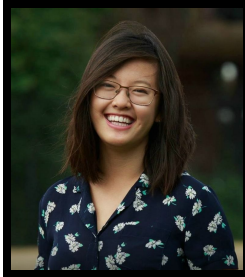




Team



Abanezer S.



Arkira C.



Armando B.



McDavis A.

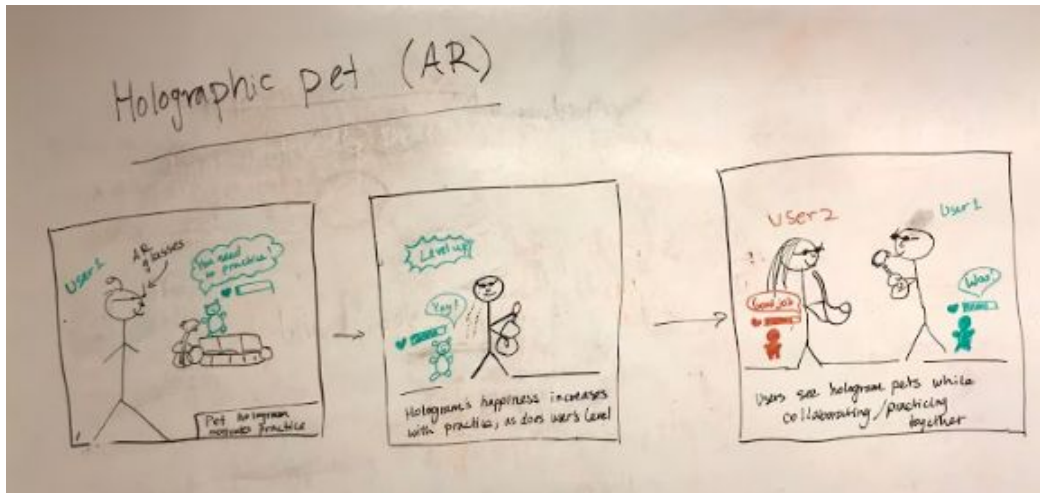
Introduction

Mission Statement: Always Have A Friend To Practice With!

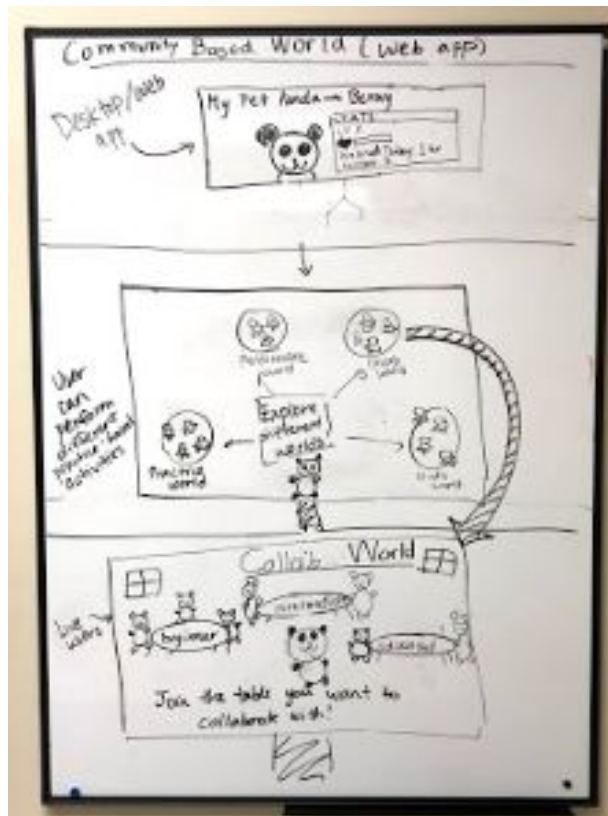
Problem and Solution Overview: From our initial needfinding, we found that musicians feel like they have nothing to practice for and no one to practice with, which leads to a lack of motivation to practice. To combat this, we decided to create a mobile app in which musicians are motivated by a digital pet whose happiness depends on practice, a reward system incentivizes increased practice, and collaboration is facilitated through other pets.

Sketches

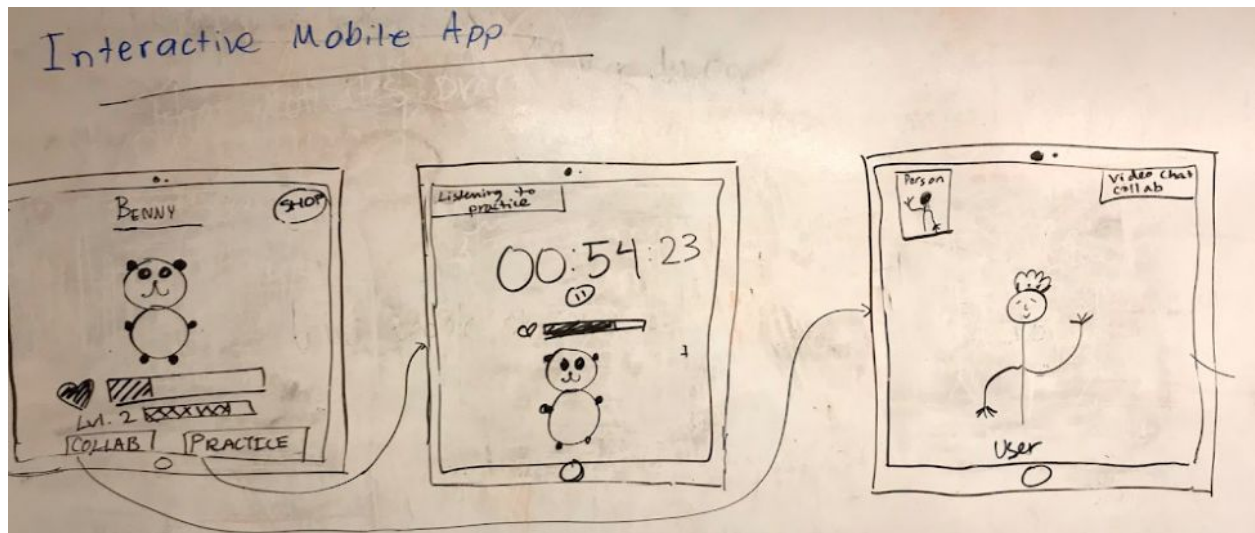
Overview Images:



