Instructor: James Landay

Heuristic Evaluation of YoursTruly

1. Problem/Prototype Description

The medium-fi prototype of YoursTruly is a Figma-simulated smartphone app that aims to help users customize gift packages they send in various ways, offering the option to add personalized video messages, packaging and delivery add-ons, and accommodation requests for the recipients.

2. Violations Found by Heuristic

H1. Visibility of system status

- No progress state in entire flow, so unclear on how many steps required to finish the entire transaction.
 - Severity: 3
 - o Found by: C
 - Fix: include a progress bar on the top or bottom of the screen that is screen width and update the bar as the user progresses through the flow.
- No success state after users save a celebration.
 - Severity: 1
 - o Found by: C
 - Fix: confirm with the user through a popup modal that save has occurred.
- When looking at "unfinished celebrations," there is no indication that one of them is selected, but clicking on the "continue this celebration" button brings the user to (presumably) one of them. The user does not know which celebration "this celebration" is referring to when clicking on the button.
 - Severity: 1
 - o Found by: A
 - Fix: Start off with a differentiating border around the first "celebration" to indicate to the user that it is currently selected so that they are not left guessing.
- The page after confirming an order gives next steps for where to send the package. This is
 implicit confirmation that the order has been placed, but there is no explicit confirmation
 anywhere on the page, so the user would have to guess that everything was successfully
 processed by the system.
 - o Severity: 4
 - o Found by: A
 - Fix: Add a page or a pop-up notification explicitly confirming that the order has successfully been placed. A display of the progress of the user's celebration after they drop off the box should show up. (Think Doordash progress report)
- There is no confirmation that an item has been added to the cart.
 - Severity: 2
 - o Found by: B

Instructor: James Landay

• Fix: Use a symbol or a brief banner notification to inform the user that the item has not only been added onto the celebration but also to a cart that the user needs to check out.

H2. Match between system and the real world

- Though the product sets a date for the package to be delivered, it does not give users a date to deliver the package to YoursTruly by. This seems important to meeting the deadline set by the user. In general, next steps are unclear. Requires a physical package delivery, and no information about what needs to be included in the package.
 - Severity: 3
 - o Found by: B, C
 - Fix: inform the user when they need to deliver the package to YoursTruly, and include tooltips or a FAQ section in view to explain what happens here.
- The "film," "upload," and "add" buttons on the video page all look the same (in size, color, shape, style) except in that the last one ("add") is grayed out, and the buttons are vertically aligned. Normally, a configuration like this in the real world indicates a sequence of steps that will "unlock" the currently-unavailable option, so the user might assume that they need to first film and then upload the video in order to add it to the cart. After filming, they might be confused until figuring out that "film" and "upload" are two separate options that both individually lead to "add."
 - o Severity: 2
 - o Found by: A
 - Fix: Do not align all three buttons (you could put the "film" and "upload" buttons side-by-side with "add" below), and perhaps make the size of the "add" button different from that of the "film" and "upload" buttons. This will avoid leading the user to think that this is a three-step sequence of events.
- This could just be me, but I had to look up what a "margaritas" was while browsing through the delivery add-ons (side note: is using the plural form intentional on the add-on page?). I was also left wondering exactly what flowers were included in each bouquet offered by Stanford Floral Design since the names of the bouquets were abstract and the pictures were small (and may not have shown all of the types of flowers included). This is important because certain types of flowers may be harmful to people or pets, so a user may need to know exactly what they are getting.
 - o Severity: 3
 - o Found by: A
 - Fix: Adding a description for every option available with proper disclaimers for food items and flowers around allergies, potential harm to animals, etc. There should also be more details about all the products (ie. size, quantity, weight, how to keep fresh, etc.)
- It's unclear that the gift symbol in the bottom right corner is the cart. As a result, checking what is in the cart becomes confusing and it is harder for the user to check on what they have added to their celebration so far.

Instructor: James Landay

Severity: 2Found by: B

• Fix: change gift symbol to the more conventional cart symbol

H3. User control and freedom

 Navigation bar is gone when you reach the checkout page. Inconsistent navigation is confusing.

