

## Heuristic Evaluation of budsies

### 1. Problem/Prototype Description

We reviewed the medium-fi prototype of the Budsies (iPad Mini 8.3) app on Figma which is an app that allows users to virtually meet with friends who have similar interests while staying anonymous.

### 2. Violations Found

**1. H1: Visibility of System Status, Severity: 2 , Found by: A**

Problem: The join a room sequence lacks indication of your progress. Users may be unsure of how far along they are in the process and how many more steps they need to go through until they can join.

Fix: Add a progress status bar to the flow or a menu bar like found in your create a room task.

**2. H1: Visibility of System Status, Severity: 1 , Found by: B**

Problem: The make an avatar sequence lacks indication of your progress. Users may be unsure of how far along they are in the process and how many more steps they need to go through until they can join.

Fix: Provide users with visibility via a progress bar when selecting an avatar.

**3. H2: Match between System and World, Severity: 3 , Found by: A, B, D**

Problem: On the screen where you can find, join or create a room, the words "Find Buddy, Some Buddy, and Best Buddy" do not intuitively make sense. Although Find Matches with Find, Some does not match with Join and Best does not match with Create.

Fix: Re-word the titles to match the buttons. Find Buddy, Join Buddy, Create Buddy. Also, maybe change the plural to match the name. Find Buddies, Join Buddies, Create Buddies.

**4. H2: Match between System and World, Severity: 3, Found by: A, D**

Problem: Usually, an exit or leave button is in the bottom/top right-most area of a screen. In the room, code is to the right of the exit button which can make it confusing if users are already used to that functionality. People may accidentally click exit instead of code when they are trying to get the code. Also, the exit terminology makes it seem as if you are exiting the app entirely as opposed to just leaving the room.

Fix: Move the exit button to the bottom-right corner and change 'Exit' to 'Leave'.

**5. H2: Match between System and World, Severity: 2 , Found by: A**

Problem: The word 'play' and the play logo is a tad confusing. I know you meant play as in play game and play movie, but it isn't immediately clear.

Fix: Change wording and icon to reflect something that represents both games and shows. Or split up watching movies/playing games.

**6. H2: Match between System and World, Severity: 4 , Found by: A, B, C**

Problem: The words 'find room' and 'join room' are a little confusing. My expected action to find a room would be further exploration (ie choosing interests) and then join a room would be to add in an already known code. For example in Zoom, the wording to go into a room is Join.

Fix: Consider switching Find Room and Join Room wording.



Join

**7. H2. Match between System & World, Severity: 1, Found by: A, B**

Problem: The word 'code' language is a bit unclear. Is that the room code? Is it a place where you can code a game? Once I clicked on it for the first time, I understood it but it wasn't immediately clear.

Fix: Write Room Code or Room # or Room ID instead of just code.

**8. H2. Match between System & World, Severity: 1, Found by: B**

Problem: Expectation that clicking the code button will automatically copy into my dashboard without creating an additional popup, and actual copy icons don't work.

Fix: Make copy icons work and copy immediately to the dashboard even if the pop up window follows.

**9. H2. Match between System & World, Severity: 3, Found by: B**

Problem: When joining a room, the user's microphone is automatically set to unmute. This may be a concern for users who did not want to talk and are not aware their mic is on. Additionally with services like Zoom or PlayStation the mic is always automatically set off, which creates this expectation that a service will not automatically turn my microphone on.

Fix: Have microphones automatically set to mute when a user joins a room.

**10. H2. Match between System & World, Severity: 2, Found by: B**

**Problem:** On each profile of the individuals within a room there are three white circles in the top left corner. It is unclear if these provide any function or are simply for design and users may try clicking them to discover functionality and may actually accidentally do something unintended. this expectation that a service will not automatically turn my microphone on.

**Fix:** Get rid of the three white dots if they do not provide functionality (what I assumed), else make their function clear.

**11. H3. User Control and Freedom Problem:, Severity: 3, Found by: B, C**

**Problem:** Not able to pick an avatar before choosing/joining a group meaning a user may not actually pick an avatar that represents them or may feel misrepresented for a period of time.

