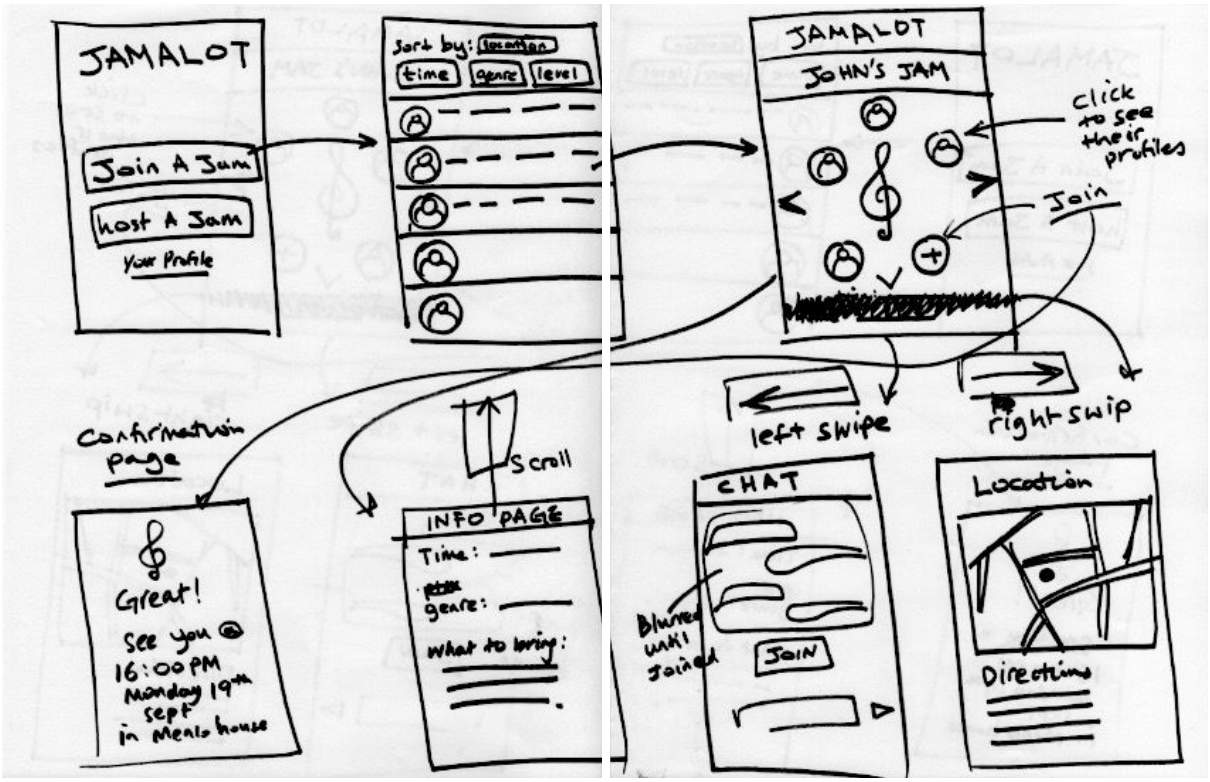


Figure 6. iPhone app interface design storyboard
This app would be downloaded by a musician who want to find nearby jams to join. The user can browse different jams, sort the jams based on genre, size and skill level etc. The user can find out about other musicians who have already joined, chat with them, find out the exact location, time and genre.

Selected Interface Design

1. storyboards for 3 tasks

We chose the Kiosk as our top design. Figures 7,8 and 9 are UI storyboards illustrating the steps to be executed each of the three tasks.