Severity: 4Found by: C

- Fix: a navigation bar throughout the entire app.
- At the checkout page for a celebration, the user has no option to directly delete the celebration. The user may have changed their mind, or something may have happened that made them no longer need this celebration, but their only options on the "Your Cart" page are to save the celebration or check out. The user would need to first save the celebration and then go to saved celebrations in order to delete it, or they would need to attempt to edit the celebration and navigate back to the home page, which is a less intuitive way to delete a celebration. This is related to being unable to remove an add-on or accommodation on the same page after adding it.

Severity: 3Found by: A, C

- Fix: Add a "delete" or "remove" button on pages with a "save" or "add" button to give the user more direct control over what they want to do with the current celebration.
- After clicking on "continue this celebration," the user reaches a page whose back button goes all the way back to the home page. However, the user may want to return to the previous page, the one on which all of the saved celebrations are listed. They would have to go to the home page and reselect "continue the celebration" to return to the previous page. In another instance, there are multiple pages when checking out, and all back buttons return the user to the cart, even if they may want to return to the previous page.

o Severity: 3

o Found by: A, B, C

- Fix: Let the back button go to the previous page (as if to "undo" the previous action of coming to the current page) rather than generalizing back buttons to route to the home page or cart.
- In Task 3 there is a forward arrow even after an item has been added to the cart. It's not clear what state the user could move forward to after this. It also wouldn't be useful for the user to skip over adding something to the cart.

Severity: 4Found by: B

- Fix: Remove the arrow button from the screens in Task 2.
- When a user starts a celebration and saves it for later, they view their cart. While they have the option to edit/remove their video, there are no options to edit delivery add-ons and

Instructor: James Landay

accommodations. Therefore, there is no exit for items placed in delivery add-ons and accommodations. This could be an issue if the user changes their mind about a delivery add-on or accommodation when they are checking out. They would only find out that there are edit and remove buttons for these options as well if they click on the button (but not on "add more," which is also on the button).

- o Severity: 3
- o Found by: A, B
- Fix: add an option to edit/remove items in "delivery add-ons" and "accommodations."

H4. Consistency and standards

- Forward and backward arrow buttons on navigation buttons are an inconsistent color. Sizing is also distracting.
 - o Severity: 3
 - o Found by: C
 - Fix: Use native navigation arrows for iOS/Android, rather than custom oversized buttons.
- If a user goes through a saved celebration, and tries to resave, it asks for a new name.
 - Severity: 1
 - Found by: C
 - Fix: populate text field with original name.
- Next steps page has an inorganic button in the signature that directs the user back to the beginning of the app flow. Unclear intention of button.
 - o Severity: 4
 - o Found by: C
 - Fix: have a navigation bar with arrows, and/or reframe existing button that explains the return to the beginning of the flow.
- At some point, the product is called a "celebration" and at other points it is called a "project." This could create confusion for users about what they are working on and if they are adding to the same thing.
 - o Severity: 1
 - o Found by: A, B, C
 - Fix: Choose one word (I think "celebration" is the most descriptive and festive) to describe what the user is creating on your app.
- After selecting "Sasha's Birthday" on the "unfinished celebrations" page, the user clicks on "continue this celebration" and is taken to the cart. The user may not have been aware that "continuing a celebration" meant going to the cart and felt surprised or confused.
 - Severity: 3
 - o Found by: A

Instructor: James Landay

- Fix: Instead of "continue this celebration," change the text on the button to "view in cart" or something similar that would better represent the next page to the user.
- Some buttons (e.g., two of the three text boxes at the center of the "Your Cart" page, the unfinished celebrations) are expandable but do not indicate so. Furthermore, on the "Your Cart" page, the text boxes in the center all look the same (same size, shape, color, style), but only the bottom two (delivery add-ons and accommodations) are expandable buttons. The one on top (video) is not a button and does not expand; only the "edit" and "remove" links on it do anything. This can be confusing for a user who is not aware of this invisible difference.
 - Severity: 1
 - o Found by: A
 - Fix: Add indicators that the expandable buttons are expandable (such as with downward arrows). You could also open the "Your Cart" page with them already expanded to avoid the confusion. Buttons and mere text boxes should be presented differently (e.g., the display of total price on the "Your Cart" page should not look like a button) in order to standardize one look for buttons and another for non-buttons.
- On the page for adding a video, the words along the top form their own "next" button, but none of the other pages along the way of creating a celebration have this feature. This is confusing for a user who notices this inconsistency. I think it might have been an error in the production of the prototype.
 - o Severity: 1
 - o Found by: A
 - Fix: Do not make the words on the top of any page clickable unless all of them become clickable.
- This is very, very minor, but the text, some buttons, and prices throughout the app are not aligned, either with each other on the same page or across consecutive pages. An example is on the "accommodations" page, where the prices are unaligned.
 - Severity: 1
 - o Found by: A
 - Fix: Align buttons/text/prices in the same position across consecutive pages and text on the same page.
- Sometimes full sentences are capitalized and other times they are not. This creates inconsistent style
 - Severity: 1
 - o Found by: B
 - Fix: Decide on a style guide for capitalization.

