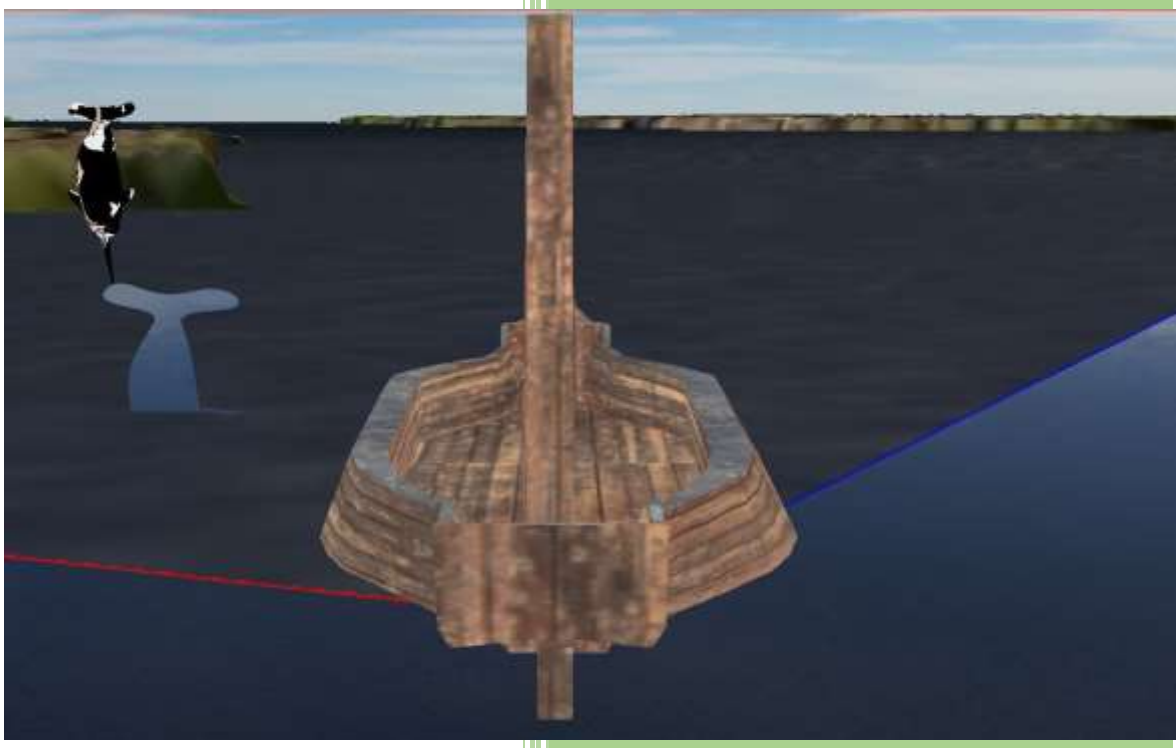
CSc 165

Assignment 3: Game Project Guide



David Grapentine & Ashley Gregory

Spring 2015

CSc 165

Game Name and Names

Game Name

Our game name is The Seven Seas

Names

The game was created by David Grapentine and Ashley Gregory

Typical Game Play Scene

A typical Game play science can be seen in Figure 1.

