Instructor: James Landay

# **Heuristic Evaluation of Chat Capital**

# 1. Problem/Prototype Description

We have evaluated the medium-fi prototype of the Chat Capital app, which is an application that provides a safe space for individuals to talk about personal finances and learn from each other.

## 2. Violations Found

## 1. H1 Visibility of System Status / Severity: 2 / Found by: B

- The "Meeting In Progress" frame on the home screen is unclear. The frame is missing key information - what group is hosting the meeting? How long is the meeting scheduled for? Who are the current participants?
- Fix: Add the missing information onto the frame.

## 2. H1 Visibility of System Status / Severity: 4 / Found by: A, C

- Olt appears that there is both a live webinar functionality as well as a chat feed functionality. Meeting in Progress leads to a group conversation, and "Join the Conversation" leads to a group conversation. One of these pages is voice-based while the other seems to be messaging-based. However, the initial screens for both of these functionalities look very similar, with user profile photos hovering on the screen in some arrangement. It took us a while to figure out what the difference was between these two and what modality I was communicating in.
- Fix: Provide status on screen about what type of conversation the user is currently in.
   The View Group button should not lead to a group conversation centered around a prompt. This implies that the group is always online. It should instead go to a page that contains information about the group and members. Additionally, one of messaging and voice-based conversation formats should be selected and used.

## 3. H1 Visibility of System Status / Severity: 2 / Found by: A

- The View Group button leads to the Join the Conversation page. It is not clear if the
  Join the Conversation page shows all of the users in the group or if it shows all of the
  users in the group who are currently online and in the conversation.
- Fix: Include a small green icon next to users' images, similar to other social media applications, to confirm that a user is currently online.

## 4. H1 Visibility of System Status / Severity: 2 / Found by: B

- There is no way to view, navigate to, or interact with your other groups. The "View Group" button takes you directly to a group and doesn't allow you to see the other groups you are a part of. There is also no way to navigate from that group to another group.
- Fix: Add a way for users to navigate to their other groups.

## 5. H1 Visibility of System Status / Severity: 2 / Found by: D

- After scheduling a meeting, you are led back to the "Members" page without any confirmation that that the meeting has been scheduled.
- Fix: Add an extra screen where it confirms that the meeting has been scheduled

## 6. H2 Match b/w System & World / Severity: 2 / Found by: A

• The Join The Conversation page is labeled "Group 1". Given that a user can only join one group, there is limited value to showing the internal group ID on the frontend.

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• Fix: Rename "Group 1" to "Your Group".

## 7. H2 Match b/w System & World / Severity: 3 / Found by: C

- The financial profile page has a confusing and vague "Search" button. It's unclear what this button will search for. Users may not find these instructions intuitive or descriptive.
- o Fix: Replace "Search" with "Search for a Group".

## 8. H2 Match b/w System & World / Severity: 3 / Found by: C, D

- On the My Profile page for savings, the selections are >100k, 100k-200k, <200k. I read
  this as "greater than 100k" and "less than 200k." Some may read it the correct way, but
  I think it could be better to use words. This is a functional error that should be
  addressed.</li>
- Fix: Change >100k to less than 100k or 0-100k.

## 9. H2 Match b/w System & World / Severity: 2 / Found by: D

- On the group page, there is a button labeled "Join the Conversation." I wasn't sure
  what the button would do. I had initially thought it would actually drop me in a voice
  conversation with everyone due the word "conversation".
- Fix: Specify whether you're joining a meeting or a text conversation.

### 10. H2 Match b/w System & World / Severity: 2 / Found by: B

- o In the "My Profile" screen, the title of "Financial History" is vague and doesn't make sense. This seems more relevant to "Experience" or "Savings".
- Fix: Change "Financial History" to "My Information" or an equivalent.

## 11. H2 Match b/w System & World / Severity: 2 / Found by: B, D

- On the "My Profile" screen, the wording of "Experience" is vague. What kind of
  experience are we talking about? The user has listed stocks as their favorite topic, so is
  it experience with stocks? Or maybe it means your experience with savings? Users will
  be unclear about the intention behind this description and may end up inputting
  inaccurate information.
- Fix: Clarify "Experience" to be a more detailed description of what this input box is for.
   Consider adding examples of what a person with low/medium/high experience might look like. Since your audience is people struggling with personal finance, it will be difficult for them to come up with a definition or guideline themselves.

