Heuristic Evaluation of Captiva

1. Problem

Captiva is an app that allows journalists to streamline their notetaking, collaboration, and production processes, in addition to allowing them to complete all of these processes on the go on their mobile device.

2. Violations Found

1. H2-4 Consistency & Standards / Severity 3 / Found by: A, C, D

The interface used the string "Save" on the first screen for saving the user's profile, but used the string "Update" on the second screen. Users may be confused by this different terminology for the same function.

Fix: Use the same string on each screen.

[...list violations here with a blank line between each -- number from 1 to n, where n is total # of violations]

1. H2 Match between system and the real world / Severity 4 / Found by: A, B, C

- a. Strange to have various modalities and navigation buttons in the bar traditionally used for autocorrect. Makes them hard to find.
- b. Fix: Move the modes to the top or bottom of the screen to make them easier to find

2. H8 Aesthetic and Minimalist Design/ Severity 3 / Found by: A, C, D

- a. Place to enter elements appears cluttered and kind of overwhelming
 - b. Fix: Maybe less of elements need to be displayed? When adding a new one is it necessary to see all previous ones?

3. H8 Aesthetic and Minimalist Design/ Severity 2 / Found by: C, D

- a. Project screen also appears overwhelming and might be nice to have more color contrast
- b. Fix: Lex cluttered boxy design, maybe something where active elements you're looking at appear big and the rest are clearly accessible but smaller so their word isn't overwhelming

4. H2 Match between system and the real world/ Severity 1/ Found by: C

- a. Elements isn't a term that I associate with journalism. Is there a more descriptive and realistic word to refer to these tidbits of information by?
- b. Fix: New word for elements that is used by journalists tips? Leads?

5. H1 Visibility of system status/ Severity 4 / Found by: A, B, C, D

- a. On elements screen, unclear that we're here. The projects screen is more clearly marked with what this page is, but elements screen is not clearly labeled, and it makes it confusing what screen we're currently on.
- b. Fix: Label Elements screen as clearly as projects are labeled

6. H3 User control and freedom/ Severity 4 / Found by: A, C

- a. I'm very confused how to assign an element to a project. Where does the user do this? My intuition says i should click on the element and see if it's assigned to a project or not, and then have the option to assign it to a project, but it's not there.
- b. Fix: Add a more clear button to add an element to a project

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7. H4 Consistency and Standards/ Severity 2 / Found by: A, C

- a. I'm confused as to what the push pins mean. After clicking on an element and being directed to the "similar elements" screen, clicking a push pin seems to like tie them together as the push pin goes down, and for some reason all of the push pins are in dark now, implying that all of them are important. It seems like the push pin is being used for two different things here. They also look very similar, and it might be nice to make these two states look a little different.
- b. Fix: Find a new icon for "tying similar elements together" or grouping if that's the action you're getting at here. Otherwise, I'm unclear what this action of selecting a similar element should represent.

8. H3 User control and freedom/ Severity 3 / Found by: C, B

- a. Is there any way to add tags or remove them? Or can you only have tags that the AI generates? Would be nice to give the user more agency in choosing these tags and having a clear + button as well as remove button.
- b. Fix: Add a "add" button and "remove" button to give the user choice about these tags. Also explain what these tags are - are they autogenerated? Can the user edit them?

9. H4 Consistency and Standards/ Severity 2 / Found by: C

- a. Why are "Al Jazeera" and "Elena S"'s names appearing similarly? My interpretation is the Al Jazeera was someone that was interviewed by the reporter, whereas Elena S is a different reporter who is collaborating on this project. As these are two really different roles, it seems strange to display these names of people in two roles in the same way in the same position.
- b. Fix: Distinguish between other interviewer's elements and quotes from interviewed people through different colors of elements, or putting the names in different positions in the dialogue boxes.

10. H10 Help and documentation/ Severity 3 / Found by: A, B, C

- a. I'm confused what the numbers in colored circles mean on the "Who to ask" tab. Do these numbers quantify how sure the AI is they'll be helpful? Are they measuring how many contributions they've made to similarly tagged elements? How credible or experienced they are?
- b. Fix: Potentially adding a header or a help button for the user to learn about what this system means.

11. H4 Consistency and Standards/ Severity 1 / Found by: C

- a. On the "Who to ask" tab, why does Peter Hansel's subtitle have an "@" next to it whereas the other ones don't? What are the subtitles to begin with? Julia's looks like a story she's working on, whereas Amy's looks like her role within the organization.
- b. Fix: More consistency in what the subtitles displayed are, and how they're displayed.