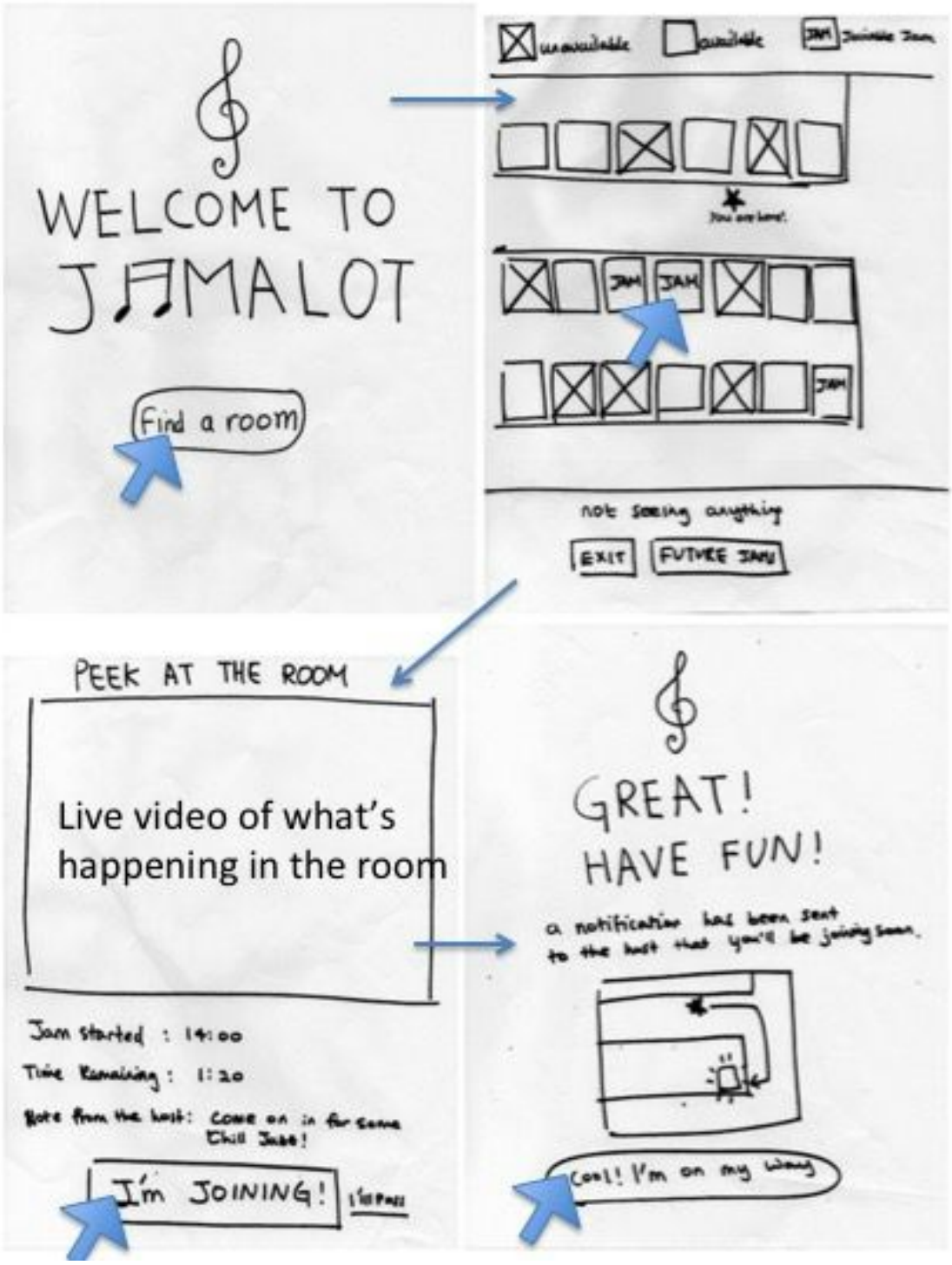


Figure 7. Find a jam right now
Task flow: click find a room button → click a room in the map that says "jam" (refer to the key at the top of the map) → see and hear what is going on in the room, and find out how much longer they are jamming for → click "I'm joining" button if you like the jam → confirm the location by looking at the directions in the mini map and then click "Cool! I'm on my way!"

