### **Heuristic Evaluation of Compass**

### 1. Problem

Using Sketch and Invision, the Compass prototype simulates a webpage interface that helps victims and their friends navigate the various actions that can be taken after a sexual assault.

### 2. Violations Found

#### Overall Website: H2-2 Match Between System & Real World [Severity 2][D]

Language for "Clarify", "Connect", "Support" is confusing and clearly delineate functions and organization. What requires clarification? Support could mean technical support. Connect is a similarly ambiguous word. To fix, create concrete titles: E.g. "Resources, Counseling Chat, Track Progress" on the main page navigation.

#### H2-3 User Control and Freedom [Severity 3][D]

User needs to go back to main screen to switch to work flows. This is convoluted. To fix, create a navigation bar with main functions (Resource, Track Progress, Chat Now, Learn More, etc.)

#### H2-3 User control and freedom [Severity 2][A,B,C,D]

The home button is not clearly delineated. It's not clear that the home button is clickable. Because of this, it is hard for a user (especially a new one), to go back to the home page. I later realized that the Compass logo is the home button, but this is not obvious. Use intuitive home button icons universally recognized. If you wanted to keep the compass logo as the button, you could also add a fill color behind the Compass logo to denote that it is also a button, since other buttons on the website also have a fill color. This would keep the website consistent.

#### H2-4 Consistency and Standards [Severity 2][D]

Need phrasing to organize different functions. E.g. 'maps in the website. To fix: title each map a Resource "Map" for greater standardization and clarity. Title the tracking progress pages "Roadmaps".

#### H2-4 Consistency and Standards [Severity 2][D]

Website has nowhere where it clarifies the precise purpose of the website. To fix: have a one-sentence summary clarifying the purpose of the website.

#### H2-4 Consistency and Standards [Severity 4][D]

Sensitive information is transmitted in the app but the user is not told how the information may be used. To Fix: Create a readily readable Terms of Service and Privacy Policy and "Contact" page to assuage concerns about misuse of private information.

#### H 2-6 Recognition Rather Than Recall [Severity 2][D]

No icons are used. This makes it more difficult for users to remember exactly how to navigate through the website. Leverage appropriate icons to provide visual cues for different functions (e.g. Chat bubble To navigate to chat page).

#### H2-7: Flexibility and efficiency of use [Severity 1][A]

The experience of the website is completely the same for an expert/experienced user and a new user. The website is also the same for someone who has experienced a sexual assault, to people who may be just interested in the resources available. Fix this by possibly adding a few introductory pages to the website for first-time users.

#### H2-8: Aesthetic & Minimalist Design [Severity 3][B,C,D]

The design contains mainly text, which is overwhelming. Sometimes it is unclear when the text is a link (the home button for example) or when the text is just dead text. Perhaps add more icons or images to break up the large amount of text. Description texts are too wordy. Limit button descriptors to 3 words max. Be more concise and avoid running sentence descriptions in titles. Avoid writing too much text. Delineate title text from descriptions.

#### H2-8 Aesthetic and Minimalistic Design [Severity 2][D]

Website feels sterile and unfriendly. Incorporate friendly hi-def background pictures and warmer coloring to make website feel more friendly. Fonts, colors and aesthetic require additional work. Fonts are difficult to read and not relevant or aesthetically pleasant. Colors (red) are gaudy and not pleasant. Choose calming colors (blue). Choose simple, easy-to-read fonts (e.g. Tahoma).

#### H2-8 Aesthetic and Minimalist Design [Severity 3][A,B,C,D]

A graph is not a straightforward way to communicate information. Again, this is very confusing, overwhelming, and hard to understand. The value proposition of Compass is to make the sexual reporting process simple and straightforward, but the website completely loses that with pages like this. This can be solved by communicating the information in a different way with as little text as possible. Alternative ways to deliver this include using a few bullet points or sentences, or playing a video.

