

## ChoreoLab Medium-Fi Prototype README

- The ChoreoLab medium-fi prototype is embedded on the team website:  
<http://web.stanford.edu/class/cs147/projects/creation/EnhancingDancing/>  
Alternatively, it can be accessed from:  
<https://marvelapp.com/11icj87>
- The prototype is implemented as a Marvel project. Click interactions are supported to navigate through the various task flows.
- The prototype opens up to the landing page, which is the discovery tab. The navigational tab bar at the bottom can be used to access task flows for creating new projects and contributing to collaboration requests, which are received as notifications.

We now discuss the Wizard of Oz techniques used and limitations in the current prototype:

To incorporate interactions and wire together our various views, we used Marvel. From a usability perspective, Marvel also allowed us to copy hotspots across multiple screens, which expedited the process of implementing common actions (such as tab clicks) across the prototype.

Although Marvel and Sketch do afford the ability to more accurately present various UI components and eliminate some of the confusions encountered in the paper prototypes, they did not necessarily afford the best support for the audio/video content that is required for our application. In particular, many of the dynamic manipulation of audio and video was not possible using these prototyping tools. These sorts of interactions are arguably the most important elements of our application as they are essential to the quality and satisfaction derived from the final compilation video. In addition, we found that Marvel's lack of conditional flows limited the ability to make certain views more dynamic. For example, on the project-sharing page, some content would be editable if you reached the page as a creator, whereas it would be fixed if you reached the page as a contributor (project title or sharing settings, for example). In Marvel, however, this sort of context could not be incorporated. Once you reach a certain view, you have to follow the same button click flow. Lastly, the integrated Marvel plugin for Sketch was not as robust as we had hoped for and presented some difficulties during the exportation process.

As discussed previously, the major limitations of the prototype in its current form involves the lack of truly dynamic multimedia interactions. For example, many important actions could only be incorporated with Wizard of Oz techniques. When you create a project, you have to select a sample of music for your project. The

prototyping tools, however, do not allow one to modify a music sample based on a certain hot spot action. Thus, instead of a user receiving the experience of selecting start and end points of a song and then being able to listen to the sample of music, we would have to use Wizard of Oz to simulate this (i.e. the user would choose the start and end song, and with a separate device, we would manually play that time range within the song). Next, these prototyping tools do not support dynamic inputs, thus preventing the realization of recording oneself dancing with the application. The Wizard of Oz technique used to simulate this was an embedded video that would display a short countdown to indicate time passing as you recorded. Lastly, on the video-editing page, we could not simulate the clipping of video segments or application of filters using Marvel. Even with Wizard of Oz techniques, this sort of interaction would be difficult to achieve. In practice, we would probably have to manually use a separate device and apply very rudimentary editing that aligned with the users' actions.

Another limitation to the prototype is the lack of support for gesture-based interactions. For music selection, we allow users to swipe to scrub through the music to the desired point in time. Marvel only supports click interactions, however.

A final limitation with the prototypes is the limited amount of content currently viewable. One important aspect of ChoreoLab is that it serves as a platform for discovering different dance styles, new dancers, or content with entertainment value. It is difficult to present this sort of breadth using hard-coded static content (i.e. for videos, project cards, users, collaboration requests, etc.), given the overhead necessary to generate compilation videos. Thus, although we feel that the intent of the platform as a discovery tool is made clear by the prototype, its potential has not been fully recognized using these prototyping tools.