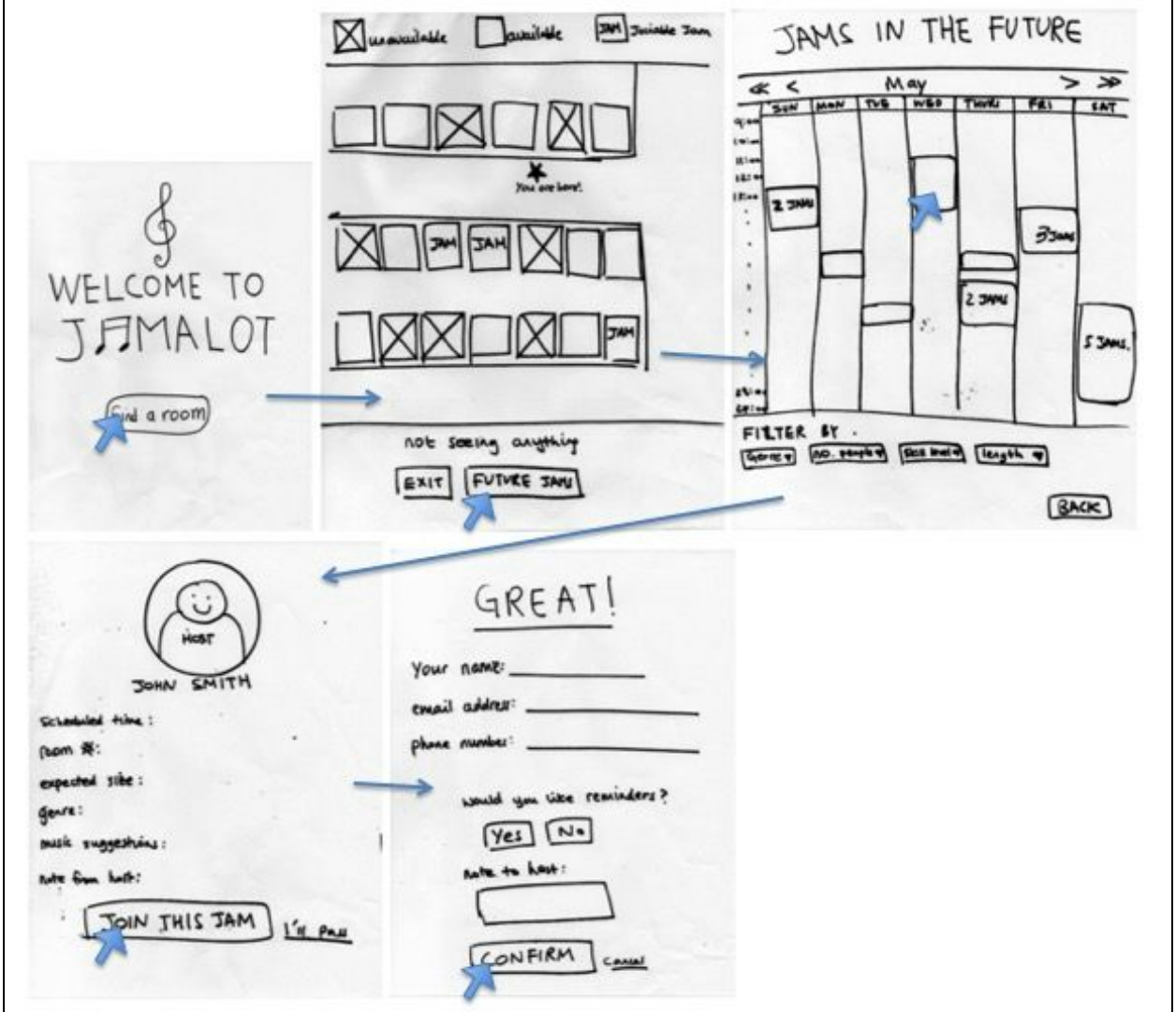


Figure 8. Find a jam in the future
Task flow: click “find a room” → click “future jams” → filter the calendar using the drop down buttons → click jams to check out their information pages → sign up for the jam that you find interesting → agree or disagree to be reminded via email and text → click the confirm button to finish the task