H5. Error prevention

• Expanding drawer in the "Your Cart" page has no return button. Once expanded, user can't go back to other things.

Instructor: James Landay

- Severity: 3Found by: C
- Fix: use native drawer UI that has open and close arrow buttons that save state.
- It could be easy for a user to accidentally send a package on the wrong date, especially because the window to enter the desired delivery date is quite small.
 - Severity: 2Found by: B
 - Fix: When checking out, the app should prompt the user to confirm that the date is correct.
- When a user inputs a song that they want the quartet to play, there is a lot of room for error. They could input a song name and no artist name or enter a song that the quartet does not know how to play. This would trigger a lot of back and forth between YoursTruly and the user to confirm the correct song name/ find a song that the quartet can play.
 - Severity: 1Found by: B
 - Fix: have a searchable menu of songs in the quartet's repertoire or give an error message if the input is not valid
- The user is allowed to click on the "continue this celebration" button without first selecting a celebration. This can lead to errors if the user accidentally clicks on the button or clicks on it mistakenly believing that they have already selected one of the options (e.g., the phone did not register the selection); in the latter case, they may continue with the wrong celebration.
 - o Severity: 1
 - o Found by: A
 - Fix: Disable this button completely or hide it if the user has not selected a celebration.

H6. Recognition rather than recall

- The user can't easily see how many items are in their cart. This requires the user to either remember everything or click the cart icon and read through their order.
 - Severity: 1
 - o Found by: B
 - Fix: Create a tracker to mark how many items are in the cart.
- After clicking on "continue this celebration," the user reaches a page that gives no indication of
 whose celebration they are looking at. The user may forget whose/which celebration they are
 currently working on, and they have no reference to remind them on the page. This is also the
 case on the "Your Cart" page.
 - Severity: 2
 - o Found by: A
 - Fix: Put the name of the celebration on the page to remind the user of which celebration they are currently viewing.

Instructor: James Landay

- When returning to delivery add-ons from the cart, selected add-ons have a check mark by them in place of the price. The user may want to reference the price of a specific add-on when looking at its selection page without having to remember it. This also applies to chosen accommodations; the price of an accommodation should stay visible even after selecting it.
 - Severity: 2
 - o Found by: A
 - Fix: Keep the prices of chosen add-ons and accommodations on their selection pages. The check mark can be moved elsewhere on the page.

H7. Flexibility and efficiency of use

- Lots of deadspace in "Delivery add-ons" and "Accommodations" pages. The emptiness feels like there's something missing.
 - Severity: 1
 - o Found by: C
 - Fix: compress all three screens into one, consider using native drawers UI to make it neat.
- There is no way for a user to quickly make a simple order. They must click through the video message, delivery add-ons and accommodations to make an order, even if they only want to do one task.
 - Severity: 3
 - o Found by: B
 - Fix: add shortcuts for common tasks (ie. only send a video message)
- Inputting payment method and billing address is a frequent action that is required every time
 a user completes an order, and an expert user would likely not change this information, but
 they would have to input it every time. This is an opportunity to speed up the interaction for
 expert users.
 - o Severity: 2
 - o Found by: A
 - Fix: After a user checks out with a new payment method or new billing address, with their permission, save this information, and in the future open this page with the fields filled in so that a frequent user can just look it over and continue.
- There is no way to save previous add-on or accommodation choices or add an accommodation request to the list of accommodations. A frequent user who sends multiple packages to the same person or is fond of a particular set of add-ons and accommodations would need to tediously select the same ones (and/or input the same custom accommodation) every time they make an order.
 - Severity: 3
 - o Found by: A
 - Fix: Add a way to save a favorite set of add-ons and accommodations and an option to save a custom request on the accommodations page for future use.

