Heuristic Evaluation of Spark

Problem

Spark is a mobile application that allows teachers to capture, track, and and share their students' important learning moments.

Violations Found

1 [H2-10: Help & Documentation] [Severity 1] [Users A]

The home screen has a help button next to password that highlights the sign in button. Users may not need help in this screen as it is intuitive how to sign in or register. Fix: Remove the button or make it functional by having a popup that explains what to do instead of highlighting the sign in button.

2 [H2-8: Aesthetic & Minimalist Design] [Severity 2] [Users A, B, C, D]

The Capture Moment screen has an icon in the lower left corner that looks like a trash can instead of a button that leads to the Moments archive. Users may be confused about what this is. Fix: Change the design of the icon into something more recognizable.

3 [H2-5: Error Prevention] [Severity 4] [Users A, B, C, D]

The "Archive" button can always be found in the bottom left of the screen while creating   a new memory. Accidentally (or intentionally) tapping the "Archive" tag while creating a moment might lead to the user losing the entire moment. Fix: remove the button altogether and rely on the navigation menu to get from the moments page to the view students page and vice-versa.

4 [H2-4 Consistency and Standards] [Severity 2] [Users A, B, C, D]

In the main menu, the student view page is referred to as "Archive". However, when this page is opened, the new title screen is "All Moments." Fix: the naming convention should be consistent.

5 [H2-4 Consistency and standards] [Severity 1] [Users B, C]

"All Moments" page title might be confusing – some users could think each block on the page represents a moment instead of a child. Fix: Change the title of the page to something along the lines of "All Students."

6 [H2-9 Help users recognize, diagnose, and recover from errors] [Severity 1] [Users A, B, C]

Coloring the "Untagged" symbol as red is alarming – is something wrong here? Did the user make a mistake? Is this the first thing we want users to look to when they open the page? Fix: Use a blue-grey color instead to avoid this problem.

7 [H2-2 Match between system and real world] [Severity 2] [Users A, B, C,D]

It is not intuitive to think of a child as a tag – so the "Untagged" box in the "All Moments" page can be confusing. Some might think the box represents moments that were untagged within learning categories and wonder why it was included under a list of students. Fix: think of other places for this category to live in, perhaps in the orange menu screen.

8 [H2-4 Consistency & Standards] [Severity 2] [Users B, C, D]

I do not understand why untagged is in the bottom right of grid. What is there are more than eight students? Does it get pushed down? Fix: Put on top left instead

9 [H2-2 Match between system and real world] [Severity 2] [Users A, B, C, D]

Inexperienced users might not understand that the numbers in each box represent the number of moments that each child has, instead of something else (Comments? Updates? Age? Unsent moments?) Fix: Consider adding the word "Moments" to each box.

10 [H2-2: Match Sys & World] [Severity 3] [Users A, B, C, D]

In the screen of Amy's moments, there is an option named "Tag" under Amy's picture that pops up a list of tags to sort the moments by. This is confusing because "Tag" comes across as an action the user can do since it is a verb. Replace with "Filter" or "Sort".

11 [H2-5 Error prevention] [Severity 4] [Users A, B, C, D]

The app does not ask user to confirm before deleting a draft moment that has not been saved. Fix: Have a popup that prompts the user if they really want to delete the moment.

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

After the user takes a picture/video/voice recording, they are taken to a screen where they can preview the content before it is added to a moment. The X in these screens represents "back", instead of "quit". Fix: The user should have the option to return to the image/video/speech recording screen with a back button or quit altogether with the X.

13 [H2-1:Visibility of Status][Severity 2][Users A, B, C, D]

Confusing that there are four types of capture options but that you can only send certain combos at once. Fix: Only show options currently available to users.

14 [H2-3 User control and freedom] [Severity 4] [Users A, B, C, D]

After adding content to a moment and returning to the screen with the four bubbles, there is no way to edit the content that has already been added. The user would have to delete the entire draft and start from scratch.

15 [H2-5 Error prevention] [Severity 3] [User B]

Allowing the user to save the moment before identifying the child creates the issue of "untagged" moments. Solve this problem by not allowing users to submit moments without identifying children, or by classifying these unfinished moments as "drafts" that can be completed later.

