Sprint 07 Report

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The goals set for sprint 07 were to fully document code from last semester, implement the total 3D gestural control of a paddle, build the 3D arena, test the 3D movement of the ball, and, if time permits, research the possibility of using SQL with Unity to better manage persistent data.

We have not documented the code from last semester. After completing the other goals for this sprint (excluding the lower prioritized SQL goal), we did not have sufficient time to document our code from last semester. Furthermore, we think that it is best to document the older code as we bring it into this newer version of Pong because if we document all of the older code, we would waste some time since we will not be using all of the older code.

We struggled with the implementation of the total 3D gestural control of a paddle. After failing to install various middleware such as OpenNI 2, Nite 2, and Zigfu’s ZDK we reexamined our existing approach to Kinect-Unity compatibility and, after reinstalling the Kinect SDK by Microsoft and the Unity Pro Package add-on (also by Microsoft) and studying the progress of open source projects on GitHub (as they relate to the integration of the Kinect with Unity), we found that total 3D gestural control of a game object is possible in Unity via the Kinect. Now that we have proved this to ourselves, we are going to scavenge for official documentation regarding the Unity Pro Package add-on and the Kinect SDK so that we may program the gestural control adequately.

Building the 3D arena was simple. We are using 3D, cubic game objects for all 6 walls.

Testing the 3D movement of the ball was also simple. We made a bouncy, 3D sphere game object and added velocity to it, via a script, so that we could observe its movement within the arena.

We did briefly research the compatibility of SQL with Unity and there is not official documentation alluding to any compatibility. This is alright – our current configuration for the persistence of data is not broken or in desperate need of change.