

# Requirements and Specifications document

Project name “Happiness plus 1”

Jeffrey Redmond

SID# 200335711

## Purpose:

The purpose of this this capstone project is to create a game called “Happiness plus 1”, the games intended audience is all ages.

## Scope:

The scope of this project is to have completed 6 levels of the game completed for project day including a title screen, credits and pause menus.

## Features:

The game will be a puzzle solving game with a art style that is 2D top down pixelated art. The main features of this product can be listed as:

- The ability for character Movement in the game
- The ability to interact with object in the game
- An Inventory of items that the player has acquired
- The ability to solve puzzles using the items acquired
  - Crafting new items using items picked up
  - Game progression after puzzles are completed
- The presence of sound effects for generic gameplay
- 9 levels with each level containing:
  - 1 - n Areas in each level depending on the particular level
  - Non playable characters
  - A script of interactions between character - non playable characters
  - Ambient music
  - Sound effects
  - Unique puzzles
- Controller screens:
  - Main menu / start screen
  - Load game option
  - New game option
  - View credits option

- Exit game option
- Pause screen
- Change settings options
- Save game option
- Exit game option

## Release criteria:

The game shall allow the user to solve puzzles to progress the main story and eventually complete the game.

## Programming languages and development software

- The game will be developed in Game maker studio 2
- The game will be implemented using game maker studio 2's native language GML

## Display Control and audio

- Game must have sound effects for most actions
- Game must have ambient music
- FL studio will be used for the creation of any developer made sound effects and or music
- Game must work in Windowed and fullscreen and support multiple common resolutions
- Game must be played on PC
- Game will run at 30 frames per second
- Game will be released as a .exe that is easy to install and begin playing
- Game will be tested as a alpha prior to project day to check for bugs and other potential issues

## Functionality

For project day the features that will need to be completed are:

- Main title screen with its corresponding components
- Levels 1 through 6 with all corresponding features

## Usability

Testing will be performed on the puzzles for each level to assert that puzzles are able to be solved by the average user and are fun.