Cost-Importance Tables

Instructions

Remove the instructions and example rows 1 and 2 in Task 1 before handing in:

Problems Identified in the CW sheets - you will have 3 cost-importance tables (one for each feature you tested)

For each feature/task:

Go through all the cognitive walkthrough sheets for each task and list the problems as noted by the evaluators for each task in their own table. Write a short summary of the problem (e.g., see row one). Also, include a reference to the task and which step/s the task name/use-case name, and note how many evaluators noted this problem (sometimes all evaluators will note it and sometimes only one or two for example).

Importance/Severity

For each problem identified, give it an importance/severity value (MF, 5, 4, 3, 2, 1).

- Your evaluators gave 2-3 top fixes must fix that had to be done which represent MF (must fix regardless of any other measure). Note, since you had two groups of evaluators, *you may actually have 4-6 must fixes per task if each group of evaluators noted different issues. Include all as "MF" in this case.*

Importance values include:

- Importance = MF: Must fix, regardless (provided by the evaluators)
- Importance = x: (from 1 to 5 based on severity). If you have one or more evaluators who noted the same problem but gave it a different rating, *take the average*. You may round up the average if you feel as a group that the rating is more serious than the average. The ratings are listed below:
  - Rating: 5 - feature is mission critical, could have major impact on user experience (e.g., task blocked), is expected to occur frequently and might cause costly errors.
  - Rating: 4 - in between a 5 and 3 where the problem may not be as critical (i.e., may not stop a user from doing a task) but may cause a lot of user frustration and happen very frequently.
  - Rating: 3 - user can complete task, but with some difficulty (e.g., confusion and extra effort)
  - Rating: 2 – in between a 1 and 3, for example the problem may have little impact on performance but may slightly affect user satisfaction
  - Rating: 1 - low impact problem/s, has little impact on task performance or satisfaction (e.g., cosmetic) but is still worth listing

Solutions (s)

Sometimes the solution is quite simple (e.g., change label wording to better represent an interaction or to tell the user what happens when they click a button/link) or the solution may be more in depth (e.g., if a mobile device, divide information on one screen to more screens because it is too cluttered making it hard for a user, or rethink a metaphor that you used for a button, or you may have to redesign the look and feel of the screen, etc.). Some solutions will come from your evaluators and others will come from your group.

Cost

Normally, if you were in a company, the cost would be estimated in person-hours for redesign. But for our table, **as a team you should a 3-point rating of cost:**

- Rating of 1 – minimum time to make change (use a one for problems that you think would take 10 minutes or less to do on your paper prototype e.g., change the label of a button or move a button)
- Rating of 2 – more time needed to redesign (e.g., 20 minutes or less – e.g., the solution may affect other features on your page that may also require some redesign)
- Rating of 3 – more time needed (20+ minutes) because you need to think of the overall design (e.g., more than one screen, add more information, inform the user of a mistake in a meaningful way). You'll probably have few or even none of these since we used a LFP.

Priority Ratio

You want to reward high importance and penalize high cost items. So high importance items will boost up priority and high cost will bring it down. Use the following ratio: Priority ratio= (importance/cost) * 1000

Priority Ranking

Order the items with highest ratio number first (note, Importance "M" are always at the top, e.g., it doesn't matter how costly it is, these are the Must Change from the evaluators).

Cumulative Cost

Add up all the costs (see the slides or textbook on this).

Line of affordability

In a company this is often related to the total people hours given to make fixes. For your table, **choose the top 8-10 priorities (if 10+ problems were identified) based on feasibility. Each team can adjust this slightly. Note, if you have a task that has less than 8 problems you don't need a line of affordability in that table (i.e., it would be assumed that all could be addressed).**

Resolution

In a company you would probably have the following resolutions: Fix now (above line of affordability), Fix - time permitting (just below the line of affordability), add to “wait-and-see list” (close to the line of affordability but low importance), table until next version, postpone indefinitely, probably never get to fix. For your table, you could have three resolutions: Fix now, fix-time permitting, fix in future versions.

Cost-importance Table – Feature 1: Visual Guide(Time-based Highlighting)

