

# CSS 450 Final Project Report

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## ***SqueePop Overview***

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SqueePop is a remake of an arcade game developed by the Japanese video game company Cave from 1998 called Uo Poko.

The objective of SqueePop is to help Squee the cat shoot colored marbles into the target area and clear the stage before the rising platform pushes the marbles up to the ceiling. The player only has 5 seconds to pull the launch spring down. If the player hasn't released the spring within the time allowed, the marble is fired automatically from whatever position it is in at the time. The position of the launch spring determines how far the marble will shoot.

If three or more marbles of the same color connect after the player fires their marble into the target area, then those marbles turn to bubbles and float away. Scoring is based on the number of marbles that turn to bubbles for a particular match. The score is not impacted by marble color.

# Game Controls



Pull Spring

## Scoring



x 100 Points



x 200 Points



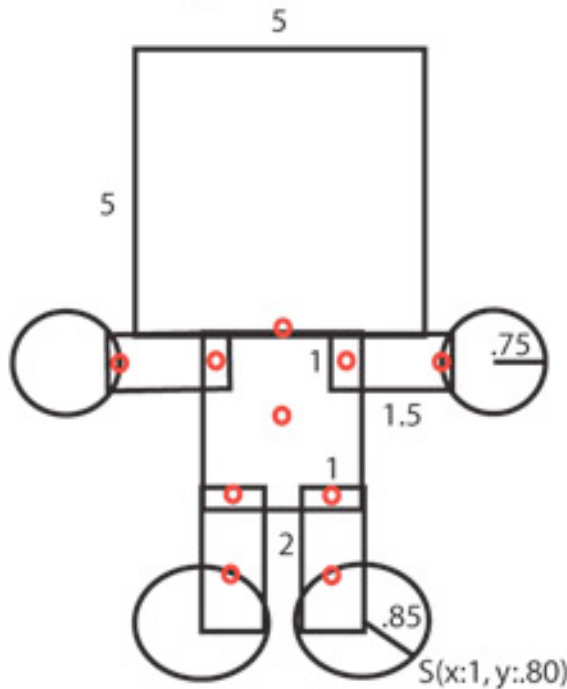
x 300 Points



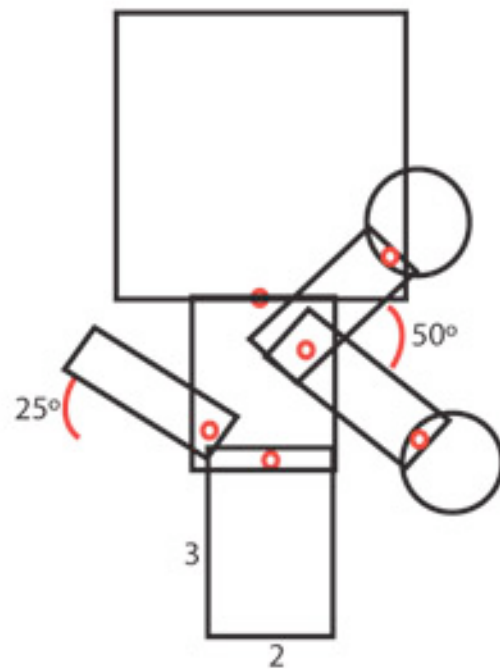
x 400 Points

# Hero Design

Facing Forward

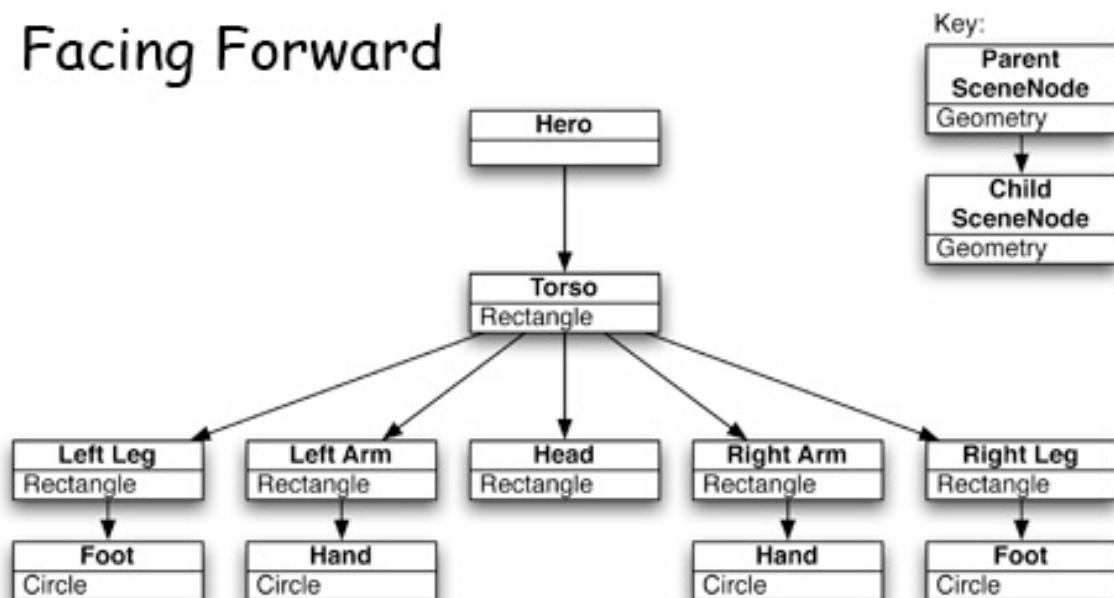


Pulling Spring



## Hero SceneNode Structure

Facing Forward



## ***Evaluation***

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### **Known Bugs**

The most severe bug was introduced at the last moment before the project deadline. If you clear the first stage it attempts to ready the next marble to fire before the second stage is built and causes a crash.

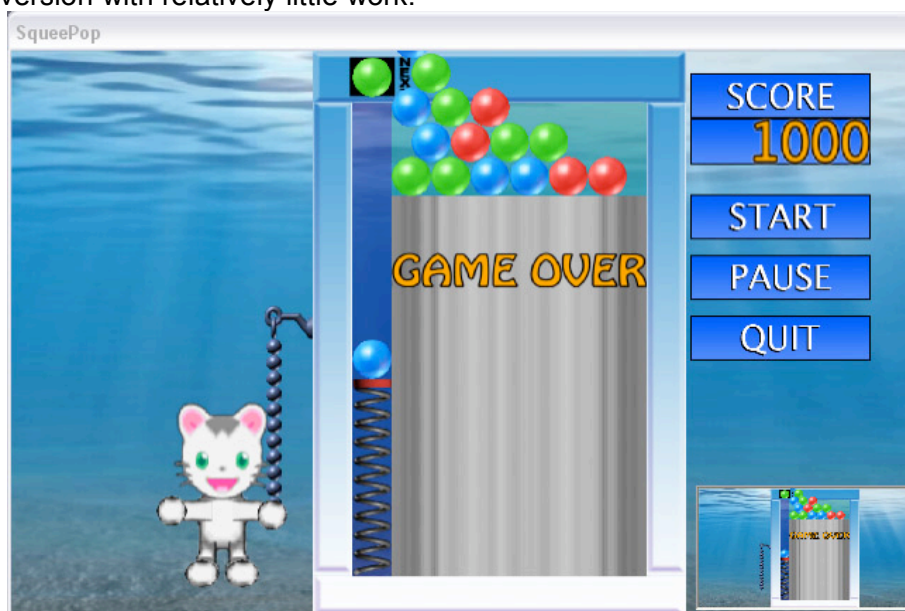
There is a timing issue with animations that sometimes manifests. This can leave a marble or bubble stuck in a position on screen that does not reflect where it is in the underlying data structure.