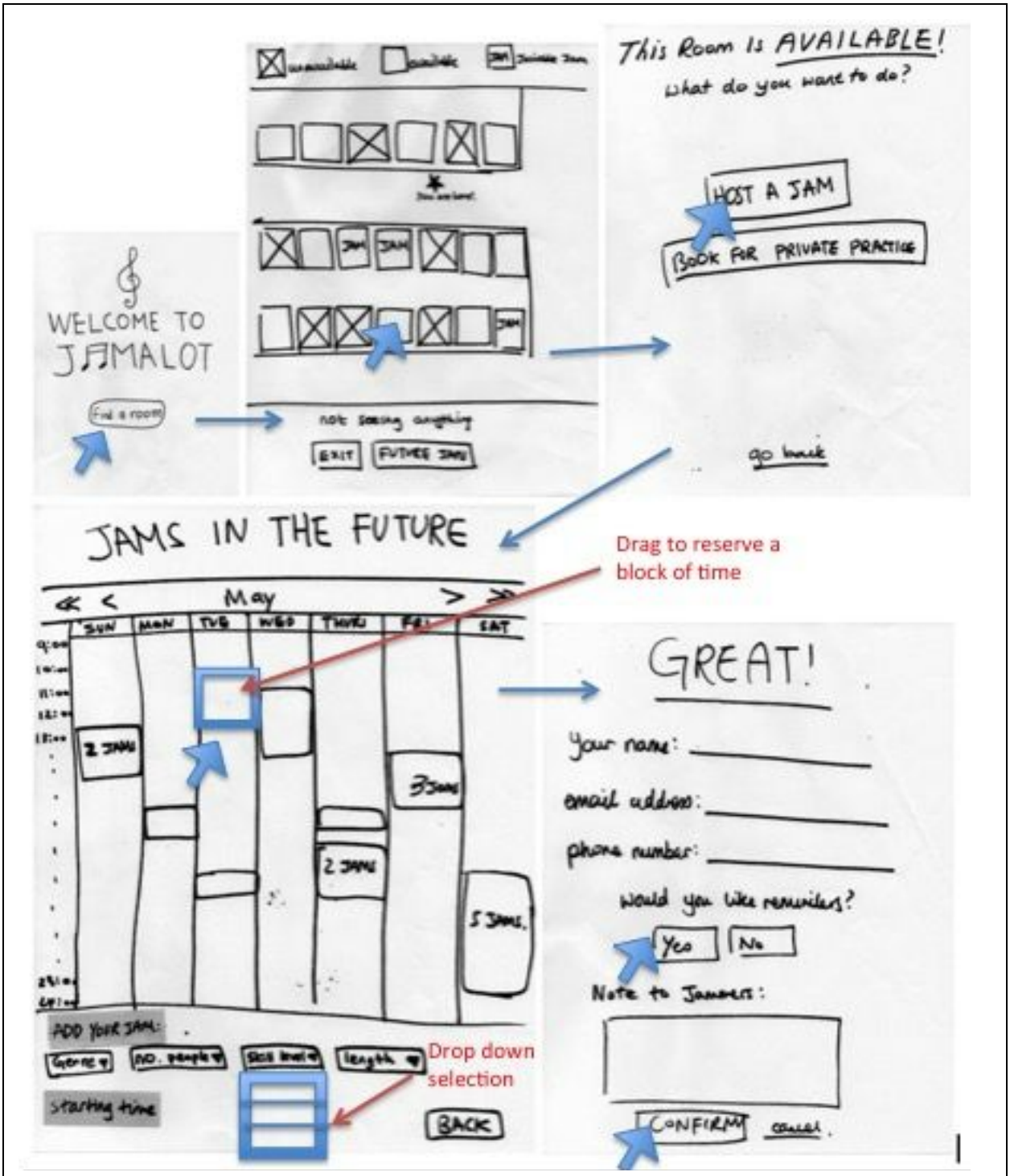


Figure 9. Host a jam
Task flow: click “find a room” button → click a free room → click “host a jam” → select a time on the calendar and specify the details of the jam by clicking the drop down menu → type in your contact information, sign up for reminders, leave a note for jammers → click “confirm” to confirm

2. reasoning for selection

We were enticed by the idea of physical presence and involvement that form the basis of user's experience when interacting with the kiosk. The kiosk rendered the idea of a "smart practice room", a space where people are encouraged and even expected to join jams with strangers. We wanted to experiment with the idea of creating an immersive space with real musical interactions not virtual interactions built upon social networks.

Functionalities of jamalot:

- Book a room for private practice
- Book a room for private practice for the future
- Join a jam happening right now
- Browse jams happening in the future
- Join a jam in the future and sign up to be notified
- Host a jam right now
- Host a jam in the future