12. H7 Flexibility and efficiency of use / Severity 3 / Found by: B, C

- a. I know this is just a medium-fi prototype, but it seems like the task of asking someone about a story or element is not quite complete. What happens when you push on someone to ask? Does it automatically send a message to them? How do you know if this worked? This taskflow seems a bit incomplete. Is the user supposed to reach out to them themselves?
- b. Fix: Some follow up screen or message to allow the user to actually message the person about the element, or if it does it automatically, some sort of confirmation that this message was sent. If user should contact the person themselves, put a phone icon or something

13. H4 Consistency and Standards/ Severity 2 / Found by: C

- a. On the "Who to ask" tab, the "Search for another topic" field is confusing to me: aren't we viewing people relevant to an "element" about "pipe bombs?" Is an element a topic? Is a topic a project?
- b. Fix: If this is intended to mean find people about a different element, switch the field to "Search for another element" to be consistent.

14. H9 Help users recognize, diagnose, and recover from errors/ Severity 3 / Found by: A, C

- a. In the "Send to Newsroom" taskflow, after selecting the elements we wish to send and clicking "Add Recipients" there appears to be no way to go back to the previous screen to change the selection. Instead, we have to go all the way back to Projects and can't edit our work of selecting the elements, or proceed with "Sending to the Newsroom"
- b. Fix: Add a back button at this step

15. H1 Visibility of System Status/ Severity 1 / Found by: C

- a. On the "Add Recipients" screen of the "Send to the Newsroom" screen, why is "Orchids dying…" displayed? Is this the project name? The way it's displayed looks more like the display of elements. If this is an element, why is it the only element displayed, when multiple were selected to send to the newsroom?
- b. Fix: Change view of header on this page so it's clear if it's a Project Name, or what.

16. H4 Consistency and Standards/ Severity 2 / Found by: C

- a. Seems weird that the display for selecting recipients to send to the newsroom looks so drastically different than the screen to select people to "Who to ask," when both have the shared purpose of displaying people to involve further in the project.
- b. Fix: Create a consistent display you use both when selecting people and displaying their role/title below

17. H4 Consistency and Standards/ Severity 2 / Found by: C, D

- a. Confusing that elements on the main element page are displayed differently than the individual elements that fall under a Project. In the project view, it looks like the elements in this project are formatted more like the project title.
- b. Fix: The distinction between element and project might be more clear if elements were always displayed as light gray boxes with light writing and a vertical bar with flags, whereas projects were always displayed with the number of elements below and a last editor field as to distinguish here.

18. H2 Match between system and the real world/ Severity 3 / Found by: C, D, B

- a. I'm confused on the elements view with the "Edit all entries: Project, Flagged" appearing below (opposed to the keyboard), what the down arrows are. I would think they would be to re-order the elements, based upon queue systems I've previously interacted with where you often press and hold on a similar icon and are able to re-order them. However, when I click on this down arrow, I'm brought to a detailed view of the element, either because this feature isn't yet working or it's designed to be a "dropdown" detail view of the element.
- b. Fix: If this should be a dropdown view of the element, consider making it a side arrow which we previously know as clicking to expand the dropdown menu, at which point it could switch to a down arrow. If you're looking for this to mean like "move element down one," then I think you're fine, and it's more a limitation of figma / medium-fi prototype.

19. H3 User control and freedom/ Severity 3 / Found by: A, C, D

a. It makes sense that clicking "Done" on the elements view with text brings me to a view of elements where I can filter by projects and flagged. However, I don't see why clicking "Done" at this point brings me to a view of Projects, and not just a view of

elements with the filters I've specified. I think Done would mean like "opt out" and not that I want to proceed to a view of Projects.

b. Fix: Make a button for Done that brings you to just a view of elements, and a different button to then enter into Projects.

20. H2 Match between system and the real world/ Severity 2 / Found by: C

- a. What does "Edit all entries: Project, Flagged" mean? This menu control seems like it should be filtering the elements by whatever I specify, and "Edit all entries" doesn't seem like an appropriate label for this.
- b. Fix: Change to "filter all elements" if this is the intended use of the menu.

21. H8 Aesthetic and minimalist design/ Severity 2 / Found by: C, B

- a. "Back to elements list" button is very hard to read, and the back arrow and the word back are a bit redundant.
- b. Fix: Have a back arrow and label that simply says "Elements"

22. H8 Aesthetic and minimalist design/ Severity 1 / Found by: C

- a. I feel like a fair amount of the view of the element under "Similar Elements" is used for the person's name and face, which is small to begin with and not adding much. I would evaluate what information you think is most important to display here, and allocate space accordingly. I would think it would be what the content of the element is, with a smaller, lighter, non-bolded name below it, and no space for the picture.
- b. Fix: Evaluate what information is most relevant to display and adjust labels to allocate space accordingly.