### **Limitations**

Before randomly choosing the next marble to be placed into play, the game makes sure it is one that already exists the target area, so the player is not stuck trying to clear a stage with marbles that do match any available. However, this check happens before matching takes place from the pervious marble, so sometimes the player is stuck at the end of a stage with a marble of a color that just cleared from the game area.

### **Possible features to implement in the next version**

The game was designed with support for many features that never made it into this release. First and foremost was animation of the hero character. The forward facing position was intended to cheer the player on when marble matches were made. Secondly, the location for the game was underwater and fish were supposed to be swimming back and forth, with the small game window displaying an aquarium view. Also, there were supposed to be many particle effects to enhance the visual interest of the escaping bubbles. Finally, all of the audio that was gathered for various events did not make it into the game. Each of these things could be implemented in the next version with relatively little work.



## ***References and Credits***

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[http://en.wikipedia.org/wiki/Uo\\_Poko](http://en.wikipedia.org/wiki/Uo_Poko)

The water background was made using a photo by Lars Lentz under the creative commons license. <http://lightningvolt.com/Image%20Gallery/imagegallery.htm>

Adobe PhotoShop CS3 was used for all graphics except the spring and lever, which were modeled in Autodesk 3ds Max.

And finally to Squee the cat, who is much less cheerful in real life.