Holographic pet that can practice with you live and can be seen by other users



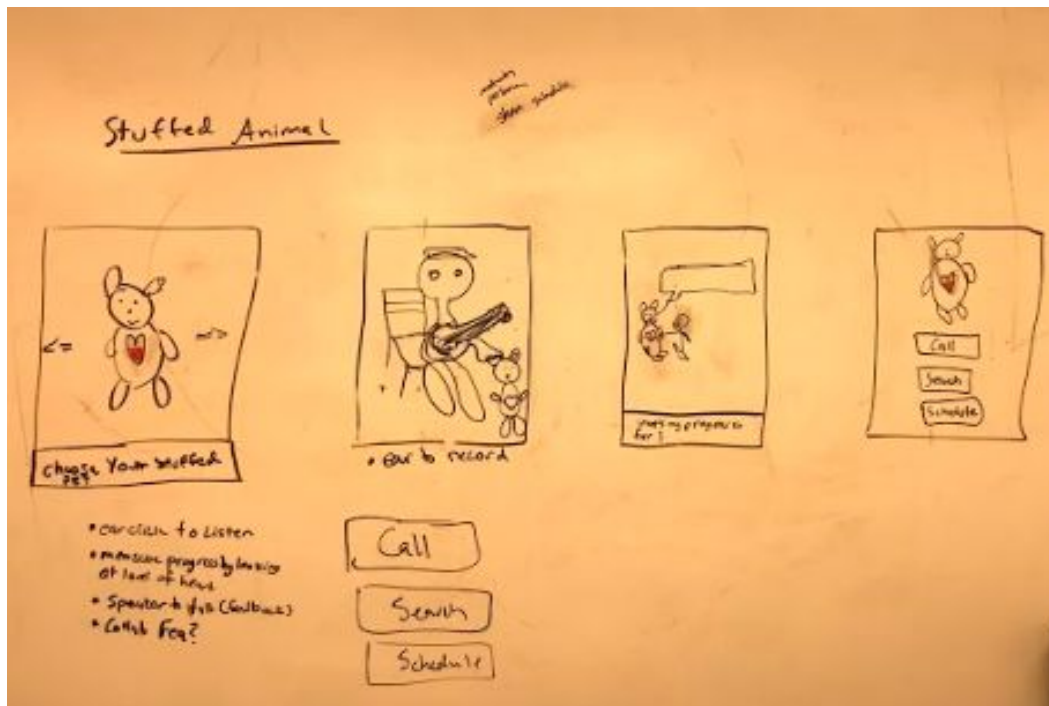
Community-based digital worlds user can explore (Club Penguin-style web app)