**Fix:** Allow avatar selection immediately following opening the app before picking a room.

**12. H3: User Control & Freedom, Severity 3, Found by: D**

**Problem:**When creating your own room, the min number of Buds one can have is 4. In order to allow more user freedom, it makes sense to have the max number of buds be 2 or even 1. If two friends want to hang out in the same room together, I think that should be allowed.

**Fix:** Lower min number of buds to 1 or 2

**13. H3. User control and freedom, Severity: 2, Found by: C**

**Problem:** On the Budsies home page, there is currently a “back” button in the top right corner that brings the user back to the “Meet Your Buddies” page, which then simply brings the user back to the Budsies home page. This puts the user in an unnecessary loop because the only action on the previous page simply just brings the user back to the page where they initially clicked the “back” button. This may create confusion for the user.

**Fix:** Remove the “back” button icon from the Budsies Home Page

**14. H3. User control and freedom: Severity: 2, Found by: C**

**Problem:** If the user is watching a show in a virtual room, exiting out of the virtual room leads back to the budsies home screen. However, it would be more intuitive for users to be brought back to the list of virtual rooms they could join. What if a user simply wants to switch rooms?

**Fix:** Alter the flow so that exiting out of a viewing virtual room leads back to the list of possible rooms to join. Users can then click the back button if they want to go back to the Budsies home screen, but they shouldn’t be taken directly there from exiting the viewing room.

**15. H3: User Control and Freedom, Severity: 1, Found by: A**

**Problem:** User cannot add in or enter code after pressing Find Room button. There is no pre-filled number, so it doesn’t make intuitive sense which room you are entering.

Fix: Add in ability to type numbers for Room # or a mock up screen which shows the user the number they are entering.

**16. H3: User Control & Freedom, Severity: 1, Found by: D**

The set of interests that one can choose for their room are limited (only 8 choices) and generally vague (life interest?). There should be much more interest for rooms, and an ability to scroll/search through them. Along with this, it would be super cool if users could create their own interest categories to post. For example, if someone loves Marvel movies, they could add Marvel as an interest.

Fix: Add many more interests, add an ability for users to add interests, and add a search bar

**17. H3: User Control and Freedom, Severity: 1, Found by: A, B, D**

Problem: There is no x button after clicking the Find Room button. If you click around the screen, it exits but it still wasn't clear at first.

Fix: Add in 'x' or '←' arrow on popup.

**18. H3: User Control and Freedom, Severity: 3, Found by: A**

Problem: There is no send button in the chat so it's not clear how you can send a message. It's also industry standard to have a send button that way you don't accidentally send a message you don't want to send.

Fix: Add send button to chat.

**19. H3: User Control and Freedom, Severity: 3, Found by: A, B, D**

Problem: User can't get back to the room after pressing the play button in any room. The user is stuck and the only way to get back is to choose a movie/game and then press back.

Fix: Add Back button.

**20. H4: Consistency and Standards, Severity: 1, Found by: A, B, D**

Problem: Buttons are not the same style throughout the app. Some are more circular than others, some turn purple when highlighted and some have different fonts. It is very confusing to the user.

Fix: Ensure that all buttons or CTAs are the same style.

**21. H4: Consistency and Standards, Severity: 1, Found by: B**

Problem: The styling of the list of Stranger Things Episodes seems random and doesn't match the consistency and standards throughout the app, furthermore within the list it is unclear that the "Join" buttons with the list are actual buttons like other buttons throughout the app.

Fix: Re-style the list of Stranger Things Episodes to be in line with the colors, and style choices of the app.

**22. H4: Consistency and Standards, Severity: 4, Found by: A, B**

Problem: The square icon ([ ]) does not make sense when expanding or collapsing screen as that is not intuitive or industry standard. The standard is to use arrows or something clearer to show popping up the chat or not.

Fix: You could consider a pop-up chat or change the icons to be more familiar to the user.



**23. H4. Consistency and standards, Severity: 1 , Found by: A, B**

Problem: There is a lack of consistency between 'x' icons that go back to the previous screen and '←' icons that go back. It needs to be uniform so that the user does not get confused with functionality.