Prototype description

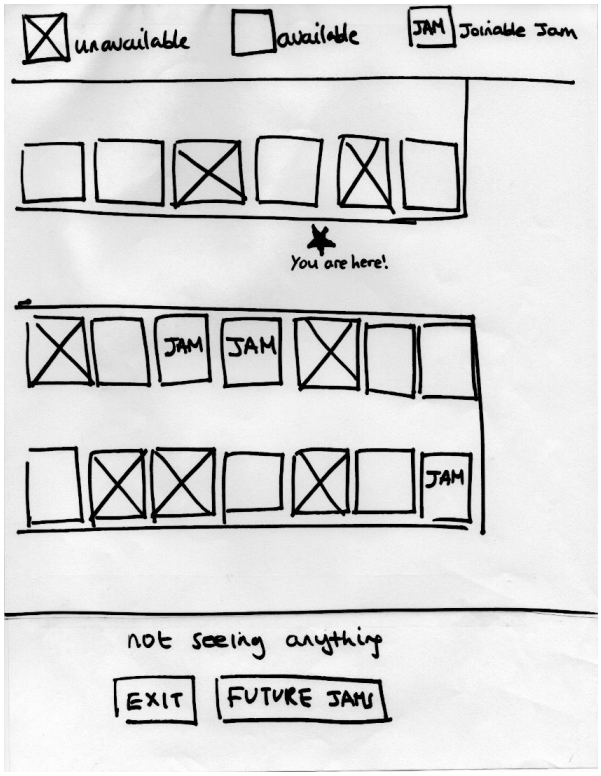


Figure 10

Key functionality: Pick a room (to join a jam, to host a jam, or to practice alone)
How to operate: Touching on the boxes (representing rooms) selects the box and moves to the next screen depending on which box the user has selected.
Additional functionality: if the user does not find anything interesting, he/she can choose to browse future jams.

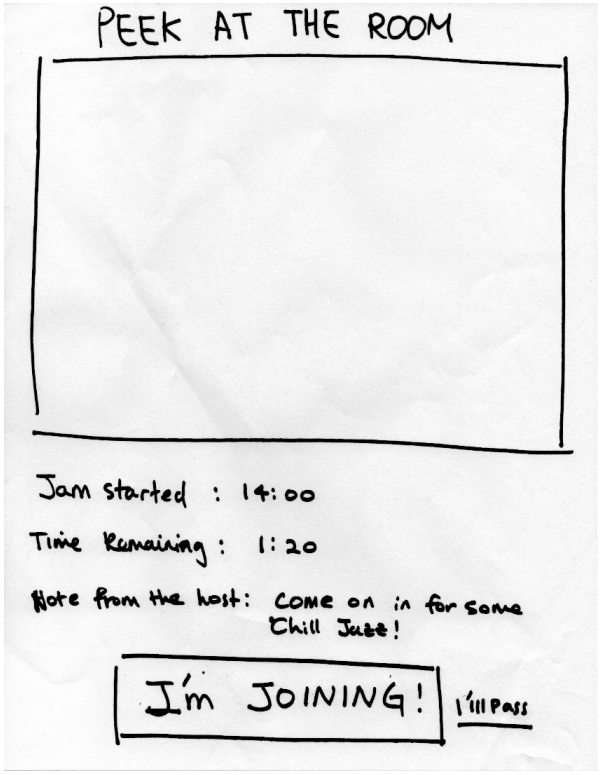


Figure 11

Key functionality: Find out about the jam
How to operate: See and hear what is going on in the room. The live feed feature enables the user to immediately gauge the size, engagement, skill-level and genre of the jam. The user can also see how long it has been since the jam started and how much time is remaining to judge if it is worth joining. Clicking “I’m joining” button takes the reader to the confirmation page.

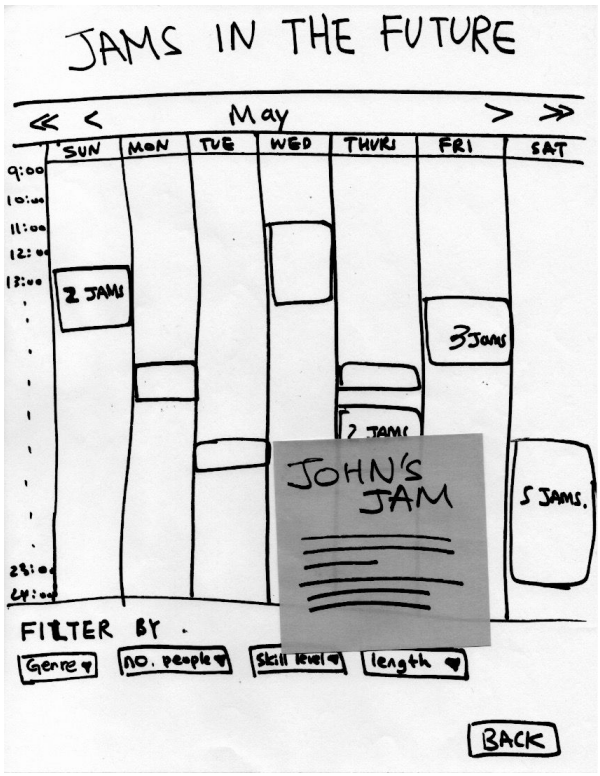


Figure 12.

Key functionality: Browse future jams
How to operate: tapping on blocks of jams on calendar will create a pop up screen (prototyped using the post-it) containing a summary of information on the jam.
Additional functionality: filtering by genre, no.people, skill level and length of jam using drop down menus.