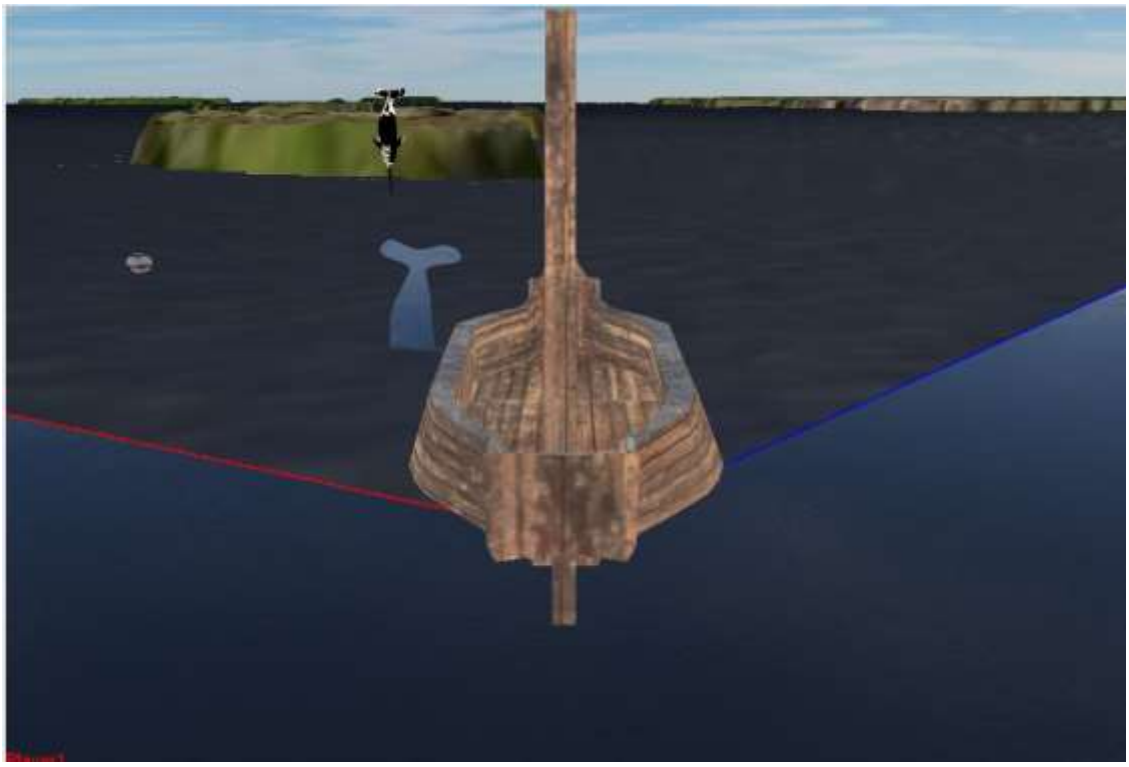


Figure 1: Typical Game Play

Compiling and Running The Seven Seas

In order to run the game please do the following steps:

1. Double click on the compile.bat
2. Double click on the run.bat
3. The console will prompt if you would like to make a server. If you are the first player please type “yes” and hit enter.
4. Then it will ask you which controller you would like to use. Please type the number corresponding to the keyboard and hit enter.
5. The game will then prompt you if you would like to connect to the server. Please type “yes” in the command window and hit enter.
6. Then a GUI window will pop up. Please choose to enter full screen mode or windowed mode.
7. The game has now started and you can commence playing.

Special Device Requirements

There is no special device requirements for The Seven Seas just please do not use a controller as no buttons are mapped. All you need is at least a keyboard to play.

Game Play

What Happens During the Game

The Idea of What was Suppose to Happen

When the game starts off each player starts on opposite sides and works their way towards the beacon (the axis lines). Both players will increase speed and take the route they believe is the safest route for their boat. If a boat hits land the players will lose points from it. If a player goes off the world then the player will lose points and will be reset back to their original start point. As they are sailing a narwhal will possible come and attack the player thus making them lose points. Once the ships are close enough they can starting firing cannons which they can only launch every few seconds. If the cannon balls hit the other player both players will gain and lose points depending on the situation. Each player can also ram each other's boats but this will cost points to be lost for both parties. After five minutes the game will then end and declare whom is the winner of that game then once user hits continues it will quit the game.

What Currently Happens

The player can sail around the world and get stuck on the land terrain. There are no collision currently working thus you cannot score points nor is there a five minute time period. You can shoot a cannon ball and speed or stop the ship along with turn it left or right. The narwhal will also go after you and follow you but the normal is upside down. Also the animated narwhal that is in the game but all it is him is waving next to the ship. Could not get the one that is moving to do the wave.

How to Score

Scoring is not implemented but the following is would have happened if we had time to implement it. When playing a player can score by attacking the other opponents but can also lose points for being attacked by other players or a narwhal doing the following each one has different value points:

- Launching a cannon ball and hits another user: 3 points for the attacker and -3 points for the victim.

- Ramming another user: -1 points for rammer and -3 points for the victim.
- Narwhal attack: -2 points for the user whom is attached by the narwhal.
- Hitting land or going off end of world: -1 point to the player whom hits the land or jumps off the world.

Controls

The controls of our game is as follows for a keyboard there is no controller implementation:

E - Zooms out

Q – Zooms in

S – Speeds boats and stops it after pressed twice

Left arrow – Goes left

Right arrow – Goes right

Up arrow – Makes camera go up

Down arrow – Makes camera go down

Spacebar – Shoots cannons

Esc – Quits game

Scripting

How The Seven Seas Uses Scripting

The Seven Seas uses scripting by creating an axis which marks the middle of the world.

How End User uses Scripting

The end user can use the script for marking the middle of the world or choose a new location to create axis marks

How The Seven Seas Satisfies Requirements

Milestone 1

Skybox

When you launch the game the player will see a scene surrounding them which is the skybox. It moves with the player thus they cannot get outside of the scene (Figure 2).