Fix: Ensure that all back buttons look the same (ie choose 'x' or '←').

**24. H4. Consistency and standards, Severity: 2, Found by: A, B, D**

Problem: In one chat, there is a microphone to speak in another there isn't. It also isn't clear if that allows voice enable chat or mutes/unmutes you.

Fix: Keep chat in videos consistent and make it more clear what the microphone means.

**25. H4. Consistency and standards, Severity: 1, Found by: A**

Problem: Budsies logo is inconsistent across multiple screens. It sometimes appears at the top of the screen and sometimes doesn't, distracting the user.

Fix: Keep logo consistent on certain screens. I would add to the top of each screen or remove it entirely.

**26. H4. Consistency and standards, Severity: 2, Found by: A**

Problem: It doesn't make sense that joining a room immediately takes you to the game screen instead of the video room screen. It just looks like a netflix show as opposed to an app where you can chat with and meet people.

Fix: Make it a split screen when you first enter to show who the people are you are with.

**27. H4. Consistency and standards, Severity: 1, Found by: B**

Problem: On the chat screen on the main page (without going into an activity) there is a white circle at the top left corner of the tap here to chat box. I suspect this is meant to have a microphone inside of it but it's current positioning is confusing.

Fix: Remove this white circle or clarify its purpose.

**28. H4. Consistency and standards, Severity: 1, Found by: C**

**Problem Description:** When joining a room, a user must enter their interests from a small drop-down menu located on the right of the screen. However, when creating a room, the user must enter their interests in a different format (by clicking on all of the different options that are available in the text boxes across the screen). The task of selecting interests is the same in both scenarios, however the manner in which the user does so is inconsistent.

Fix: Standardize the way in which a user may select their interests. I personally prefer the second option in which users can see all potential interests at once and select all of the ones that they like because it is more readable, efficient, and aesthetic.

**29. H5: Error prevention, Severity: 2, Found by: D**

Currently, rooms that are full (4/4) are still shown with a join button. In order to prevent errors here, the app could not show full rooms, or just not have a join button for full rooms.

Fix: Take out join button for full rooms

**30. H5: Error Prevention, Severity: 3, Found by: A, B**

Problem: The back button on the create avatar screen takes you back to the home page instead of the current video chat you are in. If that is correct functionality, maybe make sure that it is obvious that you are leaving a room when changing an avatar. It makes more sense to take you back to the video chat.

Fix: Have back button take you back to the video chat

**31. H5: Error Prevention, Severity: 3 , Found by: A, B**

Problem: If you press the exit button, it immediately exits. It is common to have a pop-up that says are you sure you want to leave the room (similar to Zoom). This will help prevent errors in accidentally leaving rooms.

Fix: Have a pop-up similar to the are you ready to create? Pop-up

**32. H6: Recognition and Recall, Severity: 1 , Found by: A, B**

Problem: While it may seem obvious that you are in the chat when you click it, there should be a title of chat at the top and also a list of people who are in it so you don't have to remember who you are talking to.

Fix: Add 'chat' title to chat box and have a list of people in chat

**33. H6: Recognition and Recall, Severity: 2, Found by: C**

**Problem Description:** When a user wants to join an existing virtual room, or switch among rooms, the user has no visibility into what activity or show is being played in each specific room. Rather, the user must remember that "In room three, they are watching "Stranger Things." This

puts mental load on the user to remember each room, and they may have difficulty finding the room they want to join because they must rely on recall rather than recognition.

Fix: Label each room based on the theme, show, or activity of the room, so that when a user is browsing rooms they know which one to join.

**34. H6: Recognition and Recall, Severity: 2, Found by: C**

**Problem Description:** When watching a show in the virtual viewing room, there is no icon indicating that there is a chat feature available. Instead, the user must click on the “minimize” icon in order to bring the chat up. This is not intuitive because I would expect it to simply minimize the show rather than bring up a chat. Furthermore, the user may be unaware that there is a chat feature here.