## 12. H2 Match b/w System & World / Severity: 2 / Found by: A, B, C, D

- On the "My Profile" screen, when clicking on the triangles to edit one of the three user details, a bar pops up at the bottom to select input. The arrow suggests a drop-down menu, which is different from the implementation. Users may become confused by this.
- Fix: Change the input to a drop-down format.

## 13. H3 User Control & Freedom / Severity: 2 / Found by: A

- There is no simple way to sign out of an account and return to the initial page that offers the login and sign up options.
- Fix: In settings, add a "Sign Out" button.

### 14. H3 User Control & Freedom/ Severity: 2 / Found by: C

- When creating a post, it's unclear if the post will be deleted if the user decides to hit "Back" without posting the message. There should be a clear way to cancel a post if the user decides against sending it even after it's been composed.
- Fix: Include a "delete" or "cancel" functionality on the message posting view

### 15. H3 User Control & Freedom / Severity: 4 / Found by: C

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• There is a prompt of the day in the user profile of other users, but no way for the user to also answer that prompt of the day. It's therefore confusing what that prompt is and what role it plays in the app.

• Fix: If every user should fill out the prompt of the day, make it (a) accessible and (b) more visible to the user.

## 16. H3 User Control & Freedom / Severity: 2 / Found by: D

- After searching for groups, I can find a group I like and join it. I wanted to go back and see the other groups, but it took a lot of steps and figuring out how to return back to the "Search screen".
- Fix: Add a button to search other groups when you are viewing a group.

## 17. H4 Consistency & Standards / Severity: 2 / Found by: B

- o In the "My Profile" screen, when editing your "Savings" selection the user is only given three options: ">100k," "100k-200k," and "<200k." These are limiting options, which don't provide any particularly useful information. A person who has 100k of savings would be lumped into the same category as somebody with double their amount at 200k. It is difficult to determine how much of a difference in savings is significant (e.g. 50k is a lot to me but probably not a lot for Jeff Bezos), so I would do more research on this.
- Fix: Add more options with narrower ranges or allow users to input a number themselves instead of selecting ranges.

## 18. H4 Consistency & Standards / Severity: 2 / Found by: B

- o In the "My Profile" screen, when editing your "Favorite Topic" under user details, a confirmation button pops up. This confirmation button does not appear when editing "Experience" or "Savings," causing the "My Profile" screen to be inconsistent. It is also unnecessary as the interaction is simple enough that a second click is not needed. It would be a better user experience to have no confirmation button since it would take one tap to input information and only two additional taps to re-input the correct information if a mistake was made compared to two taps to input information every time with the confirmation button, along with the off-chance that the user still makes a mistake even with the confirmation button.
- Fix: Remove the confirmation button when changing your "Favorite Topic."

### 19. H4 Consistency & Standards / Severity: 1/ Found by: B

- In the "My Profile" screen, the triangles for user input are not pointing in the same direction. The triangles for "Experience" and "Savings" both point downwards while the triangle for "Favorite Topics" points upwards. This is inconsistent with the rest of the screen so the different orientation of the triangle may confuse users.
- Fix: Reorient the "Favorite Topics" input triangle to point downwards.

#### 20. H4 Consistency & Standards / Severity: 1 / Found by: B

- The placement of the "Meeting In Progress" frame on the home screen changes as you switch between the slides. The location of the frame is inconsistent and detracts from the user experience.
- Fix: Standardize the frame location and size.

## 21. H4 Consistency & Standards / Severity: 2 / Found by: B

- The function of "Add to Calendar" is unclear. It is unclear whether this button adds the
  meeting to a calendar within the app or exporting it outside to a separate app. If it is
  adding it to a calendar within the app, how is that calendar accessed?
- Fix: Clarify which calendar the meeting will be added to.

## 22. H4 Consistency & Standards / Severity: 1 / Found by: A

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- On the sign up and login page, the logo "ChatCapital" and the "New to ChatCapital" are inconsistent.
- Fix: Choose either Chatcapital or ChatCapital as the name, and then make these two names consistent.

## 23. H4 Consistency & Standards / Severity: 1 / Found by: A

- The Join The Conversation page has a back arrow that says "home", while the rest of the pages say "back".
- Fix: Rename this button to "back".

## 24. H4 Consistency & Standards / Severity: 1 / Found by: A

- User profile emojis on the Today's Prompt page are different from the user profile emojis on the Join The Conversation Page.
- Fix: Change the emojis on the Today's Prompt page to match the previous emojis.