23. H9 Help users recognize, diagnose, and recover from errors/ Severity 3 / Found by: C, D

- a. No "back" button in the Who to Ask to go back to the specific project, you can only go back to the general Projects page which is clunky and doesn't help users recover if they decide they don't want to ask any of the people suggested.
- b. Fix: Add a back button to go back one screen to this screen so you don't have to go all the way back to projects and re-find the project you were working on.

24. H5 Error prevention/ Severity 3 / Found by: C

- a. In the "Send to Newsroom" screen, you're able to click "Prepare for Newsroom" without selecting any of the individual elements and don't get an error message saying you must select one. Since the Prepare for Newsroom seems like it's clickable at this point without selecting any, it's a bit misleading for the user to click it and then just sit there and wonder if the entire set of elements was sent, or nothing.
- b. Fix: Make it clear the Prepare for Newsroom button can't be clicked until elements are selected, and if this is attempted, send an error message telling the user to select a message.

25. H7 Flexibility and efficiency of use/ Severity 1 / Found by: C

- a. On the projects list, you have the option to skip straight to asking someone about a project, but must go through two screens to send to newsroom.
- b. Fix: Might be nice to add in a shortcut below "Ask" to be "Send" so you can quickly get a project out the door, as this is a pretty intentional choice and you likely know you want to do it.

26. H7 Flexibility and efficiency of use/ Severity 1 / Found by: C

- a. Once an element is clicked on to view in more detail and the similar elements are displayed, it is clunky to go to Projects view and you must instead go back to the main elements screen, and then navigate to projects
- b. Fix: Add a button to go straight to projects from this screen, and also maybe display which project the element belongs to that you are viewing in greater detail.

27. H6 Recognition rather than recall/ Severity 2 / Found by: C

- a. Once you initially login, there's no way to view or change your organization. If someone was working on multiple organizations, they would have to remember whatever organization's profile they were last in, and probably have to quit out of the app and re log-in to change that.
- b. Fix: Show some header with the current workspace, and a drop down menu to change that if there's multiple active ones for the user.

28. H6 Recognition rather than recall/ Severity 1 / Found by: C

- a. When you click on a project to get more information about it, you can see whether the elements under it are flagged, but you no longer can see whether the project itself was flagged, and instead have to navigate back to the Projects list to see this information.
- b. Fix: Add a small flagged icon next to the header of the project to display this information.

29. H6 Recognition rather than recall/ Severity 2 /Found by: A

- a. On the home page, there's a button to add a new organization. This violates H6 because a good design should minimize the user's memory load by making objects, actions, and options visible. The button is too small and ordinary to stand out as an actionable item.
- b. Fix: I'd using accent colors and increasing the button size.

30. H1 Visibility of system status / Severity 2 / Found by: A

- a. On the login page the arrows to select the organization, are not available until after typing in a username and password. As a result, we don't really know where we are and what the status is for where we are.
- b. Fix: To fix this, we can use either the purple or orange color for these arrow buttons instead of the grey.

31. H2 Match between system and the real world / Severity 1 / Found by: A

- a. The name of the button "New Organization" doesn't necessarily match up with what that button is doing in the real world. The idea is that you choose to add or sign into a different group for collaboration purposes, but each organization could have multiple groups.
- b. Fix: I would change this text to say "New Group"

32. H2. Match between system and the real world / Severity 1 / Found by: B

- a. Problem: When the user is clicks on a project they have the option to send the story to the newsroom. In a way, this is a "submit" button, which is normally found at the bottom of the page in order to encourage the user to scroll through all the work before actually submitting.
- b. Fix: I recommend placing the "Send story to newsroom" button at the bottom of the screen (though not page so it's always viewable" in order to match this real world expectation.

33. H4. Consistency and standards/ Severity 1/ Found by: D

- a. Grey and black color scheme with only one purple sorting button. The purple color doesn't fit with the color scheme if it only appears once, and it grabs the users attention when its function isn't that important on the page.
- b. Fix: Have every button or text box fit within the color scheme unless it is very important and needs to grab the users attention.