Fix: On the screen showing the show, change the icon in the bottom right corner from a minimize icon to a chat bubble icon

**35. H7: Flexibility & Efficiency of Use, Severity 2, Found by D**

**Problem:** When creating a room, one must drop a pin on their location. To make this more efficient, the app should use the phone’s GPS to sense where you are, and then let you adjust the pin if you need to. If the app will do this, it is not clear from the prototype.

Fix: Use phone’s GPS location services to sense general area for room

**36. H7: Flexibility and Efficiency of Use, Severity: 2, Found by: A, B**

**Problem:** It seems like every time you want to create a group, you have to re-choose interests, location, number of people etc. Might be helpful to save previous inputs so that you don’t have to input information repetitively.

Fix: Save rooms you have created in a list so that you can easily re-open them

**37. H7: Flexibility and Efficiency of Use, Severity: 2, Found by: C**

**Problem Description:** When a user is in a video room and then clicks “Select Avatar,” exiting out of this “Select Avatar” (i.e. clicking on the back button instead of the ‘next’ button) brings the user back to the Budsies home page rather than back to the video room. For example, if a user accidentally clicks on the “select avatar” option in the navbar and wants to go back, the flow should bring them back to the video room from which they accidentally clicked the “select avatar” icon.

Fix: Make the back arrow icon go back to the video room on this screen rather than back to the Budsies home page

**38. H8: Aesthetic & Minimalist Design, Severity: 2, Found by: A**

Problem: The screen that represents the video chat is cluttered with extra information. The 3 dots in the video are inconsistent because usually that means there is more to it and it can be clickable.

Fix: Ensure that the design on the screen only has an avatar or is just minimalistically designed.

**39. H8: Aesthetic and Minimalist Design, Severity: 1 , Found by: A**

Problem: Rectangles are not consistent on play games/movie screens and one even goes off the screen. The images are also blurry and not very representative.

Fix: Move the rectangles and resize them to be consistent throughout the screen so that the grid is visually pleasing.

**40. H8. Aesthetic and minimalist design, Severity: 4, Found by: A**

Problem: The background where the bottom is light blue and the top is dark blue cuts off the app and makes it hard to understand what is going on.

Fix: Create a more uniform background

**41. H8. Aesthetic and minimalist design, Severity: 1 , Found by: A**

Problem: Unclear why there are avatars at the bottom of the select interest screen. There is no connection between the avatars and selecting your interests, so it appears as not minimalistic.

Fix: Remove the avatars and add another graphic that is more relevant to screen or make the screen look like the Create Room Interest screen

**42. H8: Aesthetic and minimalist design, Severity: 1, Found by: B**

Problem: Create and Back buttons had different opacity when creating a room which I did not find pleasing or conventional given the page set-up.

Fix: Have both buttons match the current design of the create button.

**43. H8: Aesthetic and minimalist design, Severity: 2, Found by: B**

Problem: Alignment problems throughout the design, for example the spacing on the logos on the bottom is not centered and the shows and games icons are not aligned/the same size.

Fix: Pay special attention to alignment issues throughout implementations and correct them.

**44. H9. Help users recognize, diagnose, and recover from errors, Severity: 3 , Found by: A, B, C**

Problem: You can join a group that is full right now with the current setup/ There is no error message displaying that the group is full besides a 4/4

Fix: Add an error if you try to join a group that is full or don't have the room show up in the list of available rooms.

**45. H10. Help and Documentation, Severity: 2 , Found by: B**

Problem: While throughout the app, there were “?” icons to help the user with concerns or

explanations I thought another great place to put one would be when a user is creating a room explaining what the “Sharable Code” is and how it will allow friends to join a room. To novice users the idea of texting this code to their friend who can then enter it to join a room may be confusing.

Fix: Put a “?” icon next to “Shareable Code” explaining its use and function.

**46. H10: Help and Documentation, Severity: 2 , Found by: B**

Problem: Missing a high-level help page or FAQ page. It may be helpful to embed a page within the app where common users' concerns and questions can be answered especially regarding safety and anonymity as well as other basic functions.

Fix: Include a high-level help or FAQ page within the app.

