## CS425 Game Programming 1 Homework Assignment 2 Movin'

Due Friday, September 16<sup>th</sup> 2016 at 5pm

Goal: Understand the basics of animating a game character, including playing back animation clips and positioning and orienting the character. This framework will be used in future assignments, so setting up good object oriented practices will be useful.

## **Submission:**

- This is an individual programming assignment. Please download the GameApp framework from Blackboard.
- When you have completed the assignment, delete the *Debug* and *Release* directories and the .sdf file. Then zip together the rest of the directory. Be sure to include your .vcxproj and .sln files along with all of your source code files. If the project cannot be loaded and run properly, you get a zero. Name the zipped file in the following way: LastName\_FirstName\_HW2.zip and submit it through Blackboard by the due date.

Use the code provided and the OGRE **Intermediate Tutorial 1** to enable the Sinbad character to run between random points.

- 1. All of the OGRE tutorials can be found here: <a href="http://www.ogre3d.org/tikiwiki/Tutorials">http://www.ogre3d.org/tikiwiki/Tutorials</a>
- 2. OGRE Intermediate Tutorial 1 will only be a guide. You must understand it and the code given enough to merge the two into a working whole. Some variable names will be different and some placement of the code snippets will be different.
- 3. The code provided includes the required variables and method declarations in the Agent class.
- 4. The Agent constructor includes a for loop that adds a few random points onto the agent's mWalkList.
- 5. The update method of the Agent class includes the necessary call to updateLocomote.
- 6. You will need to fill in code for the nextLocation and updateLocomotion methods of the Agent class.
- 7. While moving between the points, the character should display the *run* animation (top and base) and be properly oriented.
  - a. The Sinbad (Ogre) character that you should use was created with a different orientation then the robot character that the tutorial uses. To account for this when the tutorial says to use UNIT\_X, use UNIT\_Z.
- 8. After the character reaches the last point, it should automatically switch to the idle animation (top and base) and continue displaying this idle behavior. Characters should NOT keep looping between the points