## 25. H4 Consistency & Standards/ Severity: 1 / Found by: C

- The margins of the text on the screen that says "connect with a group that fits your needs!" is uneven.
- Fix: Create a consistent style around margins and font

### 26. H4 Consistency & Standards / Severity: 2 / Found by: C

- After clicking "Join Now" on the meeting in progress, I was immediately brought to the phone call without an introduction to the topic at hand. For the chat, however, there was some introductory information about what the chat was about. There should be some consistency across communication modalities about what the user sees before joining a call.
- Fix: Create a consistent flow introducing the user to the topic being discussed and put it before all conversation modalities

#### 27. H4 Consistency & Standards / Severity: 1 / Found by: C

- On the Financial History input page, the font across the input boxes is of uneven size.
   Additionally, the margins on the input boxes are uneven, leading to a disorganized look.
- Fix: Create a consistent style around margins and font

#### 28. H5 Error Prevention / Severity: 3 / Found by: D

- For the page with "Next Meeting Tuesday 1/11 5PM PST," there seem to be two events (one that is currently going on and one on Tuesday). Upon clicking on the "Next Meeting" I was brought to a page where it says "Meeting in Progress," which made me think that the Tuesday meeting was currently in progress and I could join. After closer inspection I realize that clicking on the "Next Meeting..." actually just rotated through the meetings.
- The initial two frames for the current meeting and the upcoming meeting are confusing. It is not depicted clearly that they are two separate entities, as they occupy the same frame/space. Users may think from clicking on the upcoming meeting frame and being taken to the meeting in progress frame that the meeting has started.
- Fix: Do not rotate through the events when they click on the currently shown event and reorganize how they're displayed in general.

### 29. H5 Error Prevention / Severity: 2 / Found by: D

- I cannot see what the meeting is about without joining the meeting. This may lead to many people joining and leaving calls, which could be disruptive. I wish I could see the topic ahead of time so I could see if I am interested.
- Fix: Show the meeting topic on all of the event's screens.

## 30. H5 Error Prevention / Severity: 2 / Found by: B

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There is no confirmation message for leaving a group. Leaving a group is a high-risk action for the user, and a confirmation popup would be beneficial in preventing accidents. This is especially important as the "Leave Group" button is right under the "Schedule Meeting" button. If you're scheduling a meeting for a group, you most likely do not want to leave the group.

• Fix: Add a confirmation popup when the user tries to leave a group. Consider separating the "Leave Group" and "Schedule Meeting" buttons.

## 31. H5 Error Prevention/ Severity: 2 / Found by: C

- Upon joining the call, the user is not automatically muted. This could cause a major usability error where people are joining the call and disrupting the conversation without realizing it, ruining the experience for everyone.
- Fix: Automatically mute the user upon entry to the call.

### 32. H6 Recognition not Recall / Severity: 2 / Found by: D

- In multiple places, the "Group 1" is shown above each page and I have to remember what Group 1 is about. I think if each group had a specific name that reminded me of what it was about would be useful so I don't have to constantly remember
- Fix: Use group names instead of group IDs

## 33. H6 Recognition not Recall / Severity: 2 / Found by: B

- The "Next Meeting" frame on the home screen is lacking context. Although it tells the user when the next meeting is, it relies on the user to remember the current date.
- Fix: Add the current date.

## 34. H6 Recognition not Recall / Severity: 2 / Found by: B

- The group settings screen does not display the members' usernames. The screen only
  displays their user icons and leaves out their usernames. This leaves the user
  responsible for remembering their usernames and matching them with their user
  icons. Additionally, this could be a source of confusion if there are multiple users with
  the same user icon (e.g. multiple new users with the default icon in one group)
- Fix: Add the usernames underneath the user icons.

## 35. H6 Recognition not Recall / Severity: 2 / Found by: B

- The group screen does not show the upcoming group meetings. Besides the single frame on the home screen notifying the user of an upcoming meeting, there is no other way to check the meeting schedule and see if there are any other meetings in the future.
- Fix: Add a calendar or meeting schedule screen to each group.

## 36. H6 Recognition not Recall / Severity: 2 / Found by: C

- It is unclear what the difference is between the "Join Now" button and the "View Group" button on the screen that says "Meeting in Progress"
- Fix: Re-think the information architecture of the app. Adjust button names so their function is more clear.

