

Dance Tool at UNCC: Programming Loops Through Choreography

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INTRODUCTION

This summer in the Game2Learn Lab we worked on three separate projects: an iPhone application, a social networking game, and Dance Tool. All of the team members contributed to each of the projects however most of my time was spent to help further the progress of Dance Tool. I reviewed and modified pre existing code to allow Dance Tool to adhere to the Functional Design Document, I was responsible for handling the code that created an xml file to report on the user's interaction with Dance Tool, and I also created any artwork necessary for the other projects.

BACKGROUND

Much research and development is aimed towards introducing students to Computer Science before they attend college. Scratch, created by a collaboration of students from MIT and UCLA, is a famous example of such software. Dance Tool's target audience is K-12 Students; however it is mainly designed to suit students ages eleven to fourteen.

Dance Tool seeks to teach music concepts through placing the user in the position of a choreographer who must use a combination of dance moves contained within loops to animate two characters: Maya and Max.



Figure 1. Screen Shot of Dance Tool

METHOD

Pilot study

- Attempt to determine user attitudes about the Dance Tool
- 9 females, 28 males, 1 no response
- 17 high school, 19 middle school, 2 other
- 11 African American, 2 Asian American, 25 Other

The study took place in a computer lab, where each computer had a copy of Dance Tool pre installed. A pre test was first taken over the internet. Next, a live demo took place at the front of the

room; users were encouraged to follow along on their copy of Dance Tool. The users were then allowed twenty to twenty-five minutes to freely play with the tool. After free play the participants completed a post test and a short survey using the Likert Scale.

Results

Unfortunately results from the pre test were inconclusive. However, the results from the survey were encouraging.

Results from Dance Tool Survey	
<u>Statement</u>	<u>Average Rating</u>
I enjoyed using Dance Tool	4.00
I was having fun most of the time while using this tool	3.97
I liked the overall appearance (look) of this tool	4.23
The tool was boring to me	1.87

Figure 2. Selected results from the survey: 1 means the user strongly disagrees, 5 means the user strongly agrees.

CONCLUSION

Students, both boys and girls, really enjoyed the look and feel of the game which was one of the overarching goals of the project.

The students liked where the game was headed but many of them wished that the Dance Tool had more features to interact with.

FUTURE WORK

Much was achieved this summer on the Dance Tool, but there is still more to be done. We would like to expand the capabilities of Dance Tool; it is something we want users to continue using. There are future plans for adding features that will allow the user to create and animate their own characters. We would also like for users to be able to publish their dances to the internet. During the pilot, one student even suggested allowing the user to upload their own music for Maya and Max to dance to.

Special Thanks to:

Dr. Tiffany Barnes

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