
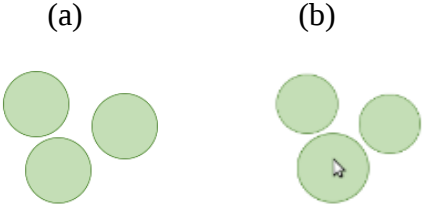




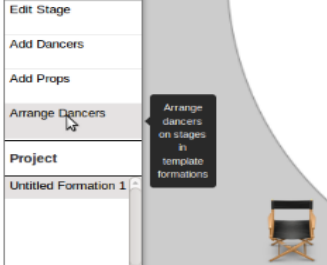



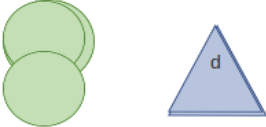
Heuristic Evaluation of Project: **Stagelt**


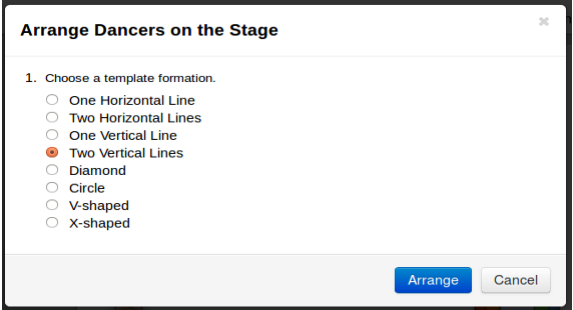

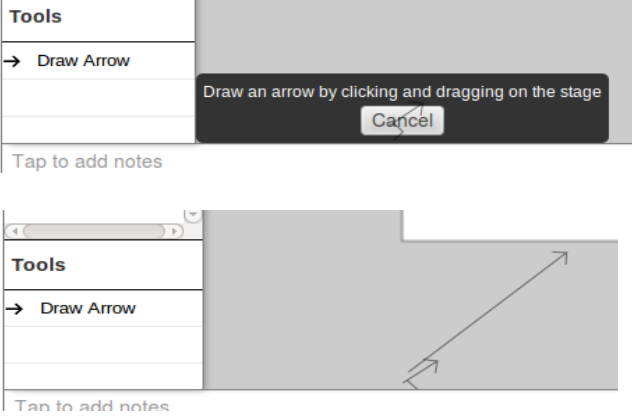
Prototype URL: <http://web.mit.edu/tforrest/www/stageIt/>


Collaboration statement: I discussed the assignment with nobody.

The heuristic evaluation of this prototype is presented in the following table, where each problematic/positive feature is described. Each item shows its severity and the associated heuristic guideline.

Usability Heuristic	Severity	Description
<p>(1)</p>  <p>Visibility of system status (Jakob Nielsen) http://www.nngroup.com/articles/ten-usability-heuristics/</p> <p>Feedback (Shneiderman's 8 Golden Rules)</p>	Minor	<p>When a dancer (a) is selected to be dragged (b), it changes its size to show the current status of the system which is to allow to move the dancer. However, sometimes this leads to a confusion of the real size of the dancer, specially if you have several sizes already in the stage. This is important if the user wants to relocate the dancer in a short space in which it's necessary to observe the real size while dragging the dancer. This could be problematic for efficiency in crowded scenarios.</p> 
<p>(2)</p>  <p>Match between system and the real world (Jakob Nielsen)</p>	Good	<p>The system is using real world conventions for icons (props) and this can be potentially increased by adding more icons that are usual in the choreography community. The stage representation and the audience signalization is a direct mapping with real situations. This is favorable for learnability and efficiency.</p>

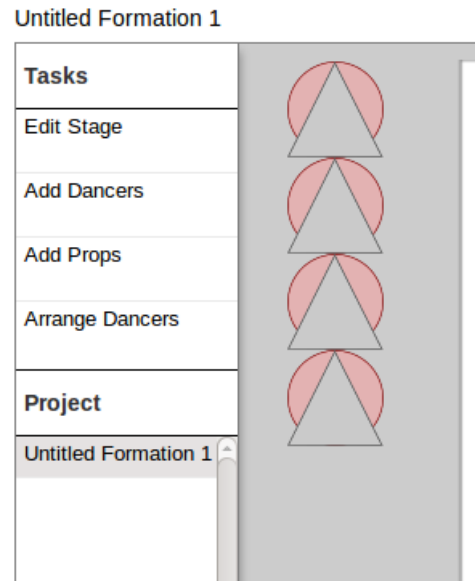
<p>(3)</p>  <p>Help and documentation (Jakob Nielsen)</p>	<p>Good</p>	<p>The interface can be learned in a few minutes by following a simple set of tasks and hovering over the options. Hovering produces a little text box with short and clear instructions.</p> 
<p>(4)</p>  <p>Error prevention (Jakob Nielsen)</p>	<p>Minor</p>	<p>The interface is prone to some errors while manipulating the dancers in the stage that should be avoided:</p> <p>1) The user wants to move a dancer, but when tries to select the dancer to drag it, actually clicks on one border without realizing it, moves the mouse, and by mistake changes the size of the dancer instead of moving it. Some feedback that indicates that the click was done in a border such as highlighting the borders (more than the cursor type change) could be useful to differentiate these two modes (move or resize).</p> 
<p>(5)</p>  <p>Error prevention (Jakob Nielsen)</p>	<p>Major</p>	<p>2) Nothing prevent the user to have overlapping dancers. This could be an error.</p> 

<p>(6)</p>  <p>Error prevention (Jakob Nielsen)</p>	<p>Major</p>	<p>3) The arrange dancers function (as implemented so far) doesn't allow to select certain type of dancer (circle, rectangle, etc). The user could move all of them at once by mistake.</p> 
<p>(7)</p>  <p>Error prevention (Jakob Nielsen)</p>	<p>Minor (bug)</p>	<p>4) This is probably a bug. When using the Draw Arrow function, an information box is displayed with help and it includes a “cancel” button. If the user decides to click the cancel button, it starts to draw the arrow at the same time, which is clearly not the desired action.</p> 

(8)

Error prevention
(Jakob Nielsen)

Cosmetic

5) Nothing prevents the user to add dancers of one kind, not moving them, and then adding more dancers immediately. In this case, the second group will appear overlapping the first group, which could be problematic.