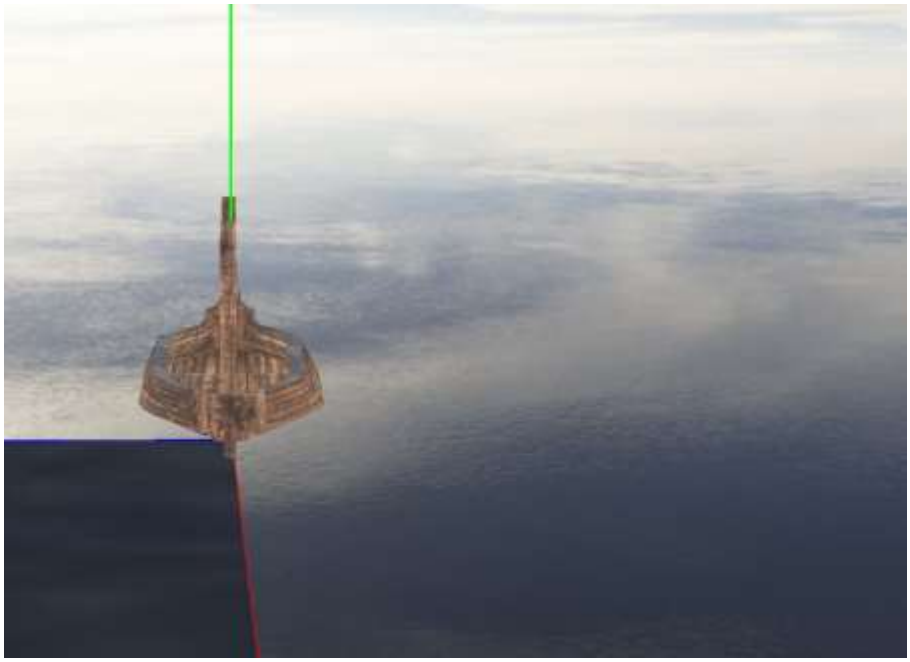


Figure 2: Skybox

Terrain

There are two sets of terrain on is land the other is ocean. The boat is able to go over the ocean but not able to go over the land (Figure 3).

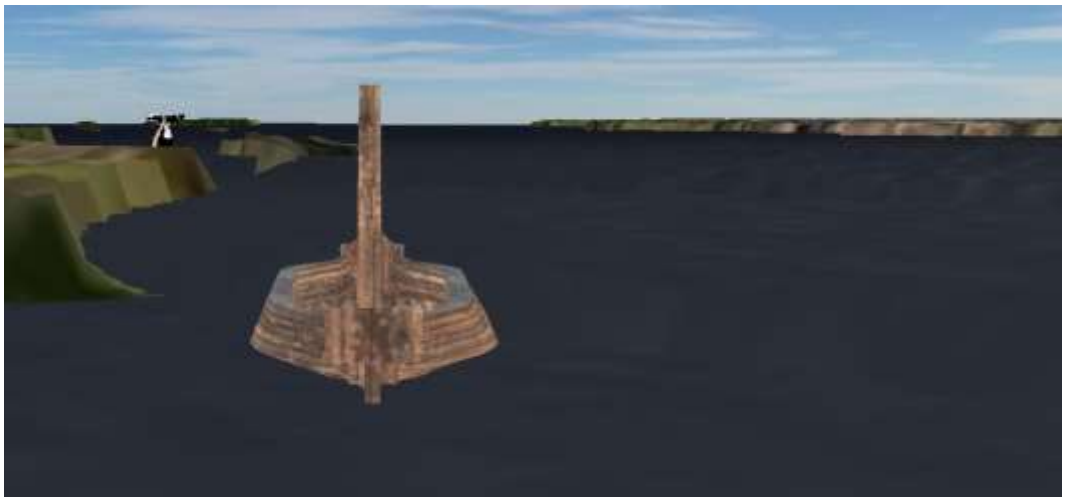


Figure 3: Terrain

Scripting

The scripting that is used is to create the axis point in which marks the point 0,0,0. This helps the user find the middle of the map when sailing around (Figure 4).