#### H2-8 Aesthetic and Minimalist Design [Severity 3][A,B,C,D]

The font is hard to read. The text under the buttons is too small and overwhelming. Button design is not intuitive for navigation, and as a result it's not clear which buttons are clickable for navigation. Visual design is glaring and unfriendly. Also, the size of header text and button texts are the same – so it looks like both of these text items are of equal importance. Other fixes: Using a different font, completely getting rid of the text under each button, and making the header text a larger font size then the button text. Make buttons rounded with more concise text and friendlier coloring. Make buttons more obvious that they are clickable. Make non-clickable assets smaller (e.g. black buttons in track progress).

## H2-9 Help Users Recognize Diagnose & Recover [Severity 0][D]

There is no method for tracking user login-logout session information. This is particularly relevant since the application is a website and not a mobile application and so users may have to login/out often. Sensitive information is transmitted in the app, so login-logout design must incorporate extra security features to protect privacy.

# Homepage: H2-1 Visibility of System Status [Severity 2][D]

The interface screens for Clarify/Resource Type webs do not sufficiently highlight the type of resource in the resource web. For example, "Mandatory Reporter" is a bubble of same size and shape as all reporter agents. This can be disorienting for the user to understand what the category of resources he is viewing. Make resource type (e.g. "Mandatory Resource") a Title front and center in the screen.

#### H2-2 Match Between System & Real World [Severity 1] [D]

## H2-2 Match between system and the real world [Severity 1][A,C]

It is not clear what the purpose of Compass is because the phrase "find your way" is not descriptive or specific enough. This

<sup>&</sup>quot;Resources" is an abstract, ambiguous/technical term. This is confusing for a user. (Resources can be.. financial, technical, counseling). Replace this and other technical terms with user friendly phrases. E.g. "Counselors"

website is about sexual assault and that it not immediately clear. To solve this, you should have a slogan or motto statement that communicates that Compass makes the sexual assault reporting and recovery process simple and straightforward. Unfortunately, "find you way" does not do that because it is too ambiguous.

## H2-2: Match between system & real world [Severity 2] [A,B,C]

The text of each button is not easy to understand. The button text should use layman language. For example, what is the difference between "confidential" and "anonymous"? This can be fixed by adding clarifying words, so the user easily can understand what each button means.

#### H2-4 Consistency and Standards [Severity 2][A,C]

The header says 3 resources, but there are 4 buttons on the page. I understand the last button says, "see all resources", but this is still inconsistent. Solve this by have the same number of buttons as the number referenced in the header.

#### H2-4 Consistency and Standards [Severity 3][A,B,C]

"Connect" and "support" seam similar in meaning. You can solve this by adding clarifying words so it is clear what each tasks each button is refers to. Another possible solution is to combine the buttons as one task.

#### H2-4: Consistency & standards [Severity 3][B,C,D]

Both the "Clarify" and the "Connect" buttons on the homepage can lead to the same flowchart. To get to the flowchart, you can click either "Clarify" à "See all resources" or "Connect" à "Find your own resource." Users may be confused that separate paths lead to the same screen, or wonder how the two flowcharts are different. Isolate the flowchart to one path.

#### **Clarify:** H2-1 Visibility of System Status [Severity 2][D]

#### H2-2: Match Between System & World [Severity 2][B]

In the flowchart, the "All Resources" bubble branches out to three options – "Mandatory Reporter," "Non-mandatory Reporter," and "The Bridge." This did not seem logical, and I was very confused as to why the Bridge was connected to the flowchart this way. After reading the summary of the Bridge, I now understand that sometimes the Bridge has to report, and sometimes they do not, but there has to be a better way to represent that. Add a bubble between "All Resources" and "The Bridge," like "Sometimes Reports."

Unclear what organization the user is exploring. E.g. what college? Add a title explaining which organization the application is currently affiliated with (particularly important as multiple organizations are included).