**47. H11: Accessible, Severity: 2 , Found by: A, C**

Problem: There are no indications of accessibility throughout the app. Will you be able to add closed-captions when watching a show? Are there ways for visually impaired users to still enjoy the games and shows?

Fix: Add closed captions to both the chatrooms and play screens.

**48. H12: Fairness and Inclusivity, Severity: 4 , Found by: A, B, C, D**

Problem: All of the avatars look the same and there is no diversity. If you are trying to make the avatar look like you, it could be impossible. It's important that disabled users are able to feel represented by their characters, so having more diverse options in terms of the avatar's bodies would be great.

Fix: Add more avatar options or allow users to create their own avatar.

**49. H13: Value alignment, Severity: 3, Found by D**

This product’s values surround casual social interactions, and seem to be geared towards a younger audience. Because of this, I worry about age limitations on the avatar customizations. To promote the value of safety for minors, there should be some sort of age range allowed. Either a lower limit cap (13+ allowed) or an upper limit cap (under 30 allowed) or both. I believe some regulation should be done to promote the value of safety.

Fix: Add an age requirement to the app

**50. H13: Value alignment, Severity 3, Found by D**

Because the app is centered around buddies, it does not seem to align that there is not a screen dedicated to users or “buddies” that one has interacted with in the past. For example, there should be a way to get a room code from a buddy through the app. This would require a way to chat with buddies that you are not currently in a room with.

Fix: add a friends screen where you can chat with past buddies you have interacted with

### 51. H13: Value Alignment, Severity: 4, Found by: A, B

Problem: Have you taken into consideration misuse of anonymity especially when creating names and ages. This leaves room for online bullying especially in chats. Are there any community standards you were thinking of implementing?

Fix: Regulate rooms for bullying or add a way to report bullying/misuse. Verify identity so that it may be anonymous to others, but you still have a way to see who your users are.

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## 3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status		1	1			2
H2: Match Sys & World		2	2	3	1	8
H3: User Control		3	2	4		9
H4: Consistency & Standards		6	2		1	9
H5: Error Prevention			1	2		3
H6: Recognition not Recall		1	2			3
H7: Efficiency of Use			3			3
H8: Minimalist Design		3	2		1	6
H9: Help Users with Errors				1		1
H10: Help & Documentation			2			2
H11: Accessible			1			1
H12: Fairness & Inclusion					1	1
H13: Value Alignment				2	1	3
<b>Total Violations by Severity</b>		<b>16</b>	<b>18</b>	<b>12</b>	<b>5</b>	<b>51</b>

**Note: check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)**

## 4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
Sev. 0	0%	0%	0%	0%	
Sev. 1	56%	62%	6%	18%	
Sev. 2	38%	27%	33%	16%	
Sev. 3	41%	50%	16%	41%	
Sev. 4	100%	80%	40%	25%	
<b>Total (sevs. 3 &amp; 4)</b>	92%	76%	17%	21%	
<b>Total (all severity levels)</b>	88%	70%	21%	23%	

**\*Note that the bottom rows are *not* calculated by adding the numbers above it.**

## 5. Summary Recommendations

Overall, we really enjoyed going through your medium fidelity prototype and have appreciated watching your ideas transform throughout the quarter. The task flows are straightforward to accomplish, and we think you're in a great position for your final app. We have some high-level feedback related to certain violations and task flows. It looks like your biggest areas of improvement lie in H2: Match Sys & World, H3: User Control & Freedom, H4: Consistency & Standards and H8: Aesthetic & Minimalist Design. These issues are very important to the overall user experience. The biggest confusion to us was the choice of wording and inconsistency with navigation throughout the app. An example of a problem with wording was "find room" vs "join room" as outlined earlier. The small details in aesthetics such as inconsistent icon choices, buttons and alignments also cause small frustrations for the user. We would recommend you pay particular attention to ensuring that all text, font, and colors, and icons are the same throughout all screens.