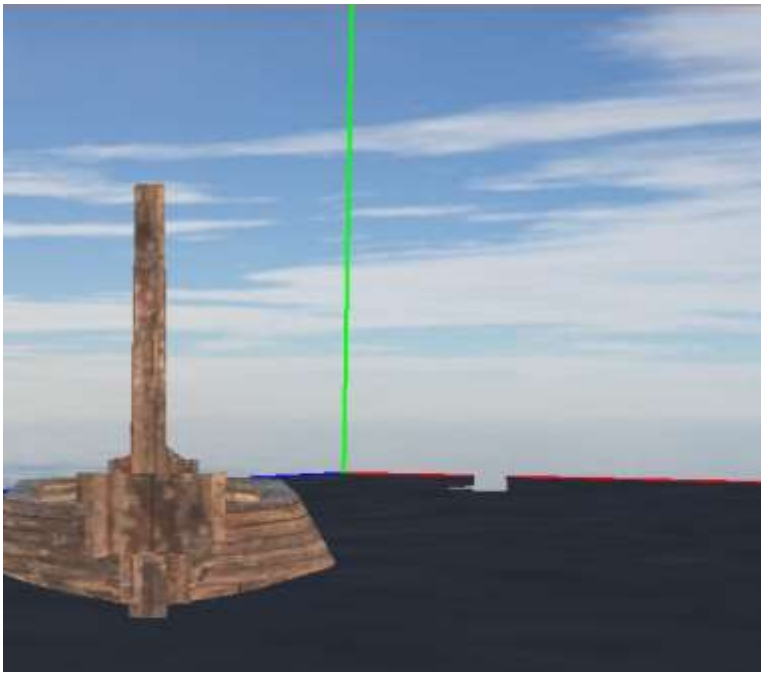


Figure 4: Scripting

Networking

With networking we are able to successfully have two players play. We have not tried any more than two thus we do not know if it can handle more than that. It is able to produce ghost avatars and all players are able to see the same items (Figure 5).

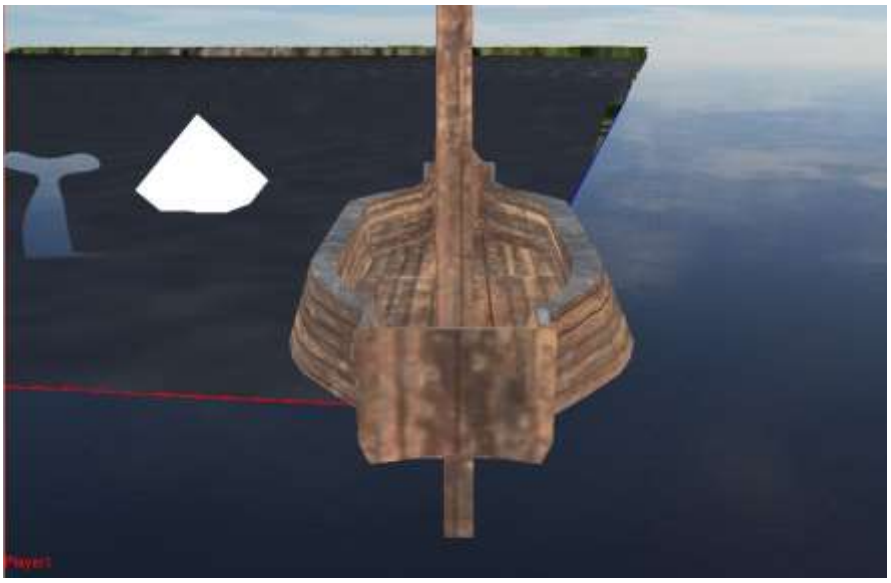


Figure 5: Networking

Milestone 2

External Models

We have three external models in our game which is the cannon ball, the pirate ship, the narwhal. All characters where created in Maya and can be seen in Figure 1.

Skinning

Skinning is also provided for all of the External Models. All skinning was done in Maya. Example of the skinning is below is Figure 6.

Figure 6: Skinning

Physics

We added physics to the cannon balls that shoots from the boat to attack the enemies. Also added collusion detection for ramming boats, cannon balls colliding with boat, and narwhal colliding with boat. If hit by cannon ball player loses points or if boats collide both player loses points. The cannon ball can see in Figure 1 on the left hand side

Milestone 3

Sound

A wave sound plays from the terrain using a dot wav file. Also when you launch a cannon ball a cannon launching sound will play.

NPC/AI

Our non-playable character is a narwhal which has AI attached to it which will either just swim around or go after the closest boat to it in order to attack. It attack the player loses points (Figure 7).

Figure 7: NPC/AI

Animation

Our animation is attached to our narwhal which his tail just goes up and down as he swims in the ocean (Figure 8).

Figure 8: Animation

Requirements Not Working

There are no requirements we were not able to get working. The controls are not mapped for a controller please use a keyboard.

Techniques Used Other Then Requirements

There is not techniques that go outside of the requirements

Contributions of Each Team Member

Milestone 1

In Milestone 1 David did the skybox and the networking and Ashley did terrain and scripting for our game.

Milestone 2

In Milestone 2 David did the external models, Ashley did skinning, and both of us worked on physics.

Milestone 3

In Milestone 3 David did NPC/AI, Ashley did sound, and we both worked on animation.

Models

David created the player's character which is a pirate ship. While Ashley created the cannonball (just a sphere skinned) and the NPC/AI character which is a narwhal.

What Machines Does it Run On

The machines our program runs on is Adventure and Pacman.