#### H2-4 Consistency and Standards [Severity 2][D]

Map elements should display consistent amounts of information. If the Bridge has information about anonymity, all other elements should have identical levels of detail. Remove anonymity information from the Bridge map element.

#### H2-4: Consistency & standards [Severity 2][B]

There is an "Anonymous" category in the "Clarify" section, but there is no "Anonymous" category in the large flowchart. There is no reason why this category should disappear. Add this category to the large flowchart.

#### H2-4 Consistency and Standards [Severity 1][D]

Acronyms are not 'dotted' causing confusion. (e.g. is SARA a person's name?). Add dots to acronym names to avoid confusion (e.g. S.A.R.A.)

#### H2-4: Consistency & standards [Severity 2][B]

The shape of the flowcharts in the more specific categories in "Clarify" like "Mandatory Reporter," "Confidential," and "Anonymous" does not match their shape in the large flowchart. This makes it unclear whether or not the information in the specific categories is the same as the large flowchart. Do the specific categories have more resources? Less? Make sure the smaller flowcharts match the shape of the large flowchart.

#### H2-5: Error prevention [Severity 1][A,B,C]

If I click on a button, and realize that I am in the wrong place, there is no back button to go back to the clarify page. Instead, I have to go to the homepage and then back to the clarify page. Fix this by adding a back button on each page of clarify task pages.

#### H2-7: Flexibility & Efficiency of Use [Severity 2][B]

Resources are only separated by whether or not the resource has to report or not. There is no way to filter the resources by other qualities, like proximity to campus or in-person meetings vs. calling center. Have an option for how the user wants to filter resources.

#### H2-7 Flexibility and Efficiency of Use [Severity 3][D]

No navigation bars are used, which limit rapid cross-function navigability in the website. Create a ubiquitous navigation bar for major functionality for return users to quickly jump to key functionality (e.g. chat)

#### H2-7 Flexibility and Efficiency of Use [Severity 2][C]

On the resource pages, it is not clear what is clickable and what is not clickable and it is not clear where things take you. To fix this, I suggest maybe making the resources a different shape to distinguish them and make it clear that it leads to more information about that resource by adding a "More info" button.

#### H2-8 Aesthetic and Minimalist Design [Severity 3][A,B,C]

The text under each button is very hard to read and is not easy to understand. The text also makes the page more overwhelming for the user. Fix this by getting rid of the text.

#### H2-8 Aesthetic and Minimalist Design [Severity 2][A,C]

On each resource page, there is way too much text, making it almost impossible for a user to actually learn about the resource with a considerable amount of effort. Fix this by having a one-sentence description of the purpose of the given resource. Be as concise as possible. It also seems unnecessary to have the phone number, email, address all listed on this page. The website could just be listed, which would already have all this info and more.

#### H2-8: Aesthetic & Minimalist Design [Severity 2][B]

The flowchart is very busy, and it's difficult to find the starting point at first glance. One option is to make the "All Resources" bubble more apparent. The other option, which I prefer, is to have a more dynamic screen that begins zoomed in on just the "All Resources," and moves/expands to other branches and paths as more bubbles are selected.

#### H2-10 Help and Documentation [Severity 3][D]

There is limited functionality to search for resources. Exploring via a visual map, in which assets are arbitrarily placed is not optimal for finding resources. Create search feature to find a resource by name.

#### **Connect** H2-1 Visibility of system status [Severity 2][A]

On the "Be recommended a resource" page, after you fill out the question list and a resource is shown, the website does not communicate to the user why this specific resource fits the users needs. Fix this by giving the user appropriate feedback after the questions are answered and a resource is shown.

#### H2-4 Consistency and Standards [Severity 2][A]

It is not clear what the difference is between "find your own resource" and "be recommended a resource". This can be fixed by rewording the button texts to ensure they are clear, or by combining the buttons into one if the offer a similar use.