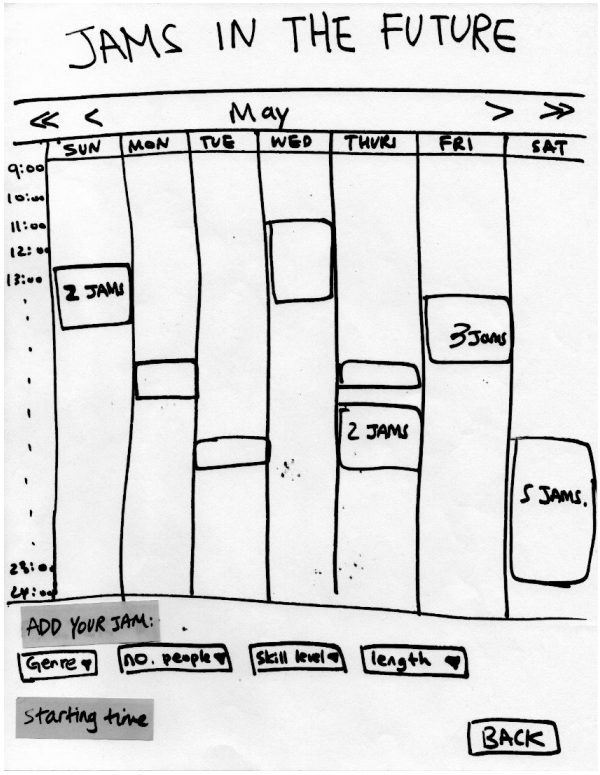


Figure 13.

Key functionality: Host future jams
How to operate: Select the time slot and drag to block out the intended length of time.
Additional functionality: Specify the genre, number of people, skill level and length of the jam by selecting an option using the drop down menu.

Figure 14. Overview of the prototype

Methods

Participants

In finding participants for the pilot usability testing, we thought of three different types of users whose needs best aligned with the service Jamalot provided. The first type of user was a musician who used practice rooms to rehearse and who mainly rehearsed in private. The second was a user who did not use practice rooms, but actively sought out jam sessions. The third type of user was one who did not use practice rooms and who passively sought out jam sessions. We thought this combination would lead to a good mix of positive and critical feedback in regards to our tasks. In the end, we were able to recruit 3 people to test Jamalot. The first tester was named Jonathan. He was recruited as a passerby in Braun Music Hall (the location of the tests), and he fit the description of our first type of user. The second tester was Frederick. We reached out to Frederick to be a tester of Jamalot, and he agreed. He fit our description of our third type of user. Our final tester was Matt. He was recruited based on an open invitation we sent out to our friend groups, and he fit the description of our second type of user. All of our testers agreed to participate without compensation.

		
Figure 15. Jonathan (Tester 1)	**Figure 16.** Frederick (Tester 2)	**Figure 17.** Matt (Tester 3)

Environment

With it's kiosk-based concept realization, Jamalot is a service that is highly location dependent. There would be a Jamalot kiosk placed near practice rooms, and users would interact with our interface at these kiosks, assumably right before or after they use a practice room. Therefore, the tests were held at Braun Music Hall on campus. The prototype, which was made out of paper and had sketches of the interface in sharpie, was placed on top of a sign which stood roughly 5 feet off the group, which we felt would be a good approximation for the actual kiosk we envision would house an iPad running the Jamalot application.

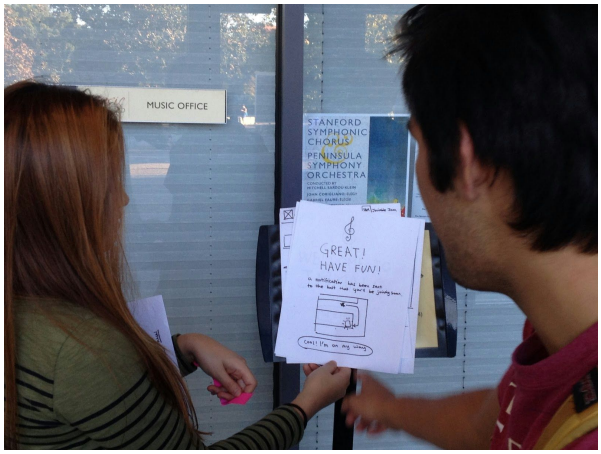


Figure 18. Jamalot Kiosk analog	**Figure 19.** Location of tests (Braun Music Hall hallway)

Tasks

We defined 3 different tasks that we wanted to test for our users, each relating to a different activity a musician walking into practice rooms might need to do. The first, which was our simple task, was to book a practice room for private practice.[1] To do this, the user would awaken the display and navigate to the floor plan page. From here, the user would select the available room they wanted to practice in by tapping on it. They would specify that they wanted to book this room for the purpose of private practice, they would enter the amount of time the planed to practice for, and the would confirm their booking.