Instructor: James Landay

H8. Aesthetic and minimalist design

- The background is distracting. It often blends with the icons in the superposing layers.
 - o Severity: 3
 - o Found by: C
 - Fix: change background to single color, probably white.
- The logo in the top bar is too large and distracting. It introduces deadspace when there are no navigation titles.
 - o Severity: 2
 - o Found by: A, C
 - Fix: shrink logo, and limit to first few screens, but not in deeper tasks.
- Clicking a language in the accommodation section leads to text being engulfed in a rectangular outline, which is an un-intuitive user behavior and looks funky.
 - o Severity: 2
 - o Found by: C
 - Fix: bold text, or include a checkmark next to it.
- Rectangular video frame for vertical video in the video screen looks unnatural.
 - Severity: 2
 - o Found by: C
 - Fix: responsive page arrangement based on video orientation.
- Dead space between cart drawer and total amount is unnatural.
 - Severity: 2
 - o Found by: C
 - Fix: bring total amount right under the drawer.
- Odd spacing between package summary items in "review order" screen.
 - Severity: 2
 - o Found by: C
 - Fix: compress the items, and remove bullet points.
- "Unfinished Celebrations" title in the top bar is off-center.
 - Severity: 2
 - o Found by: C
 - Fix: center the title.
- In some cases, the top banner gets a little busy. For example, in the "accommodations" section the top banner has the words "delivery add-ons," the logo, "accommodations," and "check out" all packed in quite tightly.
 - o Severity: 2
 - o Found by: B
 - Fix: clarify where the arrows go with less text
- On the "Your Cart" page, the user can click on "delivery add-ons" and "accommodations" to view what they have chosen for those categories, and they can "add more" from there if they so choose. Since the "add more" feature is reachable from this expanded state with the current choices listed, the "add more" links on the original—unexpanded—buttons seem unnecessary.

Instructor: James Landay

A user would probably prefer to choose whether to add more after reviewing what they have already added.

- o Severity: 2
- o Found by: A
- Fix: Remove the original "add more" links on the unexpanded buttons.

H9. Help users recognize, diagnose, and recover from errors

- User can't edit video once added on the video screen.
 - o Severity: 4
 - o Found by: C
 - Fix: add edit button, or convert add button to edit button that changes the state.
- User can't edit delivery or add on options in cart drawer.
 - Severity: 4
 - o Found by: A, B, C
 - Fix: add edit button for each drawer item.
- There are a lot of input fields and it could be very easy for the user to incorrectly input data, in particular because it is a mobile app.
 - Severity: 3
 - o Found by: A, B
 - Fix: create error messages for check-out in case the user misses an input
- There is one error message in the app that appears when the user clicks on the gift icon before adding anything to the cart. I think it does a good job of precisely telling the user in plain language what the problem is and how they can fix it, but it does not explicitly tell the user how to use the gift icon. The user may be left wondering what the button is used for.
 - Severity: 1
 - o Found by: A
 - Fix: Add a short sentence to the page with the error message indicating that anything the user adds to their order will show up there and that the user will be able to check out from this page.

H10. Help and documentation

- Every title has an unclear subtitle about what procedure is required for a given step or section.
 - Severity: 2
 - o Found by: C
 - Fix: add tooltips everywhere that users can hover over to learn more about each step.
- On slide 22, it is not totally clear that you should select a celebration to continue. Since the "continue this celebration" button is gray at first, it seems like you have reached a dead end.
 - Severity: 2
 - o Found by: B

Instructor: James Landay

- Fix: Having documentation to nudge the user to select a celebration to restart would help improve the flow. That way, users don't get confused about the purpose of the screen.
- On slide 60, when the user picks the language they would prefer the gift be delivered in, it is not clear that the user can select a language from the list. This is because the list is in the same format as the order summary, which is not interactive.
 - Severity: 4
 - o Found by: B
 - Fix: change the formatting of the language selection to more closely resemble the other parts of the product where a user can select a preference.
- There is no help or documentation. When creating a celebration, a user may think that adding a video is required, or that the little gift icon on the bottom right is only there for visual effect and not clickable. When they aren't clear on how a task is meant to be completed and what features and options are available to them, they may miss out on choices and paths that they have or even make mistakes.
 - Severity: 3
 - o Found by: A
 - Fix: The bottom left corner always seems to be empty, so a little help button (perhaps with a question mark on it) could be placed there on each page and lead to a short explanation of what the user can do there. A tutorial button could also be placed on the home page since there is a lot of white space there.