Interactive mobile app with digital pet displayed on the main screen

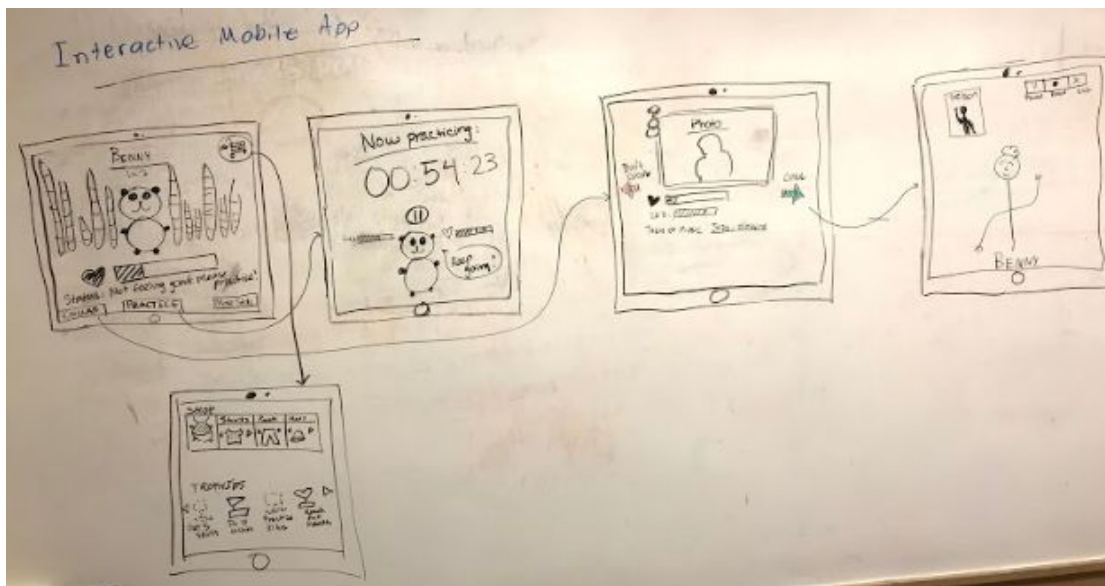


Tamagotchi-style product that stay with you and physically connect with others

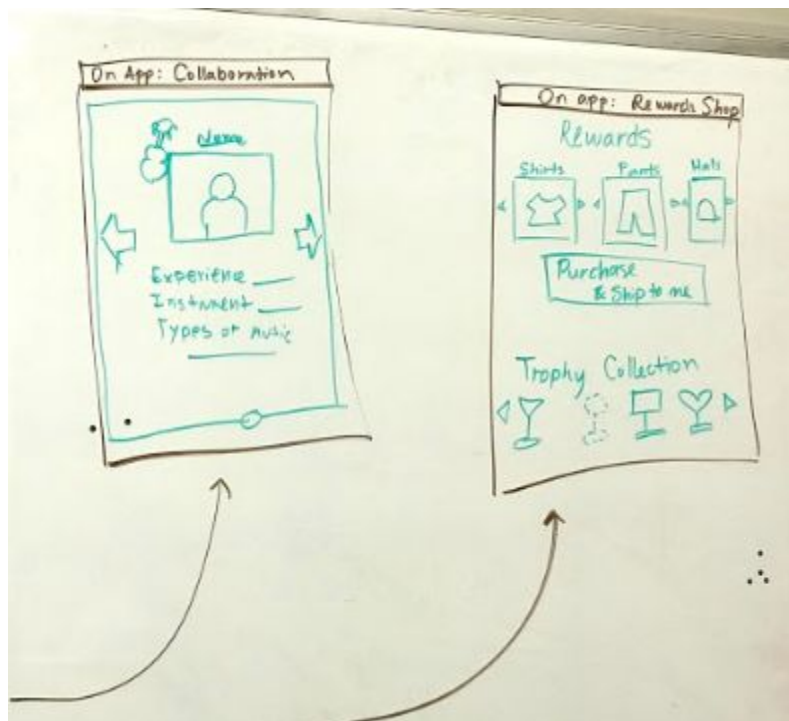
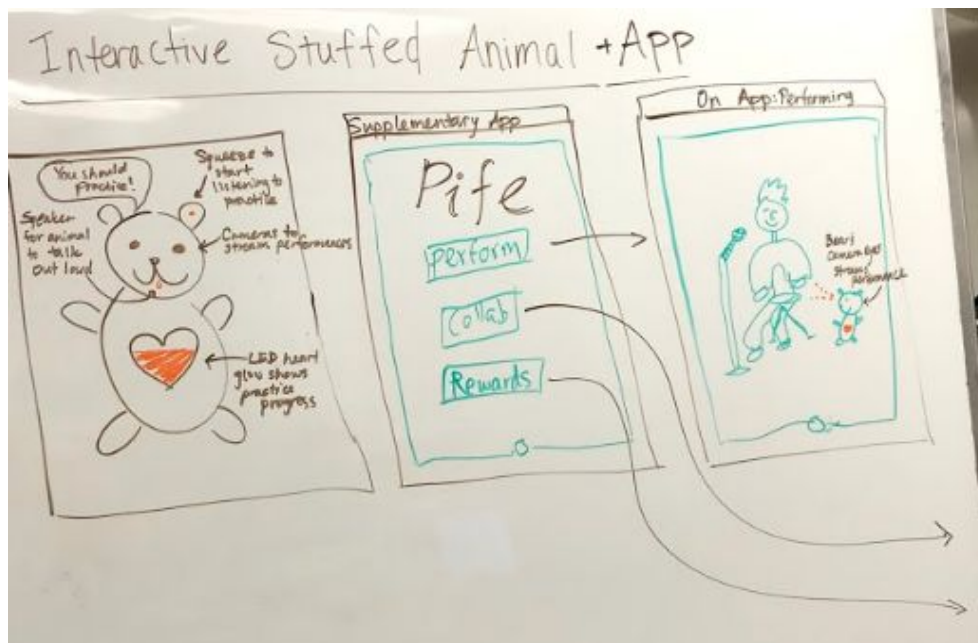


Stuffed animal with glowing heart that indicates happiness according to practice; also has a speech component for encouragement

Top 2 Designs:



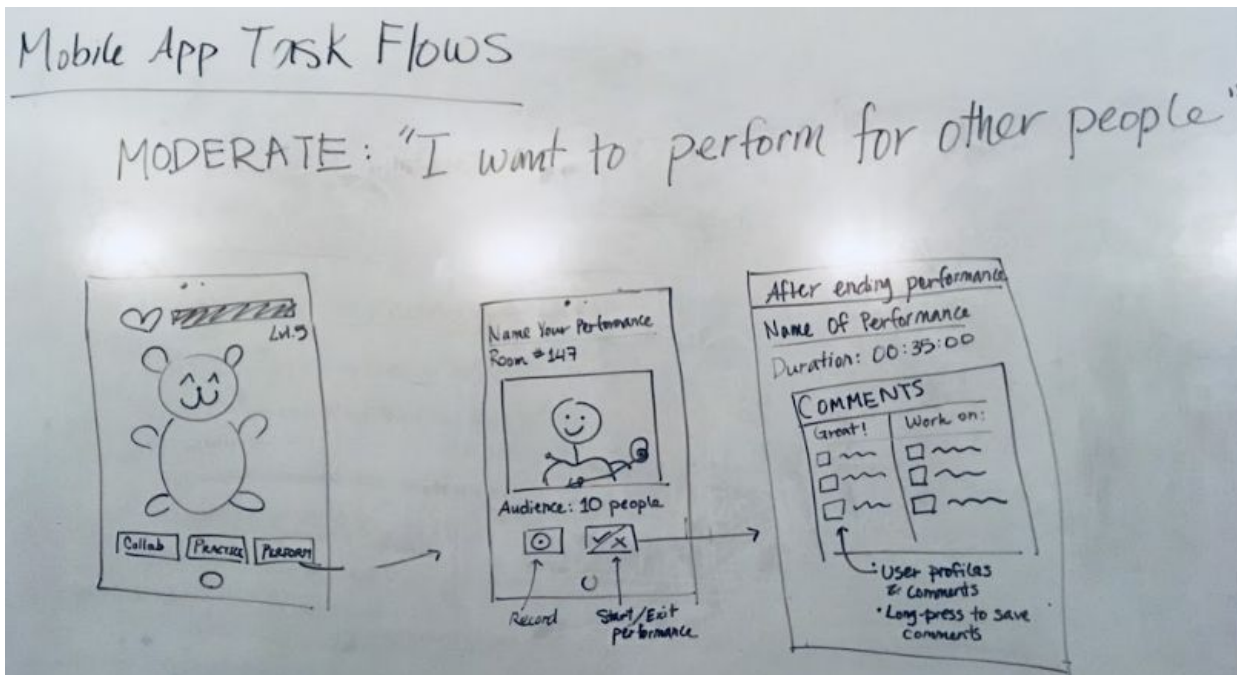
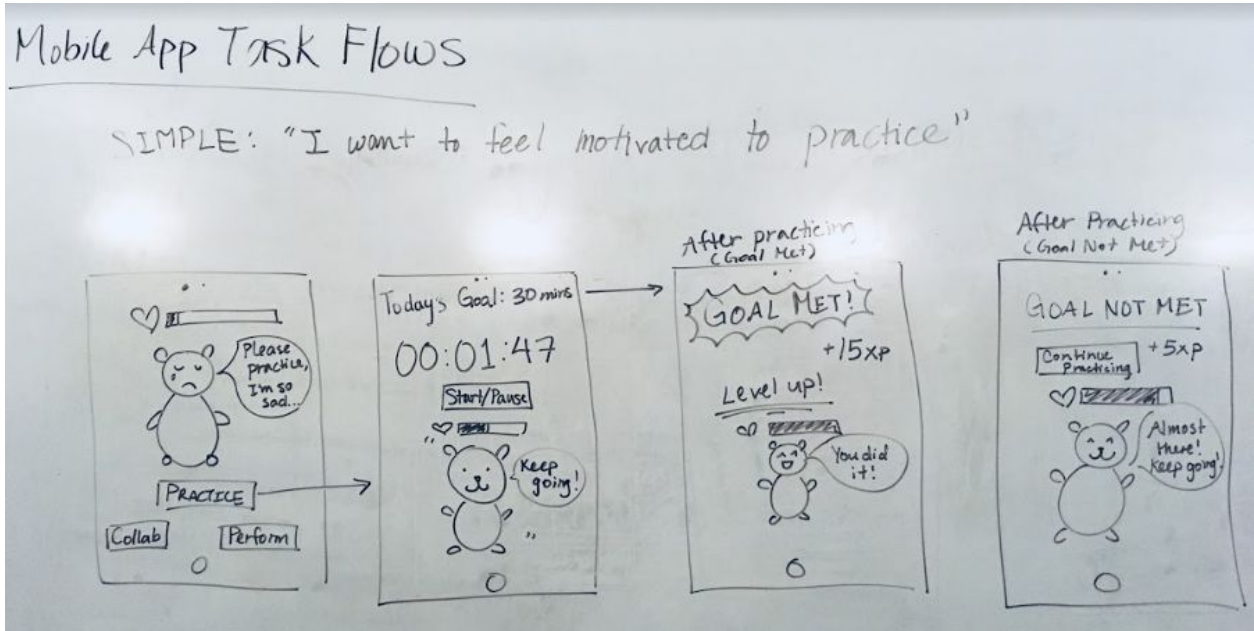
Interactive mobile app with added details in practice, collaboration, and rewards screens

