

## Heuristic Evaluation of LoopedIn

### 1. Problem

LoopedIn is an app that enables students, parents and teachers to get on the same page by making the status of upcoming assignments visible to all parties and incentivizing students to stay on task through earning rewards.

### 2. Violations Found

#### 1. [H2-3: User Control & Freedom] [Severity 3] [Found by: A]

When people first sign in, there is no way for them to specify whether they are a teacher, parent, or student. This means that new accounts could be incorrectly assigned to the type of user they are. On a person's first sign in, you could have a box to check whether they are a parent, student, or teacher.

#### 2. [H2-8: Aesthetic & Minimalist Design] [Severity 2] [Found by: A]

When students click on their tasks, they are shown a page with a huge amount of information and words on it. It might be hard for students to see the higher level view of what tasks they have. Perhaps don't show the full description of the task but highlight the task name and due date.

#### 3. [H2-6: Recognition Rather Than Recall] [Severity 4] [Found by: A, B]

When students see their tasks, the overdue tasks look the same as in progress tasks. Students should have their overdue tasks jump out at them from the UI so they know they need to finish them. Maybe use color or weights to emphasize the tasks that are overdue.

#### 4. [H2-1: Visibility of System Status] [Severity 2] [Found by: A]

On the student's view for a task, there is a large circle at the top for the number of points of a task but it doesn't seem like there can be progress made towards a task reflected in that number. The student should feel like they are earning points as they work on the task and that should be reflected. Maybe have subtasks for a task for which students can earn points towards the total task.

#### 5. [H2-7: Flexibility & Efficiency of Use] [Severity 3] [Found by: A, B]

When a student views a task, the due date is in a small font at the very bottom. This makes it hard for the student to see the due date at a quick glance. You could try moving the due date up to the top or making it have a bigger weight so that it really stands out.

#### 6. [H2-4: Consistency & Standards] [Severity 1] [Found by: A]

For the student, when you first navigate to the rewards page the top bar says Rewards but then after changing the reward, it says LoopedIn at the top. This is confusing as the top bar should say the same thing for the same page at different points in time. Change it to always saw Rewards on the top of the rewards screen to be consistent.

#### 7. [H2-2: Match Between System & Real World] [Severity 2] [Found by: A, B, C]

On the parent view, when the parent first opens the app they see "Student Tasks", "Parent Tasks" and "Rewards" but it would be better if this matched with the real world. Right now what parents see is really generic but it could be changed slightly to better pertain to the parent. Instead of saying "Student Tasks" the parent's screen should show the name of their student and instead of saying "Parent tasks" they should see "My Tasks."

#### 8. [H2-2: Match Between System & Real World] [Severity 3] [Found by: A, B]

Right now, parents can only see the tasks for one student. This is an issue if a parent has more than one student they want to keep track of. You can change this by adding another screen to select a child after clicking on “Student Tasks”.

**9. [H2-3: User Control & Freedom] [Severity 2] [Found by: A, B]**

Parents’ home screen has a button for Rewards which isn’t yet built out. This forces parents to have rewards but I’m not sure why parents need rewards or whether this is monitoring the students’ rewards. You should change this to be more specific as to who the rewards are for or maybe just get rid of it if it’s not necessary.

**10. [H2-4: Consistency & Standards] [Severity 1] [Found by: A, B]**

On the teacher view, under Rewards, Ice Cream Party is listed as 150 points but when you click on it it says it is 100 points. Also, the assignment name is HW#4 when it’s created, but it shows up as #5 on the tasks screen. This is confusing as the reward should be the same amount of points on both screens. You should change the point value of one of them to match the other.

**11. [H2-6: Recognition Rather Than Recall] [Severity 1] [Found by: A, B]**

On the rewards screen where all the rewards are listed, below each reward is a description of the reward. Presumably the teacher already knows what the reward is since they created it so the information below the reward should be more helpful. Instead, it might be nice to say how many students have achieved that reward.

**12. [H2-10: Help & Documentation] [Severity 1] [Found by: A, B]**

When parents and students and teachers first log in, there is no help button or documentation for them to get started. If parents and teachers and children are confused about what to do they might have trouble using the app. You can fix this by adding some documentation or a help icon people can click on if they are stuck. Also, it was unclear what “verification required” checkbox would actually do. I would add a little “?” or something along those lines next to the checkbox, or I would add what happens in a pop-up when selected.

**13. [H2-7: Flexibility & Efficiency of Use] [Severity 2] [Found by: A, B]**

When teachers click on a student they are given a lot of information, some of which is more relevant than others. Most of the screen real estate is currently being taken up by an image that shows the amount of points the student has earned. However, teachers might find it more relevant to see what tasks the student has and has not completed. You can fix this by making the points smaller and placing more emphasis on the completed and overdue tasks.

**14. [H2-4: Consistency & Standards] [Severity 1] [Found by: A, B]**

When teachers create a task, one of the options is to select “Requires Verification”. But none of the task screens for parents and students say anything about verification. You should clarify what this requires verification means or get rid of it if it is not necessary.

