Heuristic Evaluation for StageIt

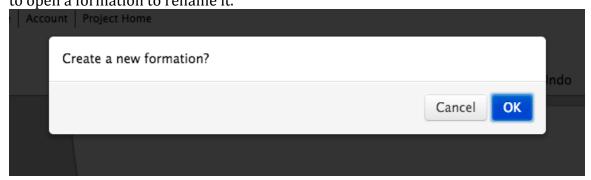
By Stephanie Su (no collaborators)

Formation Creation

Severe: Formations cannot be named upon creation. They can only be renamed, and the rename feature is non-obvious. (user control & freedom, efficiency, learnability)

Description: The user would expect the option for naming their formation to be available upon creating the new formation, especially given the way the user tasks were phrased. The user might not be able to find the rename feature because it involves clicking on the title at the top, which might not be something they would ordinarily explore.

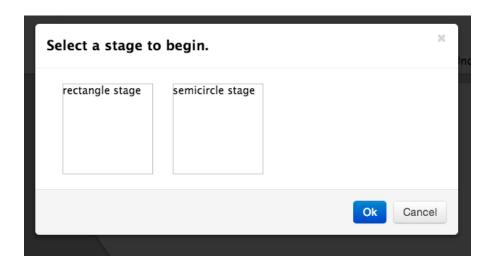
Recommendation: There should be an option for the user to name their new formation in the pop-up dialog for formation creation. It would also be efficient if users could rename formations in the Project sidebar, so they don't necessarily need to open a formation to rename it.



Minor: Stage selection uses text instead of pictures. (consistency)

Description: The text does not tell the user much about what the stage will actually look like.

Recommendation: Use pictures of the stage shapes instead.

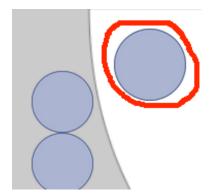


Stage Object Interactions

Major: Dragging a dancer changes its size. (feedback)

Description: While it is good that there is a visual indication for the user that they have successfully selected a dancer to drag, changing its size makes it difficult for the user to tell exactly where they are dropping the dancer because the size shrinks after they drop it.

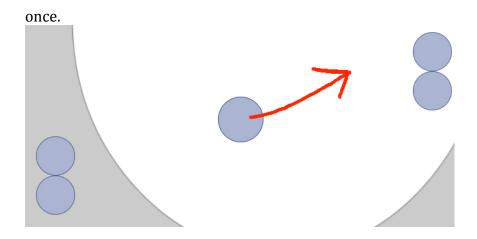
Recommendation: Use a different feedback indicator. For example, make the dancer glow.



Major: User can only select one dancer at a time. (efficiency)

Description: There are many tasks that involve moving around groups of dancers. For example, the user might want to move all of the dancers to the right, and dragging each dancer one at a time would be inefficient, especially if there are a lot of dancers on stage.

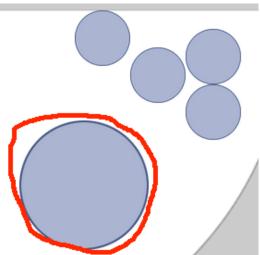
Recommendation: Allow the user to select a group of dancers and drag them all at



Major: There is no obvious indication that stage objects can be resized. (affordances)

Description: While it is good that users are able to edit the objects on stage, there is only a small chance the users could have discovered this feature apart from finding it on accident by randomly clicking.

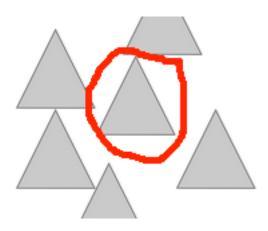
Recommendation: Use selection handles as an affordance to advertise the resize feature to the users.



Minor: Nothing happens when the user holds down the mouse key over a stage object. (feedback)

Description: There is no visual indication for the user that they have successfully selected a stage object. The objects do not expand in size until after the mouse has moved and the object is being dragged.

Recommendation: There should be visual feedback whenever the user holds the mouse down over a stage object.



Minor: Deleting a stage object requires pointing with the mouse. (Fitts's Law)

Description: Dragging items into the trashcan, while intuitive, requires the user to point the mouse, which takes significantly more time than key presses, according to KLM. Most users would be familiar with using the delete key.

Recommendation: Keep the trashcan, but also allow users to use the delete key to delete stage objects.

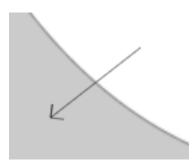


Drawing Arrows

Severe: There does not appear to be a way to directly delete arrows or move them around after creating them. (user control & freedom)

Description: While it is easy and intuitive to figure out how to delete objects by simply dragging them into the trash can, it is not intuitive how arrows can be deleted. There does not appear to be a way to select them, so the only method available is to click the undo button. There also does not seem to be a way to "edit" the arrows; the user cannot resize them or move them around.