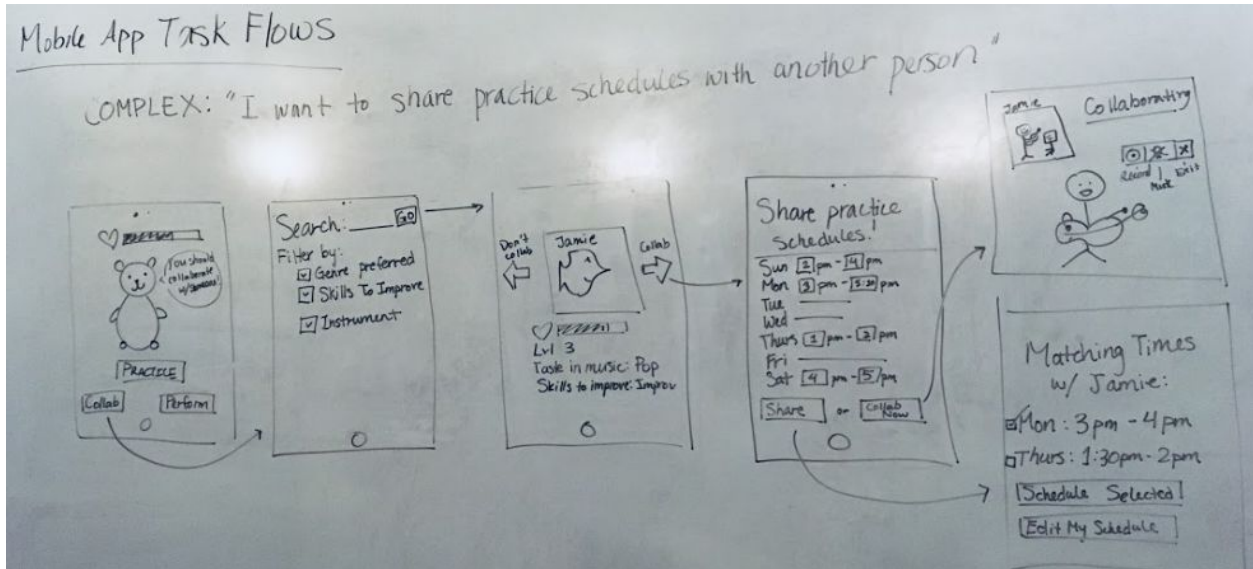


Stuffed animal and mobile app component with more details - animal has camera and microphone for recording performances/listening for practice

Selected Interface Design

Selected Interface Design - Interactive Mobile App w/Pet Homescreen





Reasoning for Selection:






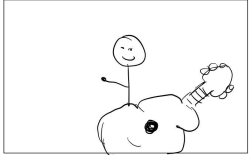
Mobile App Digital Pet Homescreen PROS	Mobile App Digital Pet Homescreen CONS	Stuffed Animal + Supplementary Mobile App PROS	Stuffed Animal + Supplementary Mobile App CONS
Portable	Can turn it off	Tangible	Needs batteries
1 consolidated product	Possibly harder to record/stream yourself	Easy to form personal connection with	2 separate products
Hard to lose	Not physically attractive	Easy to record yourself	Manufacturing + shipping component
Appeals to a broader audience		Physical reminder to practice	May not appeal to some musicians
No hardware manufacturing component			Won't take everywhere with you
No Additional Buy-in			

Low-Fi Prototype

Prototype Functionality: Our prototype mimics a mobile based interaction. An audio sensor will detect when a user practices. A video sensor will detect when the user collaborates or performs. We incorporated reward systems to incentivize continuous practice and collaborations. To see our low-fi POP Marvel implementation [click here](#).

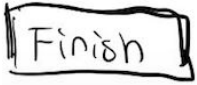




Figure A: Prototype Dashboard

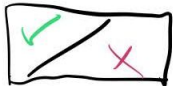
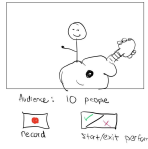

Button on Dashboard	Description of Function	Screen for that Function	Screen Transition when Button Selected
Dashboard			
<p>PRACTICE</p>	<p>Enter Practice Mode, where you can set goals for how many minutes you want to play for that and if you accomplish your goals, you get rewarded.</p>		<p>Today's Goal: 30 mins 00:01:47</p> 
<p>collab</p>	<p>Enter Collaboration Mode, where you can search who you want to collab with based on musical taste/experience/instruments and send/share your schedule.</p>		<p>Search: _____ [GO]</p> <p>Filter by:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Genre Preferred <input checked="" type="checkbox"/> Skills to Improve <input checked="" type="checkbox"/> Instrument 
<p>perform</p>	<p>Enter Performance Mode, where you can create a virtual room to perform and receive feedback from viewers.</p>		<p>Name your Performance Room # 147</p>  <p>Audience: 10 people</p> <p><input type="checkbox"/> Record <input checked="" type="checkbox"/> Start/exit performance</p>

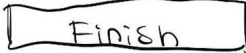


Practice Mode (Task #1)

<p>Start/ pause</p>	<p>Start/pause your practice session; immediately see a timer appear over your avatar. If you then decide to pause the practice session, you will see the page on the far right of this row.</p>		
<p>Continue practicing</p>	<p>If you pause, you have the option to continue practicing once you are ready.</p>		
<p>Completed</p>	<p>Ideally, <u>this button will not exist</u>. But for the purposes of constructing a flow on POP, we decided to incorporate this button. Once you have met your daily practice goal, you will reach another page where you will be rewarded for meeting your goal with experience to level up your avatar.</p>		



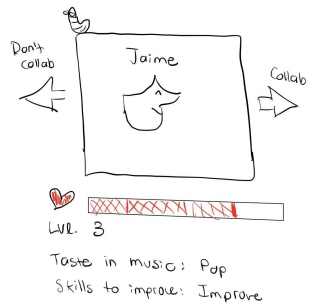
	<p>Once you have met your goal for the day, you can exit back to the dashboard.</p>		
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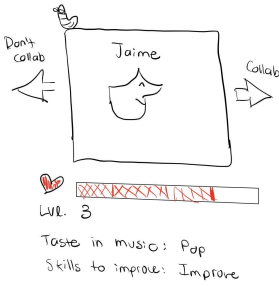

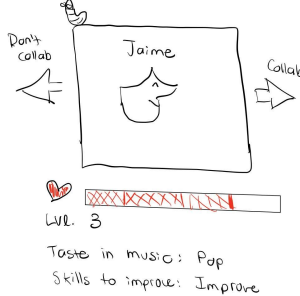


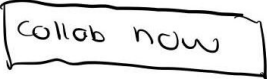
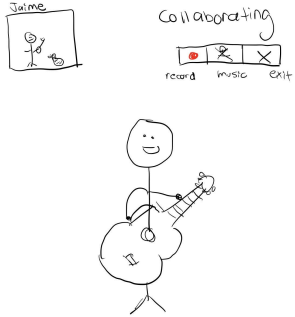
Performance Mode (Task #2)