Problem	**Imp.**	**Solution(s)**	**Cost**	**Priority Ratio** (imp/cost) * 1000	**Prio. rank**	**Cuml. cost**	**Resolution**
User does not know icons (inside floor map) are clickable or not. (Step 3, from Task 1, noted 4 times)	MF	Implement a visual labeling system where icons framed within a box indicate that they are clickable.	3	MF	1	3	**FIX NOW**
User might not see floor button is clickable or not due to congested and place of button.	MF	Change ground floor button place.	1	MF	2	4	**FIX NOW**
As there are no labels on selected room or location, user will not get which room it is (step 5, from Task 1, noted 2 times)	MF	Give labelling to every icon.	3	MF	3	7	**FIX NOW**
Choosing (Connect Phone and choose Building in Large screen) either of option will do what and use of option is not clear. (step 7, from Task 1, noted 2 times)	MF	Provide an information icon next to each button that, when selected, explains the function of the button.	2	MF	4	9	**FIX NOW**
Choose Building option(large screen) is redundant. (step 7, from Task 1, noted 1 time)	3	Change option to another like floor map.	1	3000	5	10	**FIX NOW**
After user reaches destination there should be no path shown. (step 12, Task 1, noted 1 time)	2	Path should be erased or highlighted after user reaches destination.	1	2000	6	11	**FIX NOW**
User do not know whether map changed to selected floor or not without loading information. (Step 4, from Task 1, noted 1 time)	3	Loading or simple modal when map changes to selected floor.	2	1500	7	13	**FIX NOW**
User might not know about current location and what each icon is representing directly after choosing current location option. (Step 2, from task 1, noted 1 time)	2	Use a visual labeling system like ticket booking systems, with unique icons and colors for features like the user's location, reserved room, available room etc. ensuring everything is easy to identify and use.	2	1000	8	15	**FIX NOW**
When users scan a QR code, there is no confirmation or error message to indicate whether their phone has successfully established a connection or not.	1	Add a message that pops up to tell you if your phone connected successfully or if there was an error.	2	500	9	17	**FIX NOW**

Cost-importance Table – Task 2: Audio Assistance

Problem	**Imp.**	**Solution(s)**	**Cost**	**Prio. Ratio** (imp/cost) * 1000	**Prio. rank**	**Cuml. cost**	**Resolution**
User would not know to listen to the audio once the audio directions start as label of any such kind is absent. (Step 4, from Task 2, noted 2 times)	MF	A label for starting audio directions will be displayed along with a timer to start giving the directions.	2	M	1	2	Fix Now
User is not provided multiple options for navigating. (Step 4, from Task 2, noted 1 time)	MF	A screen giving user option to choose either stairs or elevators can be provided.	2	M	2	4	Fix Now
User is not acknowledged of an instruction that is completed. (Step 4, from Task 2, noted 1 time)	MF	User will be given an audio cue of completing an instruction and getting the next instruction to proceed ahead.	1	M	3	5	Fix Now
User does not know what the done button will do. (Step 5, from Task 2, noted 2 times)	MF	Add a Home icon after Done so that user knows that it will direct to the home screen.	1	M	4	6	Fix Now
User misinterprets the input method by giving voice input for choosing the building instead of tapping to select the building. (Step 2, from Task 2, noted 2 times)	4	A label informing to tap to select location can be provided.	1	4000	5	7	Fix Now
The selection of current location or choosing building by user is not acknowledged using audio feedback. (Step 1, from Task 2, noted 1 time)	2	An audio cue saying “Choose building” can be applied.	1	2000	6	8	Fix Now

Cost-importance Table – Task 3: AR Sign Navigation

Problem	**Imp.**	**Solution(s)**	**Cost**	**Prio. Ratio** (imp/cost) * 1000	**Prio. rank**	**Cuml. cost**	**Resolution**
After clicking on the AR Navigation option, the next screen shows "Visual Guide" in the title, so users might get confused if the correct option is selected or not. (Step – 1, From Task –3, Noted – 4 times)	MF	After clicking the "AR Sign Navigation", on the next screen at the top of the page, there can be a header indicating the page is for "AR Sign navigation"	1	M	1	1	Fix Now
The "Scan the Sign" instruction is ambiguous. Users might get what to scan and why to scan. (Step – 4, From Task –3, Noted – 4 times)	MF	Add instructions regarding what to scan to begin the navigation.	2	M	2	3	Fix Now
After selecting the destination, there is no confirmation that the chosen/entered destination is correct. (Step – 5, From Task –3, Noted – 2 times)	MF	There should be a confirmation pop-up that shows the chosen destination and if it is incorrect user can click on the back button and re-enter the destination.	2	M	3	5	Fix Now
There is no feedback if the camera is not aligned properly. It might lead to suggesting the wrong path way. (Step – 6, From Task –3, Noted – 1 times)	3	Notify the user when the camera/phone is not aligned properly.	1	3000	4	6	Fix Now
While choosing a building for navigation there is an option "Choose building", it might lead to a confusion if it is for source or destination building. (Step – 2, From Task –3, Noted – 1 times)	2	There can be an instruction that the application is for indoor navigation. So, user can choose the building for which user wants indoor navigation.	1	2000	5	7	Fix Now
After choosing the building for the navigation, there is no confirmation if the building selection action is correctly done or not. If the selected building is chosen or any other building is chosen by mistake. (Step – 3, From Task –3, Noted – 1 times)	2	There can be a pop-up confirming the chosen building.	1	2000	6	8	Fix Now
On the AR navigation screen, There is no information stating the destination and distance. Moreover, Some UI elements used might not be clear to some users, such as dots on the screen. (Step – 6, From Task –3, Noted – 1 times)	3	Additional information regarding destination can be added, Also we can use better UI elements that shows the purpose, such as arrow to show direction.	3	1000	7	11	Fix Now