OPERATION CHRISTMAS

User Manual

Table of Contents

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What is Operation Christmas?

Operation Christmas is an engaging, action-packed survival simulation. As Santa, you will fight continuous waves of Grinches. The Grinches' intent is to kill you, and thus ruin Christmas. As a result, you must defend yourself in hopes of preserving Christmas. Luckily, you will have a weapon and a skill by your side, as well as snowmen allies who will sacrifice their lives for you.

System Requirements

Minimum System Requirements:
OS: Windows 7 (32-bit and 64-bit) / Mac OS X 10.8.5 / Ubuntu Linux 16.04 (32-bit)

Recommended System Requirements:
OS: Windows 10 (64-bit) / macOS 10.13 / Ubuntu Linux 18.04 (64-bit)

Installation

1. Start your computer
2. Go to https://processing.org/download/ and download the most optimal version of the software
3. Once downloaded, create a new project on Processing and download the zip file from the Github repository
4. Drag all the files from the zip file into the new project folder, or into the Processing screen itself
5. Download the Sound library in Processing
6. Run the project and enjoy

Game Manual

The Main Menu

You will be greeted with a main menu. There will be three options: Easy Mode, Medium Mode, and Hard Mode.

If you so choose to start in Easy Mode, you'll begin in wave 1. If you start in Medium Mode, you'll begin in wave 10. If you start in Hard Mode, you'll begin in wave 20.

The Levels

Each increase in wave (or level) will result in additional Grinches per wave, as well as faster average speed of Grinches. In addition, there will be five ammo crates and five barrels per wave, which would be advantageous to use. To pick up ammo crates, you must walk on top of them. Each ammo crate will grant you an additional 10 ammo.

The Controls

As the player, you'll be controlling Santa via keyboard and mouse. The WASD keys on the keyboard will control the movement of Santa with 'W' designated as upward movement, 'A' designated as leftward movement, 'S' designated as downward movement, and 'D' designated as rightward movement. The mouse will control the aim and the left mouse click will control the shooting; every left mouse click will shoot a projectile, given sufficient ammo.

As a bonus skill, holding down 'Q' will activate slow-motion. It is imperative to note that holding down 'Q' will deplete your energy. Once your energy is depleted, slow-motion will automatically deactivate. However, energy does replenish over time.

As for boundaries, you are able to walk off the screen. It will just teleport you to the corresponding opposite side of the screen. While it is an essential part of the time that should be used to the player's advantage and discretion, the player should know that zombies spawn outside the screen boundaries and the next wave will automatically start once the current wave has been defeated.

Upgrades

You get one 'money' for every Grinch eliminated. With the money, you can upgrade your player speed or bullet size, or replenish your health. Pressing 'E' with at least 30 money will grant you full health. Pressing 'F' with at least 10 money will upgrade your bullet size. Pressing 'R' with at least 10 money will upgrade player speed.

It is imperative to note that each time you upgrade, it will upgrade that specific upgrade with all your money. For example, if you have 25 money and you press 'F' to upgrade bullet size, it'll upgrade bullet size twice and return you 5 money. This feature makes quick decision-making essential to the game, as you must continuously keep track of your money and your desired upgrades.

Death

If you die, you have an option to respawn. However, all progress will be lost and you will be returned to the main menu.

Customer Support

If you find any bugs or issues with the game, please feel free to contact us at jchen1@exeter.edu.

Credits

Programming:

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