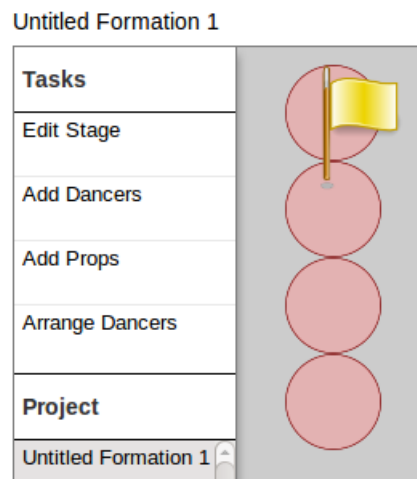
(9)






Defaults
(Tog's First Principles)


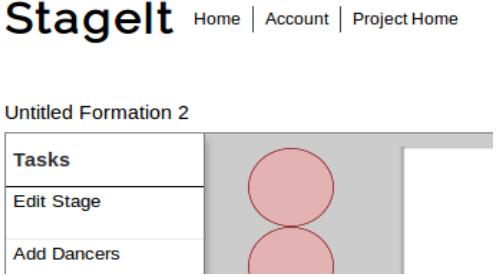

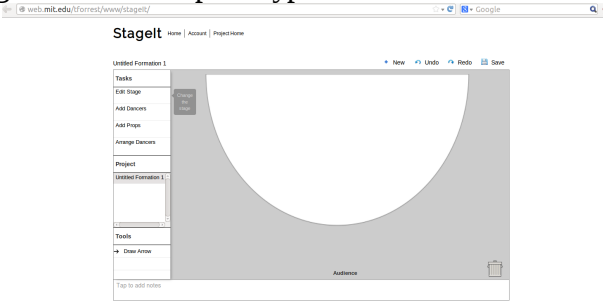

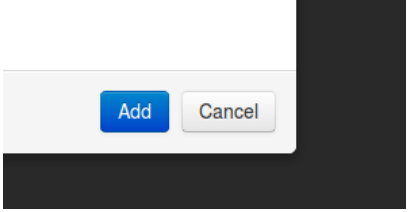
<http://www.asktog.com/basics/firstPrinciples.html#consistency>


Minor

The objects default position when they are added is not taking advantage of “intelligent” defaults. When adding objects, specially props such as the flag in the figure bellow, they could appear is a default position in the workspace (given by the more frequent position of the object). Improving this aspect could lead to more **efficiency**.



<p>(10)</p>  <p>Human interface objects (Tog's First Principles)</p>	<p>Very good!</p>	<p>All the objects allow direct manipulation with continuous display. This makes very easy and intuitive to interact with object in the scene. Good learnability and efficiency.</p>
<p>(11)</p>  <p>Protect Users' Work (Tog's First Principles)</p> <p>Reversible Actions (Shneiderman's 8 Golden Rules)</p> <p>User Control & Freedom (Jakob Nielsen)</p>	<p>Good</p>	<p>There is a “save button”, good for safety. Also, I didn't find any procedure that makes the user lost the work by mistake. This is good for safety. Undo and redo buttons work properly.</p> <p>Undo could be confusing in the case of adding n dancers with $n > 1$. Undo function will delete each dancer at a time instead of the n dancers in one step as expected, but this not represent a loss of the work.</p> <p>Added 4 dancers:</p>  <p>Undo:</p> 
<p>(12)</p>  <p>Consistency (Tog's First Principles & Shneiderman's 8 Golden Rules)</p>	<p>Minor</p>	<p>Given the similarity of this GUI with other programs for manipulating graphical object, the users expects consistency in some common functions. This is the case of (1) being able to select a group of objects at once and (2) execute an action such as deleting o moving them at the same time.</p> <p>Important for efficiency.</p>

<p>(13)</p>  <p>Affordance (Norman's rules)</p> <p>http://twobenches.wordpress.com/2008/06/05/don-normans-design-principles/</p>	<p>Major</p>	<p>The formation name can be clicked to change the name (“Untitled formation 2” text in the image below). However, the way the name is presented doesn't clearly afford this action. I discovered it only after a while. Important for efficiency.</p> 
<p>(14)</p>  <p>Visibility (Norman's rules)</p>	<p>Good</p>	<p>All the functions are in sight at the same time. They are balanced in space. No need to scroll the page. This implies good graphic design and color scheme. Typography could be improve to have more contrast in the font so that it's easier to read (the word pops out easier). Good usability.</p> <p>Image of the entire prototype in the screen:</p> 
<p>(15)</p>  <p>User Control & Freedom (Jakob Nielsen)</p>	<p>Good</p>	<p>All the functions in the GUI allow the user to “cancel” (The only exception is the “draw arrow” but this is a bug). This is important for guarantying user control even after invoking a function by mistake. Good for efficiency and safety.</p> 

<p>(16)</p>  <p>Constraints (Norman's rules)</p>	<p>Good</p>	<p>I think this design allows different types of interactions. For example, it seems portable to touchscreen devices without the need of big changes.</p>
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