#### 37. H7 Flexibility & Efficiency of Use / Severity: 2 / Found by: D

- The options shown on the "My Profile" page for the favorite topics seem very limited, as there are only 3 categories (Stocks, Savings, and Credit). I think a power user would want more options than those 3
- Fix: Add extra categories like real estate to choose from.

## 38. H7 Flexibility & Efficiency of Use / Severity: 3 / Found by: A

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- Clicking on a username takes you to a user profile, which then allows for direct messaging. There should be an easier way to send direct messages. Additionally, the information on the user profile should be more relevant and helpful.
- Fix: Either this intermediate page should have more significant information (ex: the time the user has been in the group isn't that helpful) or the user should be taken directly to the direct message option.

## 39. H7 Flexibility & Efficiency of Use / Severity: 3 / Found by: B

- There is no option to navigate to a specific recommended group. If the number of recommended groups was larger, it would be more difficult to navigate through them all simply by swiping to the next or previous one. For example, if a user liked the 2nd recommended group, but wanted to check out the other 8 options of their 10 recommended groups, they would have to swipe back to the 2nd option if they ended up choosing it after considering the other 8.
- Fix: Add a way for users to navigate to a specific recommended group.

## 40. H8: Aesthetic & Minimalist Design / Severity: 1 / Found by: A

- The Join The Conversation page cuts off usernames on the right side. This would be more aesthetically pleasing if the visuals were centered.
- Fix: Adjust the visuals so that none of the usernames are cut off the screen.

## 41. H8: Aesthetic & Minimalist Design/ Severity: 1 / Found by C

- On the screen where the user is posting, there is a box that says "Tell others your
  questions" that is transparently hovering above another screen. I found this view
  confusing because you can see the text both behind and in the transparent box. There
  should be a way to make this more pleasing to the eye and less busy.
- Fix: Make the box with directions opaque, and in a common pop up (or other notification) interface that users will recognize.

## 42. H8: Aesthetic & Minimalist Design/ Severity: 2 / Found by C

- Similar to the above, when selecting a date to schedule a meeting the time input is transparent and hovering above the calendar. This is confusing and hard to read.
- Fix: Make the time input opaque, and in a common pop up (or other notification) interface that people will recognize.

## 43. H8: Aesthetic & Minimalist Design/ Severity: 1 / Found by D

- For the "Sign Up" and "Login" screen, the placeholder text says "Enter \_\_\_\_." for every textbox. I don't think the word "Enter" is necessary everywhere because it feels repetitive and more text to read. I think if it was removed, it would create a more minimalist and aesthetic feel.
- Fix: Remove the word "Enter" from the placeholder.

## 44. H8: Aesthetic & Minimalist Design/ Severity: 1 / Found by D

- On the group page with the posts, there is a colon at the end of "Today's Prompt:" and
   "Group Feed:" Since these are headers, I don't think the colon is necessary
- Fix: Remove the colon from the headers

## 45. H8: Aesthetic & Minimalist Design / Severity: 2 / Found by: A

- In the Join The Conversation page, every user has the same emoji. While this may be helpful for maintaining anonymity, this does not provide helpful information to the user.
- Fix: Allow users to upload images of themselves or select stock icons that are more personalized to their background.

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## 46. H8 Aesthetic & Minimalist Design / Severity: 3 / Found by: B and C

- The color scheme is poorly chosen. The dark yellow/brown on top of the background dull green does not allow for much contrast and is not the best choice for an accent color.
- Fix: I see that the dark green and dark yellow comes from your logo, so I would suggest changing the background color to something else. A less saturated more pastel green might work better.

### 47. H8 Aesthetic & Minimalist Design / Severity: 1 / Found by: B

- The background of frames is the same color as the app's overall background. Since both colors are the same, the individual frames blend into the background with only the dark yellow outline remaining to distinguish it.
- Fix: Make the background a different color perhaps white

## 48. H8 Aesthetic & Minimalist Design / Severity: 2 / Found by: B

- The message frames themselves are cluttered. There is no padding around the text, causing it to have an unsightly appearance where it gets overly close to the outline.
- Fix: Add padding around the content of the frame, and consider moving the user icon and username to the outside of the frame such that the frame highlights the message.

## 49. H8 Aesthetic & Minimalist Design / Severity: 1 / Found by: B

- The text on the group messaging screen is all the same size. With the prompt having
  the same font size as the messages themselves, there is no sense of importance to the
  prompt. If the prompt had a larger font size, users would be drawn to it and read it
  first, improving the user experience.
- Fix: Make prompt font size larger and text message font size smaller.