**15. [H2-9: Help Users Recognize, Diagnose, & Recover from Errors] [Severity 1] [Found by: A, C]**

If teachers create a task and make a mistake, right now there is no way to edit tasks. There is also no way to delete tasks so if a teacher makes an incorrect task, it is stuck there for students and parents to see. You should make a way to edit or delete tasks for the teacher.

**16. [H2-8: Aesthetic & Minimalist Design] [Severity 2] [Found by: A, B]**

When teachers click to create a task, they are directed to a screen with a lot of information on it. Having to fill out all the information for a task in one screen can be overwhelming. Instead, it might be better to split up creating a task across multiple screens with one question per screen.

**17. [H2-2 Match between system and real world] [Severity 1] [Found by: C]**

“Loop me in ” button on home screen (sign-in screen) does not look like a button, looks like a logo. Add shadow or other 3D effect to the button, and/or change the text.

**18. [H2-3 User control and freedom] [Severity 3] [Found by: C]**

There is no “search” function on the “My Tasks” or “Rewards” sections. When there are a lot of tasks or rewards listed, it could be time-consuming to scroll through and try to find the one that the user wants to see. Add a search bar or search button on top of the screens.

**19. [H2-2 Match between system and real world] [Severity 1] [Found by: B, C]**

The 2nd screen of Student view has an image in front of the student’s name, which seems to prompt user to add a photo. But the UI design does not allow that. Remove the image as it is not really necessary or just add a basic profile functionality so it does what users expect.

**20. [H2-5 Error prevention] [Severity 2] [Found by: C]**

All tasks mark complete does not prompt for confirmation. User may accidentally tap on it and has no way to undo the action. Add a pop-up dialog to ask user for confirmation.

**21. [H2-6 Recognition rather than recall] [Severity 2] [Found by: C]**

The Rewards screen in Student view, there is confusion between currently-selected reward and other rewards. The list under “other rewards” section may mislead user to think they have those rewards in addition to the “Ice Cream Party”. Also, it is not obvious what is the reward that the student is currently working towards.

Add a header such as “Selected Reward: Ice Cream Party”, and change the “Other Rewards” heading to “You can change to other rewards...”

**22. [H2-2 Match between system and real world] [Severity 1] [Found by: C]**

In the screen after user clicked on one of the items listed in “Other rewards” in Student view, the “change reward” button may confuse user in that it may make user think this button is for changing to another reward instead of changing to this reward.

Change the text on the button to be “ Select this reward”.

**23. [H2-3 User control and freedom] [Severity 2] [Found by: C]**

When clicked on “Change reward”, a dialog pops up, but there is no way to confirm the change.

Add a button to the pop-up that says “confirm the change” to let user verify and confirm the action.

**24. [H2-6 Recognition rather than recall] [Severity 2] [Found by: B, C]**

On the Task screen, it is not very obvious as to how to create new tasks. The plus sign does not stand out. Add a button that says “Add a new task”.

**25. [H2-2 Match between system and real world] [Severity 2] [Found by: B, C]**

“See completed tasks” button on the Task screen makes the user (a teacher) to think that the button is used to check his/her own completed tasks. And it is not clear what the button is for.

Change the text on the button to make its function clear or remove the button.

**26. [H2-2 Match between system and real world] [Severity 1] [Found by: C]**

On the “Create Task” screen, for due date, user may not know what the correct format might be, mm/dd/yy, dd/mm/yy or other formats. Instead of asking user to enter the data, bring up calendar and let user choose a date from calendar.

**27. [H2-2 Match between system and real world] [Severity 1] [Found by: C]**

On the “Create Task” screen, it is not clear how to enter points value. Change the appearance of the boxes to make it clear to user.

**28. [H2-5 Error prevention] [Severity 2] [Found by: B, C]**

On the “Create Task” screen, under “Require Verification”, there are two choices “Students” and “Parents”. It is not clear whether they are for the user to set the task target group, or they are for the user to set task verification group. And the user can make mistakes if he/she misunderstood the functionality. I would put the assigned users above the verification check in their own section and end with “required verification.” If you run out of space, I might have the verification pop up as confirmation after the teacher has selected “create.”

**29. [H2-2: Match Sys & World] [Severity 1] [Found by: B]**

When parents view their permission slip task, the language used is the same as that used for the corresponding student task. The parent’s task is to sign the form and sign up to chaperone, but the wording isn’t action oriented for the parents. Make every task personalized to the user doing it to give them more ownership over that task.

**30. [H2-8: Aesthetic & Minimalist Design] [Severity 1] [Found by: B]**

The alignment of the “Math HW #5” header isn’t centered like the rest of the headers. The rest of the headers are consistent, so this one really stood out. You may need to come up with a standard naming scheme or character limit for naming assignments/tasks otherwise it may cause issues with your headers in the future. For now, I would just center “Math HW #5.”

**31. [H2-4: Consistency & Standards] [Severity 2] [Found by: B]**

The ordering of the fields on the task creation screen is closer to what I imagined how the displayed information would look. Given the order of creation, you make it seem like here are the important details first, and then it doesn’t match that expectation when displayed. I would maintain a consistent hierarchy of information for the teacher.