The second task, which was our moderate task, was to join a jam session. If the user wanted to join a jam that was in progress, they would awaken the kiosk, navigate to the floor plan page, and click on one of the rooms labeled “JAM.” They would be presented with some details on the jam and a live video feed of what was happening in the room. They would then choose to join the jam, and be sent to a confirmation page showing them how to they would get from their current location to the selected room. If they wished to join a jam that was scheduled for the future, they would, from the floor plan page, select “future jams” which would take them to a calendar page containing all future jams, which they could filter based on genre, jam size, skill level, and other factors. They would select the jam they wanted, fill out a page requiring some basic information, and then confirm their joining of the scheduled jam.

Our final task, and our complex one, was for a user to host a jam. To host the jam starting at that moment, the user would navigate to the floor plan page, tap an available room, and specify that they’d like to use this room to host a jam in. They would inform the program that they’d like to begin the jam now, and they would fill out some details about the jam they planned on having (including size, genre, duration, etc.). They would then confirm the jam listing, and head to their reserved practice room. If they wished to book a room for a future jam, they would follow the same flow up until the point where they specified to begin the jam now. Instead of doing this, they would specify to begin the jam “later,” at which point they’d be taken to a calendar page. They would tap into the calendar when they’d like to jam, and input details about they jam they planned on having. They would then confirm this jam.

Procedure

All members of the group were present for all user tests, and played the same roles in each. Yunha played the role of the computer, Mohammed played the role of the facilitator, and Matt played the role of the notetaker. As each tester entered, they were greeted by Mohammed, who gave them a brief overview (2-3 sentences) of our idea of the service Jamalot would provide as well as a few coaching tips for how to test a prototype (ie: interacting with the paper as if it were a touchscreen, speaking their inner-thoughts out loud). They would then be given a sheet of paper which contained at script (Full copies of scripts can be found in the Appendix). The first script prompted them to do the first task. As they did this, Matt took notes, and Yunha acted as the computer, showing and exchanging the interface sketches based on the places the tester navigated to and did. Once they had finished their task, Mohammed would hand them another sheet containing the script for the next task, which they’d proceed to do. Once they had finished all three tasks, we would ask them how it felt to use the app, if there was anything they especially liked, and if there was anything they wished was different.

Test Measures

We wanted to gauge the following three measurements:

1. Number of errors - We wanted to count the number of times users went about their tasks incorrectly, or navigated to pages that didn't get them closer to completing their task. This would aid us in redesigning task flows that perhaps made sense to us as designers, but didn't translate for first-time users
2. Number of pauses - By keeping track of the number of long pauses users had when they were first introduced to a new screen, we could know at which points during the test the user felt they were not educated enough about how Jamalot worked to immediately know what to do next. With this knowledge, we could study these moments in our redesign process, review the pages that stumped people, and see if there is anything we could alter about the page or the task flow to make that step more intuitive.
3. Perceived Efficiency: For a person who is hoping to get into a practice room, we do not want Jamalot to feel like a barrier or an unnecessary step. Therefore, once they had finished with the their tasks, we asked the testers if they had felt bogged down or impeded by using the app, provided that they imagined they had been in the mindset of a musician who wants to begin practicing while they're still excited to do so.

Results

We unpacked the results of our testing task by task. The first task, booking a practice room for private rehearsal, did not pose large issues to any of our tester. When confronted with the floor plan page, Frederick and Jonathan both briefly paused to figure out what the diagram represented. Matt, however, immediately understood the floor plan screen, recognizing it as a page laying out all of the free music room, but paused briefly before recognizing that he had to input the amount of time he planned to be practicing for on the confirmation page. All of the testers were slightly confused by the map on the confirmation page that showed how the user would get from their location at the kiosk to their practice room. In the end, there were no errors made by the users, only one or two brief pauses made by each tester, and all of them felt the process was comfortable and intuitive.