16 [H2-5 Error prevention] [Severity 3] [Users A, B, C, D]

When the submit button is pressed, the application does not prompt for confirmation. This might lead to frustrating situations when flawed moments are saved and cannot be easily edited. Fix: After submitting a moment, an update banner should be shown allowing the user to "Tap to Undo."

17. [H2-2: Match Sys & World] [Severity 2] [Users A, B, C, D]

The Spark label on the share moments screen pulls up the Capture Moment screen. This isn't intuitive for users especially since the Spark logo isn't used elsewhere in the app. Replace "Spark" with "Capture Moment".

18. [H2-7:Efficiency of Use] [Severity 4] [Users A, B, C, D]

Just realized that I cannot send work to parents straight after tagging. I have to go back to the main page. Fix: I feel like there should at least be a link at least so that workflow is not broken.

19 [H2-7 Flexibility and efficiency of use] [Severity 3] [Users A, B, C, D]

The only way to access the "category" tag page is through the "student" tag page. Fix: the user should be able to access each independently.

20 [H2-10: Help & Documentation] [Severity 2] [Users A, C, D]

The add note label and function in the share screen doesn't seem intuitive when there is an option to add text when capturing a moment. The user may be confused about what to do here especially since there isn't much space to enter text in. Remove this or increase the size of the text box and have a more descriptive label.

21 [H2-9 Help users recognize, diagnose, and recover from errors] [Severity 2] [Users A, B, C]

When sending a moment to the parent, after tapping on the platform the application currently moves to the "Capture Moment" screen without giving additional feedback. After sending a

moment, the system should provide the user with a notification when the moment is successfully sent. If the system fails to send the moment, the error message should ask the user to try again.

22 [H2-7:Efficiency of Use] [Severity 3] [Users A, C, D]

Does not seem designed for those who want to feature different students consecutively. Fix: have way to select multiple students at once of mass send out moments.

23 [H2-10 Help and documentation] [Severity 3] [Users B, C, D]

As I mentioned in class, the concept of a moment is not immediately intuitive for a new user. The app should introduce the concept with an intro when the account is first made.

Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
[H2-1: Visibility of Status]			13 [A.B,C, D]			1
[H2-2: Match Sys & World]			7,9,17[A,B,C,D]	10 [A,B,C,D]		4
[H2-3: User Control]			12 [A,B,C, D]		14 [A,B,C, D]	2
[H2-4: Consistency]		5 [B]	4[A,B,C ,D], 8[B,C,D]			3
[H2-5: Error Prevention]				16 [A, B, C, D], 15 [B]	11 [A, B, C, D], 3 [A, B, C, D]	4
[H2-6: Recognition not Recall]		6[A,B,C]	21[A,B, C]			2
[H2-7: Efficiency of Use]				22 [A, C, D], 19 [A, B, C, D]	18 [A, B, C, D]	3
[H2-8: Minimalist Design]			2[A,B,C ,D]			1
[H2-9: Help Users with Errors]						0
[H2-10: Documentation]		1[A]	20[A,C, D]	23 [B, C, D]		3
Total Violations by Severity	**0**	**3**	**10**	**6**	**4**	**23**

Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D
sev. 0	0%	0%	0%	0%
sev. 1	66%	66%	33%	0%
sev. 2	90%	90%	90%	90%
sev. 3	66%	83%	83%	83%
sev. 4	100%	100%	100%	100%
total (3 & 4)	80%	90%	90%	90%
total (all)	82%	87%	82%	78%

Summary Recommendations

The design of the application overall is outstanding. In general, Spark is a cool app that is filling an important niche in teacher parent communication. It had a very simple and admirably elegant way of accomplishing its goal to bridge the communication gap between parents and teachers and did a great job on not overloading the user. One recurring trend is the lack of confirmation dialogs and status notifications when completing important tasks. There are many opportunities for the user to "mess up" in the moment creation interface (see heuristics above for more detail). Additionally it would be preferable for Spark to be made more intuitive by using more recognizable icons. Certain functionality should also be made more clear or labeled. We also felt that there was a lot that could be done to simplify navigation to other tasks – for example, there could be more exit options. Additionally, the title of the app could be included in the login page. One final thought is regarding the problem/solution statement of the app. While the app seeks to bridge the communication gap between parents and teachers, currently it is more a one-way street that is only focused on information flow from the teacher to the parent. This could be changed in the design by perhaps having a section in the student's list of moments that has thoughts/responses from the parent or increasing information flow from the parent back to the teacher.