



DEMO GAME

ANALYSIS OF NETWORKING PLATFORM

AC (Andrew) De Leon

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Executive Summary

Game Overview

Title: *DEMO GAME*

Platform: PC Standalone

Genre: Demonstration of Mini Games

Rating: (10+) ESRB

Target: Casual gamer (aging from 12 - 30)

Release date: May 2018

Publisher: AC De Leon

DEMO GAME is a game that serves as a hub for other games to demonstrate specific capabilities that Unity can support which range from artificial intelligence and networking behaviors.

Technical Summary

DEMO GAME is developed with a budget of \$0 by one person for a grade.

The game will be deployed for PC and WebGL, other outlets are to be considered.

PC

Everything made since 2004 should work.

WebGL

Everything made since 2004 should work.

CONSOLE

N/A

Evaluation

Game Engine

The game engine utilized for the development of *DEMO GAME* is Unity because that is what is required by the course of CS 596. Unity's integrated services such as Unity's Asset Store helps speed up the development process and optimize the game.

Target Platform

DEMO GAME will be deployed to PC and other outlets if considered. The PC platform is perfect for testing and distributing amongst the audience in order to garner feedback.

Networking Platform

DEMO GAME utilized the networking manager component within Unity. This provides simple ways to start and stop client and servers, manage scenes, and provides virtual functions that the user can use to implement handlers for network events. With the built in components that the networking manager contains, creating a multiplayer game is certainly possible, especially those with no network experience such as I.

Scripts and Complexities

To determine the complexity for each script, the measurement called the Cyclomatic Complexity is calculated for each individual script. The cyclomatic complexity is the number of linearly independent paths within a script. For example, a code with no conditionals or decision points such as IF statements would have a complexity of 1. A code with one IF statement would have a complexity of 2.

(To insert a row, right click on table and "insert row")

Script	Conditionals	Cyclomatic Complexity
Billboard.cs	0	1
Boid.cs	2	3
Bullet.cs	1	2
EnemyFollow.cs	1	2
FlockController.cs	3	4
Health.cs	3	4
LevelManager.cs	0	1
Patrol.cs	2	3
PlayerController.cs	2	3
TargetMovement.cs	1	2
TOTAL		25