The testers also found the second task, joining a jam, intuitive for the most part, but also encountered more stumbling blocks than they had in the first task. No errors were made by testers joining a jam that was currently happening. The only major pause was experienced by Matt and Jonathan, who, after being told in the script that they were looking for a blues jam, could not find any means of filtering the jams on the floor plan page. When joining a jam that was scheduled for a later time, there were also no errors, but It wasn't clear to Frederick whether the the boxes on the calendar page represented places where jams were or were not scheduled. He eventually guessed correctly, and completed the rest of the task without problems. With the exception of these moments, testers reported this task as also being easy and comfortable.

In doing the third task, hosting a jam, testers uncovered some substantial flaws in the task flow. Jonathan, our first tester, navigated through the flow without any errors or substantial pauses. However, Matt and Frederick did experience a substantial error, when, on the floor plan

page, they selected the “future jams” button instead of selecting a room. This took them to the calendar page, and they then navigated almost entirely through the flow of joining a jam in the future before asking for help from the facilitator, who led them back to the floor plan page. On top of that, Frederick was confused as to how he could add a jam and specify the details of his jam because he felt the set of buttons to do so “looks too much like a filter.” Frederick also noted that he would’ve liked more prompts from the interface, telling him which information he had to input and when. Overall, users reported this task to be the most confusing and one that required more attention than they’d probably be giving in this situation.

Discussion

Probably the most useful knowledge we gained from the prototype testing experience was knowledge of which task flows were intuitive and which ones invited errors to be made, and why. The primary major error we observed was testers navigating through the flow of hosting a jam incorrectly. We realized that the cause of this error was also a point of feedback Jonathan gave us. He said that, even on the very first “welcome” page of the app, he was looking for a button that would allow him book a future jam. This showed us that, when a user walks up to a kiosk with a specific objective in mind, the sooner they can specify what that goal, the less they’ll feel like they have to keep working to find their way through the task flow. We thought that, if a user is able to specifically hit a button that has their task on it, perhaps before they see or as they’re seeing the floor plan page, this would eliminate this issue in the hosting a jam task flow, and would allow users to book not only the rooms that are currently open for future jams, but any room that’s open that the time the user wants to jam.

There were other flaws that did not necessarily cause errors, but did cause longer pauses. For example, Matt and Jonathan paused while looking for a filter feature on the floor plan page that would allow them to only see the joinable blues jams. All testers were confused by the map on the confirmation page, which was intended to lead them from their location to their practice room. Matt and Frederick were unclear as to whether the boxes drawn into the calendar were spaces available to be booked or spaces that were already booked. Some of these pauses represent places in the app where features need to be added (users were expecting something they didn’t get) and some of them were places where our representations need to be more clear. In places where our representations need to be clearer, user would not pause on the second or third time encountering that page. To us, this means that we’ll just need to be clearer in representing some features in our higher-fidelity prototypes.

In the end, we learned that people who use practice rooms were certainly interested in a service that allowed them to interact with practice rooms more efficiently. Matt thought that the prototype was “pretty darn straight forward,” and thought it would make the process of booking practice rooms simpler. We are still curious, though, if by providing the features for people to book jams and join jams more easily, people will actually jam more. Frederick, our user who does not typically use practice rooms, expressed concern that he would have to travel all the way to the music rooms without the guarantee that he would find the sort of jam he was looking for. He did, however, express interest in a complimentary phone app that allowed him to book practice rooms for jams with his friends remotely.

Overall, we're excited to use this feedback to continue to design a service better oriented towards the needs of the user and a service that feels as easy as opening the door to a practice room.

Appendix

Task Scripts

Task 1: Booking your own practice session. You have been meaning to practice your violin for a while now, and never get the chance in your own place because of noise complaints. You know a Jamalot ~~recording~~ ~~studio~~ practice studio has opened near you so you get there and try to book your own room.

Task 2: Joining a Jam. You are tired of playing music on your own, and you notice a Jamalot ~~recording~~ ~~studio~~ practice studio has opened up near your, and you see that there is a blues jam! Blues! Your favorite! So you decide to join.

Task 3: Hosting a Jam. You play music with your friends every Thursday, but your friends suck. So this coming Thursday, you're going to host an open jam at Jamalot. But first you have to book a room (it is currently Tuesday).

Footnotes

1. After deciding on the kiosk-based realization of our concept, we went back to our needfinding data, and realized that what we ultimately wanted to drive for in our product was a service that removed the barriers to practicing. We realized that, if our system was integrated into publicly available music practice rooms as we envision it to be, than we would be putting barriers in the way of musicians looking to practice if we did not provide the functionality of booking private practice rooms, which is why we chose this task to be our first.