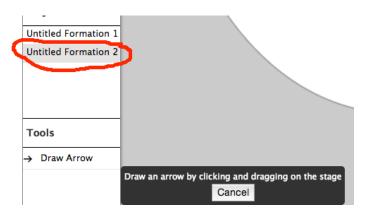
Recommendation: Make the arrows selectable.



Major: Arrow drawing persists after creating a new formation. (mode errors)

Description: By the time the user saves and creates a new formation, it is likely that they would have completely forgotten that they were still using Draw Arrow. It is also unlikely the user would need an arrow immediately after creating a new formation.

Recommendation: Draw Arrow should deactivate immediately after the user switches to a different formation.



Major: Canceling the Draw Arrow operation involves canceling out of a pop-up. (learnability, external consistency)

Description: It is not intuitive that clicking the Cancel button on the pop-up would cancel the arrow because the pop-up seems as though it is just there to explain the interface to the user. Ordinarily, the user would expect clicking Cancel to simply cause the message to go away. In addition, traditional means of canceling the operation, like selecting a different action from the menu (as in MS Paint and other graphics editors), do not cancel the arrow draw in this interface.

Recommendation: Make the Draw Arrow button toggle-able, so the user can toggle the operation on and off. Selecting a different action from the menu should also cancel the arrow draw. Use the pop-up solely as a tutorial message, and instead of a

Cancel button, add a little X button in the top-right-hand corner.

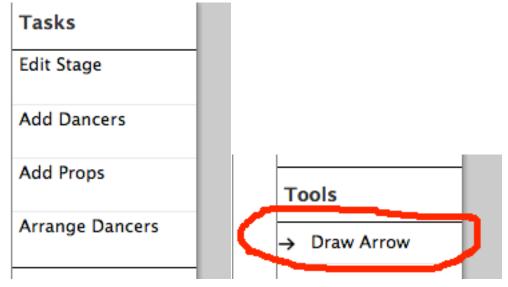
Draw an arrow by clicking and dragging on the stage

Cancel

Minor: The Draw Arrow feature is located in its own section instead of grouped with the other features. (internal consistency)

Description: It would make more sense for the Draw Arrow feature to be grouped with the other tasks for the sake of internal consistency. This would also make it easier for users to find since they would be more likely to look there first.

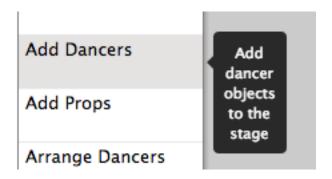
Recommendation: Move the Draw Arrow feature to under the Tasks section.



Sidebar Design

Good: Tooltips inform the user of the various features at their disposal. (information scent)

Description: The tooltips are useful for informing the user of features via hovering, without requiring them to actually click on the buttons. The use of simple labels made the available features easy to scan, while the tooltips prevented the interface from sacrificing learnability.



Cosmetic: The headers on the side bar ("Tasks," "Project," etc.) do not particularly stand out from the items below them. (graphic design)

Description: The font size for the headers are the same as the font size for the items, the bolding does not significantly change the value, and black versus grey box outlines are not particularly distinctive. Also, there is no space between the two sections.

Recommendation: Add some margin between Tasks and Projects. Make the header boxes have a black background with white font to make the stand out more.

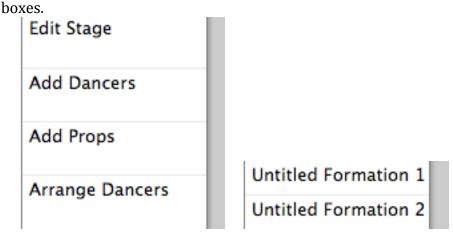
Tasks	
Edit Stage	
Add Dancers	
Add Props	
Arrange Dancers	
Project	
Untitled Formation 1	
Untitled Formation 2	

Cosmetic: The buttons in the sidebar are not the same size. (internal consistency)

Description: The size of the box outlines in the Tasks item list is twice the size of

those in the Project item list.

Recommendation: Make the task item boxes the same size as the project item



Other Features

Good: The icons for new, undo, redo, and save are consistent with those for other applications. (external consistency)

Description: The user can quickly understand what the buttons will do without even reading the labels because the icons are externally consistent with popular applications such as Microsoft Word.



Minor: It is not clear what the difference between Project Home and Home is. (information scent)

Description: Even though the links have not yet been implemented, from the labels, it is difficult to tell at a glance what the difference between Home and Project Home is.

Recommendation: Rename one of the links to be more descriptive. Also, it is possible that one of the pages is redundant, and therefore, unnecessary.



Minor: The instructions, "Tap to add notes," do not make sense for a web app. (learnability)

Description: Since users will be using a computer, and not a touchscreen, they would clicking, not tapping, the interface.

Recommendation: Change the instructions to "Click to add notes."

Tap to add notes

Cosmetic: The audience text label does not match the rest of the graphic interface. (internal consistency)

Description: Everything else in the section is represented by graphic icons and shapes, but the audience is represented as a text label.

Recommendation: Represent the audience as 1-2 rows of seats.

Audience