**32. [H2-3: User Control & Freedom] [Severity 1] [Found by: B]**

Teachers do not have the option to select a time for when something is due along with the date. This may not impact some teachers where assignments are due the same time every day, but this option may be needed by others. I would add time as well, but I would enable teachers to select “At the start of class” and to be able to select that as a recurring default option.

**33. [H2-1: Visibility of Status] [Severity 2] [Found by: B]**

On the teacher’s view of a specific reward, they can only see the students that have earned that reward. Many of the rewards that you included require many students within a class to earn that reward, so it would make sense for their to be a progress bar similar to the student’s view, as well as being able to see the students that have selected that reward but are still working towards it. This way the teacher could visualize how many students are left in order to earn that reward. I would add that same progress visual, but change the metric to number of students left.

**34. [H2-1: Visibility of Status] [Severity 2] [Found by: B]**

If there are rewards that require a certain number of students, then there needs to be an indication on both the student’s and teacher’s ends if not enough students have selected a particular reward. Otherwise, a student could work hard to earn a particular reward with no chance of actually earning it. I would add a “# of students” indicator on each reward, so students and teachers know which rewards should be tracked, removed or replaced.

**35. [H2-8: Aesthetic & Minimalist Design] [Severity 1] [Found by: B]**

The text in the buttons at the bottom of the screen is pretty hard to read given the bright green and tiny font. The bolder text and size of the home screen buttons make them more readable. I would recommend bolding the font, making it bigger, and/or making the button slightly bigger.

**3. 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]			3			
[H2-2: Match Sys & World]		6	2	1		
[H2-3: User Control]		1	2	2		
[H2-4: Consistency]		3	1			
[H2-5: Error Prevention]			2			
[H2-6: Recognition not Recall]		1	2		1	
[H2-7: Efficiency of Use]			1	1		
[H2-8: Minimalist Design]		2	2			
[H2-9: Help Users with Errors]		1				
[H2-10: Documentation]		1				
<b>Total Violations by Severity</b>		<b>15</b>	<b>15</b>	<b>4</b>	<b>1</b>	<b>35</b>
<b>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)</b>						

#### 4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Total	Evaluator E
sev. 0					
sev. 1	6 -> 40%	9 -> 60%	6 -> 40%	15	
sev. 2	6 -> 40%	10 -> 66%	7 -> 46%	15	
sev. 3	3 -> 75%	2 -> 50%	1 -> 25%	4	
sev. 4	1 -> 100%	1 -> 100%	0 -> 0%	1	
<b>total (sev. 3 &amp; 4)</b>	4	3	1		
<b>total (all severity levels)</b>	16	22	14		

#### 5. Summary Recommendations

Overall, the design of your prototype was very clean and the flow was clear, so this iteration definitely succeeded in addressing your low-fi feedback. In general, you can reduce clutter on important screens and make the text and buttons more readable throughout the app. We would also recommend that you add more error prevention to their application by adding confirmation pop-up dialogs and an ability to edit and delete items. In particular, we recommend that you focus on the task creation screen. Think about the appearance of UI elements (blanks for due date, boxes for points value) and how users would interact with those elements, make the operation more intuitive, and modify some texts to remove confusion.

There are three critical pieces of feedback that we want you to emphasize that affect all three user prototypes. They are: 1) Simplify and reduce how much information is displayed on critical screens, 2) Focus on prioritizing the correct information for each user on each page, and 3) add another layer of organization so that teachers and students can manage all their classes, and parents can manage all their students. The crux of your app depends on making these deadlines visible to all parties. Your audience is incredibly busy, so making the data accessible quickly is key. Additionally, I would enable teachers and students to filter by specific class and parents by individual child. All three users will be much more likely to use the app if it becomes a one stop shop for managing all upcoming tasks. In our opinion, this is necessary functionality, and for many users, I imagine this would make or break their usage of the app.

#### 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

## ***Heuristics***

### **[H2-1: Visibility of System Status]**

- keep users informed about what is going on

### **[H2-2: Match Between System & Real World]**

- speak the users' language
- follow real world conventions

### **[H2-3: User Control & Freedom]**

- "exits" for mistaken choices, undo, redo
- don't force down fixed paths

### **[H2-4: Consistency & Standards]**

### **[H2-5: Error Prevention]**

### **[H2-6: Recognition Rather Than Recall]**

- make objects, actions, options, & directions visible or easily retrievable

### **[H2-7: Flexibility & Efficiency of Use]**

- accelerators for experts (e.g., gestures, kb shortcuts)
- allow users to tailor frequent actions (e.g., macros)

### **[H2-8: Aesthetic & Minimalist Design]**

- no irrelevant information in dialogues

### **[H2-9: Help Users Recognize, Diagnose, & Recover from Errors]**

- error messages in plain language
- precisely indicate the problem
- constructively suggest a solution

### **[H2-10: Help & Documentation]**

- easy to search
- focused on the user's task
- list concrete steps to carry out
- not too large