Your 3 tasks make sense, but specifically your complex task (customize avatar) was not able to be fully completed in the app. We would suggest adding a thorough task flow of customizing skin tone, hair style/color, eyes etc (similar to apple's memoji or bitmoji walkthroughs). This will help with diversity and

inclusion. Additionally, we encourage the ability to select your avatar before joining a room that way users can accurately represent themselves immediately. If for some reason you are not able to fully implement customized avatars, we highly suggest that you make sure the default avatars provide more representative options. I also believe the most important consideration is how you make joining a room (whether creating or finding) task flow easy and straightforward. This flow will be used the most in your app, so I would spend the most time perfecting it. Another area of concern that I have for this app currently is anonymity. You might want to re-consider some of the negative effects of creating a platform that opens the door for anonymous online bullying. Some design changes for this could be keeping names but hiding video or creating anonymous animals as names instead of allowing users to input their own names. Building on this, we think it's paramount to allow users to report users who engage in bullying or toxic behavior to create a positive environment for users.

We appreciated the interactive walk through but like James says with any good design, things shouldn't have to be explained. Maybe consider connecting the walk through tutorial to the rest of the app through a help button in the top right or bottom right side of the screen as opposed to forcing every user to go through the How To Play.

Hopefully these design considerations can help with your high-fidelity design! We're excited to see how the app develops from here.

### **User D Summary Comparison:**

I was happy to see that my fellow team members and I agreed that seeing Budsies grow throughout the quarter into an impressive prototype has been exciting. I share the sentiment with my group members that the first and most important fix would be overall navigational issues. In my individual write up, I stated that "making sure navigating through the app requires little thought and comes naturally to the user is something that this prototype could improve on, and I believe would be relatively simple to fix." We also all agreed that diversity should be at the forefront of avatar design, and that default avatars to choose from should allow more users to feel included. I believe making the avatar generally more customizable only has benefits to the user, and can create a more positive environment for a young user base.

Something my team members caught that I did not see an initial problem with was the walkthrough prototype. My team members felt this should not be necessary, and be more inherent in the design, and looking forward to app development I agree with this sentiment.

Lastly, we agreed that due to the children on that app, some sort of regulations towards the platform should be done. My idea for this was age regulation whereas the partners wanted to take away some of the animinity that the platform offered.

Overall, fantastic job on Budsies! I think this is a great idea and could be a super popular application.

### ***Severity Ratings***

0 - not a usability problem

1 - cosmetic problem

2 - minor usability problem

3 - major usability problem; important to fix

4 - usability catastrophe; imperative to fix

## ***Heuristics***

### **H1: Visibility of System Status**

- Keep users informed about what is going on

### **H2: Match Between System & Real World**

- Speak the users' language
- Follow real world conventions

### **H3: User Control & Freedom**

- “Exits” for mistaken choices, undo, redo
- Don't force down fixed paths

### **H4: Consistency & Standards**

- Words, actions, and UI elements should be consistent across the entire platform
- Follow platform and industry conventions

### **H5: Error Prevention**

- Minimize error-prone conditions
- Remove memory burdens, support undoing, and warn your users when necessary

### **H6: Recognition Rather Than Recall**

- Make objects, actions, options, & directions visible or easily retrievable

### **H7: Flexibility & Efficiency of Use**

- Accelerators for experts (e.g., gestures, keyboard shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

### **H8: Aesthetic & Minimalist Design**

- No irrelevant information. Focus on the essentials.

### **H9: Help Users Recognize, Diagnose, & Recover from Errors**

- Error messages in plain language

- Precisely indicate the problem
- Constructively suggest a solution

### **H10: Help & Documentation**

- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large

### **H11: Accessible**

- Users can interact with the system using alternative input methods.
- Content is legible with distinguishable contrast and text size.
- Key information is upfront and not nested for screen readers.
- Purely visual or auditory content has text-based alternatives for users with low vision and low hearing.

### **H12: Fairness and Inclusion**

- Users shouldn't feel that the design is not made for them.
- The design should meet all users' needs equally and prevent the reproduction of pre-existing inequities.
- It should not create additional burdens for members of disadvantaged populations.

### **H13: Value Alignment**

- The design should encode values that users can understand and relate to.
- Conflicting collateral values should not emerge when the user interacts with the product.
- Encoded values should match users' values in a broad set of use-contexts.