H11. Accessible

- Font in the checkout page that has a subtitle next to the main title has a very light color.
 - Severity: 2
 - o Found by: C
 - Fix: brighten the font, and bring subtitle under the main title rather than next to it horizontally.
- Cursive font for button actions is illegible and incurs visibility problems.
 - o Severity: 2
 - Found by: C
 - Fix: consider using a neutral font, maybe a system font.
- The font size for "video" and "accommodations" is very small and, combined with the lack of contrast between the thin yellow text and white background, makes the words difficult to read.
 - Severity: 2
 - o Found by: B
 - Fix: Increase the font size and bold the text to create more contrast with the background. Consider a darker color of yellow.
- The font is very thin and often placed on backgrounds with little contrast.
 - Severity: 2
 - o Found by: A, B

Instructor: James Landay

• Fix: choose text colors with greater contrast

- The font of the app name (and subtitle on the home page) is thick in some places and extremely thin in others. At a distance or the text size on a regular smartphone, those who are visually impaired may have trouble reading this, and since the name of the app is one of the first things a user sees, it may make a visually-impaired user immediately feel that this was not made with them in mind.
 - Severity: 2
 - o Found by: A
 - Fix: Change the font type to one with more uniform thicknesses, or at least one that is overall thicker so that the thinner parts do not "disappear" to the visually impaired.
- The orange text color on the homepage buttons contrasts very little with the light pink background on which it sits. The thinness of the font type does not help. Those who are visually impaired might not be able to see it, or they might have trouble reading it and feel frustrated.
 - o Severity: 2
 - o Found by: A
 - Fix: Make the text color darker and/or the button color lighter to increase the contrast and make the text more easily readable. Thickening the font or making the text larger could also help.

H12. Fairness & Inclusion

- No description of the identity of the gift recipient.
 - Severity: 1
 - o Found by: C
 - Fix: include pronouns and other preferred identifying details of the recipient so the delivery can be special and tailored.
- Charging more for disability accommodations does not line up with values of fairness and inclusion. It is not fair that someone should have to pay more to send a gift to someone with different abilities. This ultimately disincentives gift-giving to the disabled.
 - Severity: 4
 - o Found by: B
 - Fix: Make accommodations free.
- The delivery add-ons in the more expensive ranges (flowers, margaritas, cupcakes) show only one price and one vendor option. Users who do not have the means of buying from these high-end vendors may feel excluded from these features.
 - o Severity: 3
 - o Found by: A
 - Fix: Add more vendors with different price ranges for the same types of items (e.g., three different vendors for cupcakes at three different price ranges).

Instructor: James Landay

H13. Value alignments

- Unclear on the processes after confirmation. This is misaligned with your value of transparency that you mention.
 - o Severity: 4
 - o Found by: C
 - Fix: include more information and interaction with the experience after the delivery has been sent to the YoursTruly courier.
- The goal of the product is to make gifts feel more personalized. However, some of the delivery add-ons like the acrobats and the flowers feel impersonal.
 - Severity: 1
 - o Found by: B
 - Fix: allow users to write notes to attach to the delivery add-ons. This will help tie the add-ons back to the relationship between the sender and receiver.
- The app conveys that its creators want to be inclusive toward package recipients who need
 accommodations, but the app itself lacks some accommodations for its users. For example,
 images in the app do not seem to have alt text, so those who cannot see the images would not
 feel included.
 - o Severity: 2
 - o Found by: A, C
 - Fix: Add more accommodations to the app for its users, including alt text for images.