## 50. H8 Aesthetic & Minimalist Design / Severity: 1 / Found by: B

- The original poster is difficult to determine in a group thread. The only thing differentiating the starting post and the response posts are the different layouts of the frame. It would be beneficial for users if the original starting post was better highlighted so they knew to read it first.
- Fix: Make the original post more distinct from responding posts.

#### 51. H10 Help & Documentation / Severity: 2 / Found by: A, B, C

- There is no documentation, FAQ, or onboarding. New users are thrown into this
  interface to simply explore and figure things out for themselves. Although most
  interactions are fairly intuitive, this increases the learning curve of navigating the app.
- $\circ\quad \mbox{Fix: Add some sort of onboarding or documentation.}$

## 52. H10: Help and documentation / Severity: 2 / Found by: A

- On the Today's Prompt page, it is not intuitive that clicking a username leads to a direct message option and clicking a post gives a public response option.
- Fix: Add information explaining that clicking on a username enables direct messaging while clicking on a post enables public responses.

#### 53. H10: Help and documentation / Severity: 2 / Found by: D

- The app allows users to schedule a meeting, but I am unsure what the meeting is supposed to be used for. Is it just to talk to people?
- Fix: Add some instructions about the purpose of meetings.

## 54. H10: Help and documentation / Severity: 2 / Found by: D

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- On the "Groups Recommended" page, it took some playing around to figure out I had
  to drag the screen to see the other selections. I think the 3 bubbles gave me an inkling
  that there were more groups, but clicking on them didn't let me see other groups.
- Fix: Either add some text or arrows to help the user know how to see other groups.

[...create your numbered list of violations here]

# 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	0	0	4	0	1	5
H2: Match Sys & World	0	0	5	2	0	7
H3: User Control	0	0	3	0	1	4
H4: Consistency & Standards	0	7	4	0	0	11
H5: Error Prevention	0	0	3	1	0	4
H6: Recognition not Recall	0	0	5	0	0	5
H7: Efficiency of Use	0	0	1	2	0	3
H8: Minimalist Design	0	7	3	1	0	11
H9: Help Users with Errors	0	0	0	0	0	0
H10: Help & Documentation	0	0	4	0	0	4
Total Violations by Severity	0	14	32	6	2	54

*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)

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## 4. Evaluation Statistics

Severity /	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Total
Evaluator					
Sev. 0	0%	0%	0%	0%	0
Sev. 1	29%	36%	21%	14%	14
Sev. 2	22%	44%	19%	31%	32
Sev. 3	17%	33%	50%	33%	6
Sev. 4	50%	0%	100%	0%	2
Total (sevs. 3 & 4)	25%	25%	63%	25%	8
Total	24%	39%	30%	26%	54
(all severity levels)					

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

# **5. Summary Recommendations**

The medium-fi prototype does a great job of walking through the three tasks and is a fantastic starting point for your final application! We thoroughly enjoyed using it, as it is intuitive to use and has a clear purpose. In terms of the heuristic evaluation, we thought your team did a great job mitigating scope for errors and providing users the option to go to other pages. There were two significant UI issues that we saw. We were confused by the lack of consistency between the two group conversation pages. It seems like there is an option to do both text-based messaging and voice recordings. We think that it would be helpful to choose one format for group discussions. Secondly, there was a "prompt of the day" in the user profile of other users, but no way to answer the prompt of the day oneself. This left us confused about whether this was a feature of the app, or whether we just couldn't find out how to answer the prompt ourselves.

Other cosmetic issues centered around the color selection and using common design patterns. The colors did not add enough contrast, and in some cases the font color was hard to read on the background screen provided. Additionally, there were several places where common design patterns, such as the way drop downs usually work or the way notifications normally show up, were not followed. The app could be greatly improved by changing the color scheme and using common design patterns for all components.

Finally, we would rethink the information architecture of the app as a whole. A large piece of feedback that doesn't fit into any of the heuristics is that the app felt disorganized overall. The information architecture of the app is unclear. For example, how does the chat feed relate to groups? Are they many groups per topic or one group per topic? What is the prompt of the day, and why wasn't I presented with it as a user? At the beginning, we were also a bit confused on what functionalities even exist. For example, a tester was unaware of the meetings feature. We would go back and draw out what the key tasks are that this app is trying to accomplish, and try to simplify the way the information is laid out and navigated through in the application.

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# **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