#### H2-4 Consistency and Standards [Severity 3][D]

There is no confirmation page after user fills out a "Recommend a Resource" page. Users expect this, and will be disoriented if not. Create a confirmation page upon successful submission of web form with next steps and what to expect.

#### H2-5 Error Prevention [Severity 2][D]

There is no way to save form input information if user accidentally leaves page. Create confirmation pop-up if user leaves the page with information filled in the page, or right before the user submits form information.

#### H2-6 Recognition rather than recall : [ Severity 3][A,C]

On the "find your resource page" the graph requires the user to be able to remember different nodes to be able to read the information properly. This makes it very difficult to interpret the information. Fix this by representing the information in a much more simple format.

#### H2-8 Aesthetic and Minimalist Design [Severity 1][A]

On the "Be recommended a resource" page, the questions and the answer choices are the same size. This makes them look these items are of equal importance, when the questions are probably more important. Fix this by making the questions a larger font size then the answer choices.

#### H2-8 Aesthetic and Minimalistic Design [Severity 2][D]

Web forms are visually confusing and poorly laid out. Line up question text and multiple choice bubbles and clean up the web

form.

## H2-9 Help Users Recognize, Diagnose & Recover [Severity 2][D]

If there is logic in the "recommend a resource page", then appropriate error prevention messages need to be generated. E.g. If the user submits a "Recommend Me a Resource" without inputting and information. Add Error messages if user accidentally enters a blank form.

## H2-9 Help users recognize, diagnose, and recover from errors [ Severity 3][A]

If you click "be recommended a resource" without answering all of the questions, a resource is still shown to the user. Instead, an error message should be shown to remind the user that he/she needs to answer all the questions to be given the best resource possible.

#### H2-10: Help & Documentation [Severity 3][B,C]

There are no instructions for the questionnaire. It is unclear whether or not each question is mandatory to answer; for example, if a user has no preference between on campus and off campus resources, do they have to select an option? Either add an option that says "No preference" or add clarifying instructions at the top.

#### **Support:** H2-1 Visibility of System Status [Severity 2][D]

Chat screen should have a standout title describing the screen function and the key information about the chat resource. This should stand out of the block paragraph description, which makes it more difficult to easily capture system status of the page. Add Chat title to chat screen. Add Chat personnel information in corner panel.

#### H2-1 Visibility of System Status [Severity 3][D]

Track your progress page has no title and can be confusing to understand system status on the page. Add title to the Tracking Progress page. Same for Recommend a resource page.

#### H2-1 Visibility of System Status [Severity 3][D]

Chat box has no visible metrics to track how recent (and thereby how relevant) the messages are. Add timestamps to chat window

#### H2-1 Visibility of System Status [Severity 2][D]

Chat functionality has no method for pinging new messages to user, particularly if viewer leaves the webpage. Convert chat functionality to pop-over chat box that persists across different web pages and has indicator for new messages.

#### H2-2 Match Between System & Real World [Severity 2][D]

Track progress maps use space arbitrarily and untidily. Red triangles for beginning and end are arbitrary. Incorporate visual design that is visually aligned for better organization and presentation. Choose design elements that are relevant, like a person silhouette, or a finish line.

#### H2-2 Match Between System & Real World [Severity 3][D]

Track progress page is confusing. User cannot tell what is past and what is future. Create a visual cue to determine where the user is in the "roadmap."

H2-3 User control and freedom [Severity 0][A] On the chat page, there is no way for a user to edit or undo a message that is sent. A user

should be able to easily undo an action. Fix this by adding edit/delete message options.

#### H2-4 Consistency and Standards [Severity 3][D]

Standards in Chat Design information are not met. There is no information about the counselor to which the user will be confiding. Add basic information and a picture as a mini-profile in the corner of the chat page.

#### H2-4: Consistency and Standards [Severity 0][C]

The track your process button does not seem to fit and doesn't feel like a necessary feature as some users would prefer to keep their process confidential and would not want anyone else to see what they did. I would suggest to get rid of this feature all together.