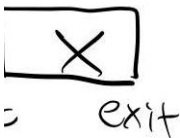
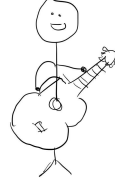

	<p>Will start and stop your performance. For our low-fi prototype, we are assuming the person starts the session.</p>	<p>Name your Performance Room # 147</p> 	<p>Name of Performance Duration: 00:35:00</p> 
---	---	---	---

	<p>Post-performance receive feedback from users then clicking "Finish" returns you to the dashboard.</p>	<p>Name of Performance Duration: 00:35:00</p> 	
--	--	---	--

Collaboration Mode (Task #3)

	<p>Once in collaboration mode, you can filter who you want to practice with. By pressing "GO" you will only see filtered user profiles.</p>	<p>Search: _____</p> <p>Filter by:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Genre Preferred <input checked="" type="checkbox"/> Skills to Improve <input checked="" type="checkbox"/> Instrument 	<p>Don't collab ←</p>  <p>→ Collab</p>
---	---	---	---

	<p>You can swipe right to see if you would like to collaborate with the displayed user. If this user also decides to collab with you, you will move onto a page to share your schedule with said user.</p>	 <p>Don't collab ← Jaime → Collab</p> <p>Lvl. 3 Taste in music: Pop Skills to improve: Improve</p>	<p>Share Practice Schedules</p> <p>Sun <input type="checkbox"/> 2pm - <input type="checkbox"/> 4pm Mon <input type="checkbox"/> 3pm - <input type="checkbox"/> 5:30pm Tue _____ wed _____ Thurs <input type="checkbox"/> 1pm - <input type="checkbox"/> 2pm Fri _____ Sat <input type="checkbox"/> 4pm - <input type="checkbox"/> 5pm</p> <p><input type="button" value="share"/> or <input type="button" value="collab now"/></p>
	<p>You can swipe left to decide not to collab. Pife will display another user profile. However, the low-fi prototype it prompts you back to the dashboard.</p>	 <p>Don't collab ← Jaime → Collab</p> <p>Lvl. 3 Taste in music: Pop Skills to improve: Improve</p>	 <p>Lvl. 3</p> <p>phone practice, I'm so sad</p> <p><input type="button" value="collab"/> <input type="button" value="Dashboard"/></p>
	<p>You can share your schedule with the person you want to collaborate with. A schedule matcher is then used to find places in both of your schedules to have a jam session.</p>	<p>Share Practice Schedules</p> <p>Sun <input type="checkbox"/> 2pm - <input type="checkbox"/> 4pm Mon <input type="checkbox"/> 3pm - <input type="checkbox"/> 5:30pm Tue _____ wed _____ Thurs <input type="checkbox"/> 1pm - <input type="checkbox"/> 2pm Fri _____ Sat <input type="checkbox"/> 4pm - <input type="checkbox"/> 5pm</p> <p><input type="button" value="share"/> or <input type="button" value="collab now"/></p>	<p>Matching Times with Jaime</p> <p><input checked="" type="checkbox"/> Mon: 3pm - 4pm <input type="checkbox"/> Thurs: 1:30pm - 2pm</p> <p><input type="button" value="schedule selected"/> <input type="button" value="edit my schedule"/> <input type="button" value="Finish"/></p>
	<p>If the user is online, you can collab with them now, if they accept the invitation.</p>	<p>Share Practice Schedules</p> <p>Sun <input type="checkbox"/> 2pm - <input type="checkbox"/> 4pm Mon <input type="checkbox"/> 3pm - <input type="checkbox"/> 5:30pm Tue _____ wed _____ Thurs <input type="checkbox"/> 1pm - <input type="checkbox"/> 2pm Fri _____ Sat <input type="checkbox"/> 4pm - <input type="checkbox"/> 5pm</p> <p><input type="button" value="share"/> or <input type="button" value="collab now"/></p>	 <p>Jaime</p> <p>Collaborating</p> <p><input type="checkbox"/> record <input type="checkbox"/> music <input type="checkbox"/> exit</p>

<p><u>schedule Selected</u></p>	<p>Once the schedule matcher finds the best times to jam, you can choose to add it to your schedule by clicking this button.</p>	<p>Matching Times with Jaime</p> <p><input checked="" type="checkbox"/> Mon: 3pm - 4pm</p> <p><input type="checkbox"/> Thus: 1:30pm - 2pm</p> <p><u>schedule Selected</u></p> <p><u>edit my schedule</u></p> <p><u>Finish</u></p>	
<p><u>edit my schedule</u></p>	<p>If you want to change your schedule, click this.</p>	<p>Matching Times with Jaime</p> <p><input checked="" type="checkbox"/> Mon: 3pm - 4pm</p> <p><input type="checkbox"/> Thus: 1:30pm - 2pm</p> <p><u>schedule Selected</u></p> <p><u>edit my schedule</u></p> <p><u>Finish</u></p>	<p>Share Practice Schedules</p> <p>Sun <u>2</u> pm - <u>4</u> pm</p> <p>Mon <u>3</u> pm - <u>5:30</u> pm</p> <p>Tue _____</p> <p>wed _____</p> <p>Thurs <u>1</u> pm - <u>2</u> pm</p> <p>Fri _____</p> <p>Sat <u>1</u> pm - <u>5</u> pm</p> <p><u>Share</u> or <u>collab now</u></p>
<p><u>Finish</u></p>	<p>If you are done scheduling your collaboration session, this will return you to your dashboard.</p>	<p>Matching Times with Jaime</p> <p><input checked="" type="checkbox"/> Mon: 3pm - 4pm</p> <p><input type="checkbox"/> Thus: 1:30pm - 2pm</p> <p><u>schedule Selected</u></p> <p><u>edit my schedule</u></p> <p><u>Finish</u></p>	
	<p>While in your collab session, press this button to exit at any time.</p>	<p>Jaime Collaborating</p> <p>record music exit</p> 	