34. H4 Consistency and standards / Severity 3 / Found by B

- a. Once the user is ready to send a project to a newsroom, there are presented with a list of quotes, facts, and more. The button "prepare for newsroom" simply takes them to a screen called "add recipients" and then there's an option to send to the newsroom.
- b. I'd recommend changing the name of the button "prepare for newsroom" to "add recipients"

35. H5. Error prevention / Severity 3 / Found by: B

- a. Problem: When the user is selecting which quotes, facts, recordings, etc, to send to the newsroom, they are not currently given the option to see all of their selections in one place. While in the example in Marvel this is fine (since you can see all the selections), this would be an issue with more items present in a scrollable format.
- b. As such, it would be imperative to have a "review all selections" screen before the user decides to send to its recipients. This prevents errors.

36. H6. Recognition rather than recall/ Severity 3/ Found by: D

- a. When adding a new story, there is an "up arrow" and a "done" button next to one another. Both of these buttons can be used for similar a function, that being sending out the text you just entered. A user could be confused as to which one of these buttons sends out their update.
- b. Fix: I believe the "done" button is used to put away the keyboard, so maybe use "cancel" instead of "done."

37. H3. User control and freedom / Severity 3 / Found by: B

- a. Problem: When the user is adding recipients to add a story to a newsroom, there is currently only a radio button group of options. However, it is possible for journalists to be sending this to external or other members, so it is imperative to have the ability for them to add in additional emails/people in this field.
- b. Fix: I recommend having an "add" button with a field for emails.

38. H4. Consistency and standards / Severity 2 / Found by : B

- a. Problem: The user has the ability to archive a project, but I did not see "archived projects" anywhere in the rest of the application. It is important to let the users know where these archived projects will be stored.
- b. Fix: I recommend adding in a filter in the "projects" page that lets you filtered by archived projects or not.

39. H9 Help users recognize, diagnose, and recover from errors / Severity 3 / Found by: A

- a. The preview for what sending the information to the newsroom would look like, doesn't allow users to make edits to certain quotes or make changes if reporters made mistakes in documenting information. This prevents users from recovering from mistakes and can be fixed simply by adding an edit button to this page.
- b. Fix: Allow the user to edit elements before sending.

40. H4. Consistency and standards / Severity 2 / Found by: B

- a. Reports are able to add photos and voice recordings in the notes section of the app, but then when sending information to the newsroom it appears as though there are only two categories: quotes and facts.
- b. Fix: To be consistent with other areas of the app, users should be able to add photos and voice recordings to the package of information that they send to the newsroom.

41. H2. Match between the system and the real world/ Severity 2/ Found by: D

a. The section at the bottom of a page labeled "Edit all entries" has a dropdown menu. However, it is at the bottom of the page, and the arrow points down. It doesn't make sense for the arrow to point down as the dropdown menu is at the bottom of the page and there would be nowhere for the menu to drop down to. b. Fix: Either change the arrow from pointing down to up, or move the entire segment to the top of the page.

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	1	1	0	1	3
H2: Match Sys & World	0	3	2	1	1	7
H3: User Control	0	0	0	3	1	4
H4: Consistency	0	2	7	1	0	10
H5: Error Prevention	0	0	0	2	0	2
H6: Recognition not Recall	0	1	2	1	0	4
H7: Efficiency of Use	0	2	0	1	0	3
H8: Minimalist Design	0	1	2	1	0	4
H9: Help Users with Errors	0	0	0	3	0	3
H10: Documentation	0	0	0	1	0	1
Total Violations by Severity	0	10	14	14	3	41
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	100%	100%	100%	100%	
sev. 1	10%	10%	70%	10%	
sev. 2	21%	21%	64%	21%	
sev. 3	36%	71%	64%	36%	
sev. 4	100%	66%	100%	33%	
total (sev. 3 & 4)	47%	75%	71%	29%	
total (all severity levels)	29%	39%	68%	24%	

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

5. Summary Recommendations

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In general, our group felt the need for a more clear menu to help the user navigate between elements, projects, and other task flows. Currently, there's no clear menu bar to switch between these options. Additionally, we feel that Captiva would benefit greatly from more consistent back buttons, and functionality to edit and de-select certain choices on back screens, instead of having to start over with the task. Further more, emphasis and thought into aesthetic and visual brand would help make the display cleaner and less cluttered and overwhelming. Lastly, adding user flexibility for removing and adding recipients, tags, and organizations would be extremely valuable to the end users of the application.

Severity Ratings

- 0 don't agree that this is a usability problem
- 1 cosmetic problem
- 2 minor usability problem
- 3 major usability problem; important to fix
- 4 usability catastrophe; imperative to fix

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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

H5: Error Prevention

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, kb shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design

• No irrelevant information in dialogues

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