#### H2-5 Error Prevention [Severity 3][D]

If the user accidentally exits the chat screen, chat and session information is lost. Warn user with pop-up before user leaves chat.

#### H2-5 Error prevention [Severity 2][A]

If a user tries to send an empty message in the chat, a pop-up window should show to prevent that. Another thing to consider is showing a pop-up window for the first message a user sends, since the conversation will probably be sensitive. This will ensure the user didn't click send by accident, and that the user is comfortable communicating with the peer counselor.

**H2-6 Recognition rather than recall [ Severity 2][A]** There is no clear send message button on the chat page, so I don't even know how to send a

message. Fix this by adding a clear send message or send button.

#### H2-6 Recognition Rather Than Recall [Severity 2][D]

Chat input bar is not intuitive to click to input chat. Users need to recall where to tap to activate the chat input box. Change coloring of bar to clarify contrast from read-only portion of chat

bar. Type inviting default text e.g. "Type your message..."

#### H2-8 Aesthetic and Minimalist Design [Severity 0][A]

There is too much text above the chat box. This is distracting, because it takes away from the focus of the page – which is the chat box. Fix this by removing this text or making is much shorter (no more than 4-5 words).

#### H2-10: Help and documentation [Severity 2][A,B]

There should be some help documentation on the chat page, so it is clear that the contents of the chat conversation are completely confidential and private. A section like this would be good so the user can have more confidence in the product. Fix this by adding a help button, which clearly explains the terms of use of Compass.

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
[H2-1: Visibility of Status]	0	0	5	2	0	7
[H2-2: Match Sys & World]	0	2	4	1	0	7
[H2-3: User Control]	1	0	1	1	0	3
[H2-4: Consistency]	1	1	7	4	1	14
[H2-5: Error Prevention]	0	1	2	1	0	4
[H2-6: Recognition not Recall]	0	0	3	2	0	5
[H2-7: Efficiency of Use]	0	1	2	1	0	4
[H2-8: Minimalist Design]	1	1	3	4	0	9

### 3. Summary of Violations

[H2-9: Help Users with Errors]	1	0	0	1	0	2
[H2-10: Documentation]	0	0	1	2	0	3
Total Violations by Severity	4	6	28	19	1	58
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
sev. 0	50%	0%	25%	25%
sev. 1	67%	17%	33%	33%
sev. 2	36%	29%	21%	57%
sev. 3	26%	37%	32%	68%
sev. 4	0%	0%	0%	100%
total (sev. 3 & 4)	25%	35%	30%	70%
total (all severity levels)	35%	27%	25%	55%

#### 5. Summary Recommendations

Overall, Compass is organized in a logical fashion which allows users to easily clarify, connect and support while going through sexual assault reporting. You did a great job highlighting the major features of each resource and categorizing them. Overall, the app design is rough and should employ standard visual design elements, such as icons, appropriate colors and fonts, visual organization between page elements, etc. This can be tuned up with greater care for making visual design clean, visually appealing and intuitive. Reduce the text across the website, pick a much more readable font, and supplement the graphs with either a video or a few easy to read bullet points. Make sure the size of the buttons and the font size within the buttons remain consistent throughout the website. Title elements and page structure can be organized to make the page function more obvious. Functionally, several elements can be included to improve page flow and make user experience more intuitive. Including a main navigation bar that is constant across pages, enabling more robust error prevention and recovery across form and user session tracking, and making interactive navigation elements would visually intuitive will substantially boost user experience. There was also a lack of instructions for various pages; look at each page carefully and consider whether a first-time user would have any problems navigating through the page. Finally, the application as a whole requires trust from the user, given the use context. More content and care can be given to appeal to make the application seem more trustworthy. This can be done by making the visual design feel more polished,

adding in terms of service language to clarify the limits of data usage by the app and clarify the users' right to privacy, and adding other privacy-buffing features.