3. Summary of Violations

Category	# Viol.					
	(sev 0)	(sev 1)	(sev 2)	(sev 3)	(sev 4)	(total)
H1: Visibility of Status	0	2	1	1	1	5
H2: Match Sys & World	0	0	2	2	0	4
H3: User Control	0	0	0	3	2	5
H4: Consistency & Standards	0	6	0	2	1	9
H5: Error Prevention	0	2	1	1	0	4
H6: Recognition not Recall	0	1	2	0	0	3
H7: Efficiency of Use	0	1	1	2	0	4
H8: Minimalist Design	0	0	8	1	0	9
H9: Help Users with Errors	0	1	0	1	2	4
H10: Help & Documentation	0	0	2	1	1	4
H11: Accessible	0	0	6	0	0	6
H12: Fairness & Inclusion	0	1	0	1	1	3
H13: Value Alignment	0	1	1	0	1	3
Total Violations by Severity	0	15	24	15	9	63

<i>Note:</i> 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)						

Instructor: James Landay

Instructor: James Landay

4. Evaluation Statistics

Severity /	Evaluator	Evaluator B	Evaluator C
Evaluator	Α		
Sev. 0	n/a	n/a	n/a
Sev. 1	47%	33%	30%
Sev. 2	42%	29%	42%
Sev. 3	60%	33%	47%
Sev. 4	22%	44%	56%
Total (sevs. 3 & 4)	46%	38%	50%
Total (all severity levels)	44%	33%	35%

^{*}Note that the bottom rows are *not* calculated by adding the numbers above it.

5. Summary Recommendations

Overall, your team did a great job on this prototype! We loved seeing all of the accommodations for the recipients and browsing through the variety of add-ons. Although the intended animations were not implemented, at times Evaluator A imagined the way they would look while completing the tasks and thought they would really enhance the experience, making it more fun to use the app. The paths of creating a celebration and continuing a saved one were very linear, and Evaluator A thinks that with the back buttons rewired so that they each bring the user back to the previous page, it would be difficult for users to make mistakes.

While working through the tasks and exploring options, a trend Evaluator A noticed was in the disparity between the conscientiousness toward meeting a recipient's needs/accommodation requests and that toward meeting the needs of the user of the app. This gap may have been made more obvious because of just how much thought and effort you have put into the accommodations for package recipients. In particular, Evaluator C thinks that more can be done to create contrast and readability. They really like your color scheme but think that it often gets in the way of your product being readable, especially when there is a lot of small text on the screen. This accessibility issue, coupled with the lack of error checking, could create difficulty for a user who has a hard time reading the app and therefore messes up their order. We recommend spending more time to think of ways to make the app more accessible and inclusive for users with disabilities and who are part of other disadvantaged populations.

Evaluator B also thinks that there needs to be more value alignment between accessibility and affordability. While it is amazing that your product offers disability accommodations, charging extra for them only amplifies the inequities already placed on people with disabilities. This conflict needs to be addressed in order for your product to meet its goals.

For the completion of the task flows themselves, there are some logical failures in the UX around the workflow for checkouts and resuming a celebration. For example, the back button on the second

CS 147 Winter 2022 website

Instructor: James Landay

checkout screen with payment information leads to the entire celebration being erased. There are also no confirmation/success or failure states that notify the user of the system status, so Evaluator B would recommend including those through modals of sorts. Most importantly to them, given there is an in-person element to your entire product experience, Evaluator B recommends including ample user education around what is happening with the information the user gives YoursTruly and how the service works once they finish the process in the app. This can come in the form of tooltips throughout the app.

Onto more cosmetic aspects, Evaluator B would recommend sticking to native UI kits or derivatives of native UI kits that are sized proportionally to the design standards put out by Apple and Google. Some of the particular visual elements around sizing seem unnatural simply because the sizing is off, and other elements such as a consistent color palette and a stable background would be great additions to make the UX consistent. They recommend checking out Ant Design (ant.design) if you're doing a React Native app.

To finish, here is some minor feedback related to a few errors Evaluator A noticed that do not fit into the heuristics. First, there might be a situation in which the same user orders multiple "celebrations" for the same recipient, so they wondered how the packages would be distinguished from one another when YoursTruly received them. Perhaps the user should provide a tracking number for each celebration they order? Also, the user has the option to type in a custom accommodation, but (like in other input text fields) there does not seem to be a way for the app to check that the request is valid. The app may need to indicate that the user will be refunded for the custom accommodation if their request is impossible to accomplish or unintelligible. Additionally, Evaluator A could not help remarking while reading the description of the quartet add-on that three people do not make a quartet; maybe there is inside context there? Lastly, the words accommodation, receive, and receives are misspelled throughout the app prototype.

It was a pleasure to experience the YoursTruly prototype, and we look forward to seeing the hi-fi version!

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

Instructor: James Landay

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.

CS 147 Winter 2022 website

Instructor: James Landay

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.