Together, these functions contribute to our value proposition:
 "Always Have A Friend To Practice With!"

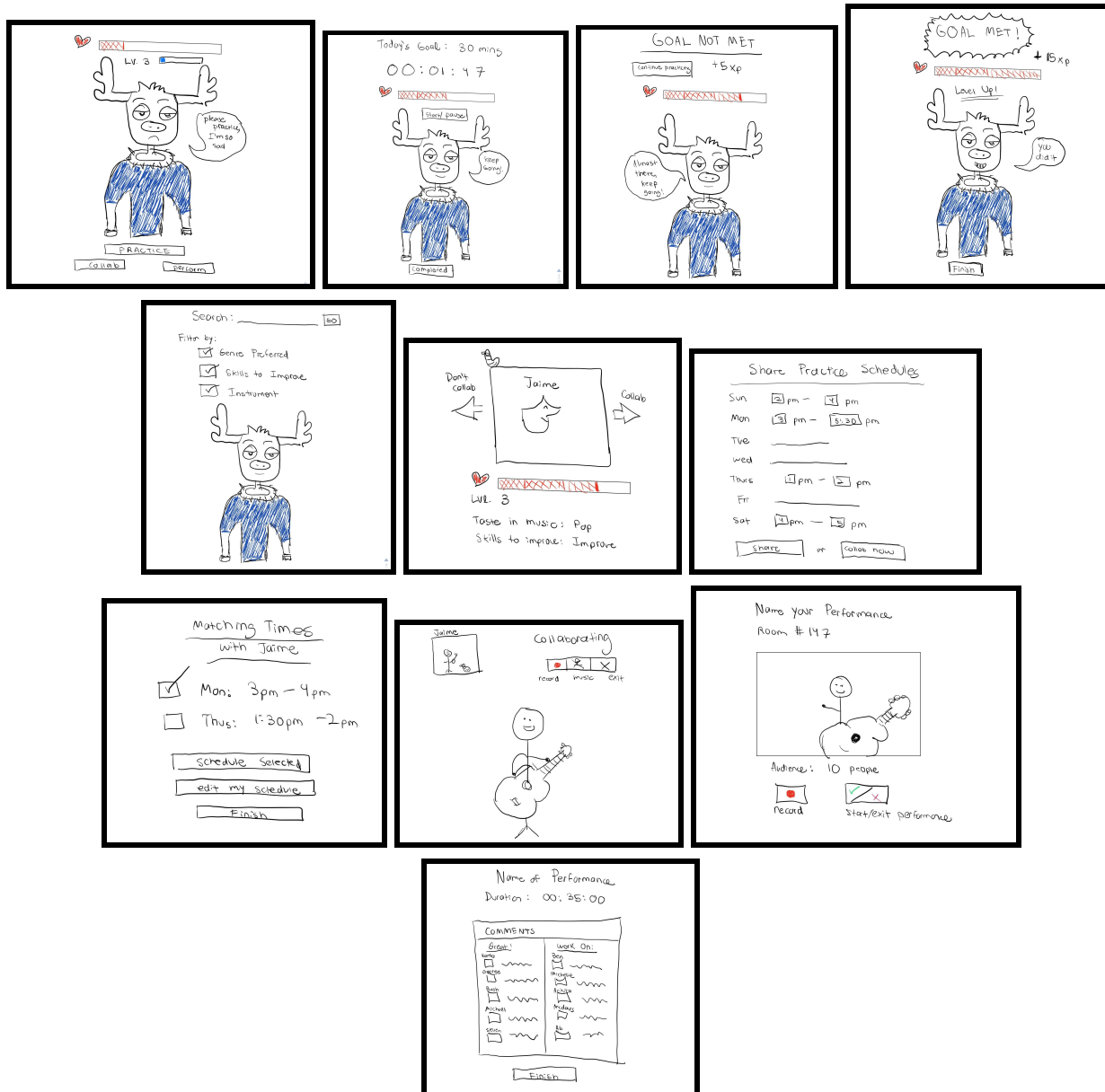


Figure B: Entire System

Testing Methodology

Participants:

Subject 1: Freshmen at Stanford, plays trombone; recruited at Braun Music Center.

Subject 2: Lawyer, plays piano; recruited at the Oval.

Subject 3: Guitar player in band from San Francisco State University, recruited at Guitar Center.

Environment:

Subject 1: Braun Auditorium

Subject 2: Oval

Subject 3: Guitar Store

Tasks:

1. User wants to be motivated to practice
2. User wants to perform in front of others
3. User wants to share practice schedules with another user

Procedure:

First, we had to determine roles for each prototype testing. The facilitator role involved introducing and demo-ing the product. The observer/notetaker would take notes on the subject's interaction with Pife. During the actually prototyping, the facilitator demo-ed the product for our subject by showing them the different parts of Pife, while never explicitly mentioning the different task flows. The facilitator also gave our subject instructions on how to complete the various tasks. During this, the notetaker put down information on how the testing was going and on observed behavior.

