

# **KNUCKLES BATTLE**

TECHNICAL DESIGN DOCUMENT

CS596S18Team9

## **Table of Contents**

- 1. Executive Summary
  - a. Game Overview
  - b. Technical Summary
- 2. Evaluation
  - a. Game Engine
  - b. Target Platform
  - c. Game Planning
- 3. Scripts and Complexities
- 4. Game Development Team Members

### **Executive Summary**

#### **Game Overview**

**Title:** *KNUCKLES BATTLE* **Platform:** PC Standalone

Genre: Top-down Shooter, Protect the King

Rating: (10+) ESRB

Target: Casual gamer (aging from 12 - 30)

Release date: May 2018

Publisher: CS596S18Team9

KNUCKLES BATTLE is a game where you take the role as Pickle Rick, with the outstanding ally of Mr. Meeseeks, to battle the incoming Knuckles that have come to find their "queen". Using your weapons and power-ups, you must defeat the tribe of Knuckles onslaught as best you can.

### **Technical Summary**

KNUCKLES BATTLE is developed with a budget of \$0 by five people for a grade. (See Game Development Team Members section for more info.)

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

PC STANDALONE

Everything made since 2004 should work.

CONSOLE

N/A

# **Evaluation**

#### **Game Engine**

The game engine utilized for the development of *KNUCKLES BATTLE* 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**

KNUCKLES BATTLE 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.

### **Game Planning**

We've compiled our planning area in a <u>spreadsheet</u>. Lists out the scope of how we wanted the game to be as well as due dates.

# **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