Test Measures:

General Opinions:

What did the user think about the usability of the app?

Could they explain what the different task flows are after using the app?

Were users able to find what they needed on each screen?

How well did users think we designed the app?

Critical Incidents:

Moments of confusion using the app

Reaction to aesthetics of individual screens

Delight with the tools in the app

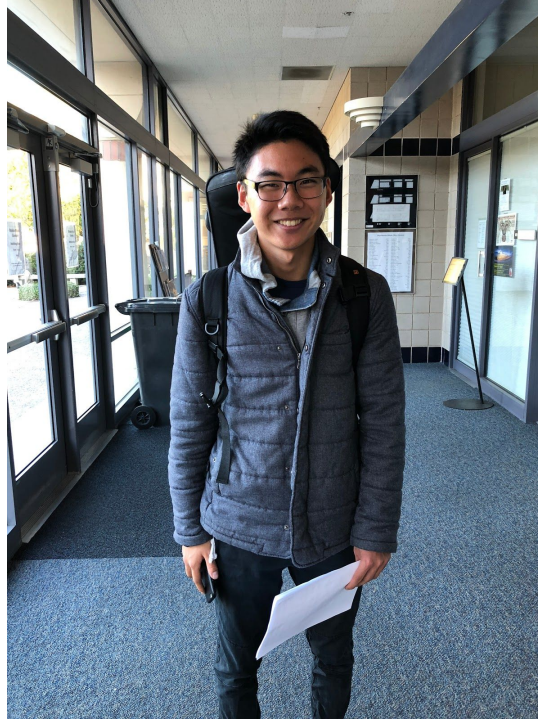
Team Member Roles:

Subject 1: Facilitator = Abanezer; Notetaker = McDavis

Subject 2: Facilitator = Arkira; Notetaker = Armando

Subject 3: Facilitator = McDavis; Notetaker = Abanezer

Results



Subject 1:

Subject 1 thought that the gamification of practice was great. But on the practice screen, Subject 1 had trouble seeing where we placed buttons. On the collaboration screen, Subject 1 was confused with the timing of sharing schedules and instant collaboration. After the performance screen, Subject 1 was unsure of the comments section. Despite his confusion, Subject 1 repeatedly said “dope” in response to the concept of Pife’s tools.



Subject 2:

Subject 2 enjoyed the idea of the app - especially the collaboration component. For the most part, Subject 2 didn’t have a problem following our task flow on his own, but he wanted more clarity on some of the screens. Subject 2 suggested using prompts and text

with explanations of each screen to help the user understand Pife's features. Subject 2 also suggested adding to community interaction, such as displaying audience members' profile pictures as you performed, allowing users to reply to performance feedback and allowing collaborate with more than one person.



Subject 3:

Subject 3 loved the application at first sight. He liked the initial home screen with the animal character as it made the app more approachable. They also having an accountability mechanism through our character. However, he found it difficult to understand the collaboration aspect through video and wanted a way to collaborate in person. Subject 3 was also critical about the hardware capabilities of the app as the hardware capabilities of a phone aren't really meant for creating music.

Discussion

From the feedback received, we learned that the idea was great but the UI and UX sometimes needed more explanation; sometimes the buttons and the pictures weren't clear enough for the user to expect the next screen. As a result, some of our users were stuck in loops if they were quickly going through the application. Text explaining what each tool was meant to do and how to use it would help users navigate the app, as well as remove some of the ambiguity in screens. In terms of interactivity, users liked the idea of the digital pet and community, but wanted even more interactivity with them. Some suggestions that came up were giving users the option to fully customize their pet and to communicate with audience members through performance feedback.

We also learned that there needs to be some change to the way we designed the collaboration screens. While everyone loved this tool, the User Experience was not optimal in any of our subjects' opinions. Specifically, there is not much explanation of what the "sharing practice schedules" tool was, so confusion arose after a user chose to collaborate with someone then unexpectedly ran into schedule sharing. In the future, we will work to solve the problem of alerting users that they are now sharing calendars with their chosen collaborator in order to find overlapping schedule times.

What the experiment did not reveal was any attachment to the avatar. This might be because we didn't allow users to fully customize their avatar or because users were focused on evaluating the flow of the application.

Appendix

Subject 2 - plays Piano - here for reunion
 - 4 years as a kid, played on and off
 - played again when he had kids

• Moose
 • Understands the bars - positive
 - pretty good w/ practice page
 - wants a pause + understands how practice screen works

Ambiguous
 we or the other person?
 - Assumed correctly on collab works
 - didn't understand Skills to Improve

- Options for multiple people (quartets)
 - suggested key preferences

Jamie's profile: - add bio - location
 - no necessarily music/hobbies

Practice Schedule page - hesitates due to ambiguity
 (his schedule? my schedule? shared schedule?)
 "share schedule" instead of "share"

[Prompts] for schedule

Perform:
 for comments: knew it was feedback
 "Audience feedback"
 ↳ Reply option - more interactive w/ audience
 "would do the job" like
 ↳ show profiles of audience "feel performing"

Before
 On each page: explain what's about to happen
 - narrative

Will Email Subject 2 final site

• Great for collaboration - bring comfort away from zone + good for getting over shyness

Subject 2 Raw Data