



Resident Medi-evil

Christina Baziw, Matthew Confalone, Ricky Yue, Edgar Mejia | [19F --Intro to Game & Simulation \(Combined\)](#) | OCT 18/2019

Version Number	Description	Date
1	Original documentation	October 18, 2019
2	Changes based on feedback, powerups	November 2nd, 2019

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Overview

Plot

Resident Med-evil takes place in an alternate timeline where the world has been overrun with zombies, because of a time-traveller who brought zombies back to the past. You play as a time traveller who goes back in time to stop the one who spread the infection in medieval times, but instead of accepting your help, the townspeople take your weapons, and imprison you in a dungeon. In order to escape, you must bypass all of the traps that have been set up to prevent you from escaping the dungeon.

Enemies / Obstacles

Zombies

Zombies take up 1 square and will walk back and forth between two walls, they will kill the player if they make contact with them. Each zombie can be killed with 2 damage. Zombies will pursue the player upon taking damage.

Archer

Archers take up 1 square and will patrol in a straight line, while shooting in another direction. Their arrows will kill the player in 1 hit, and they can be defeated with 1 damage. The arrows fired by the archer will follow the player.

Flamethrower

Flamethrowers are stationary obstacles that project up to 3 grid squares of flames on all four directions. The flamethrower will have a timer that turns itself off for a short amount of time, the off animation will have the flames gradually retreating back to the flamethrower before disappearing completely, to recharge and allow the player to cross to the other side. If the player collides against the flames the player would die and be sent back to spawn.

Hole

Holes are stationary obstacles that will kill the player if they land upon its square tile. The player can jump over the obstacle, but the jump will only cover 1 grid square and in order to jump further the player will need a jetpack to perform a "double jump" which will cover 2 grid squares.

Gameplay

Powerups

Most of the powerups in Resident Medi-evil will be optional with some being more important than others. The powerups will be picked up automatically by the player when their sprite appears on the same grid square as the powerup and will disappear after they have been picked up. The powerups' effects will be indefinite and cannot be turned off once they have been acquired.

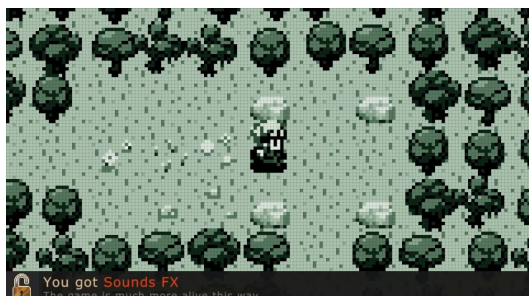
Lantern

Resident Medi-evil will utilize “fog of war” to limit the player's sight and add a more suspenseful atmosphere to the game. The player will have the option to pick up the lantern powerup to expand the radius of their vision range and plan their next move. This Powerup will be optional as players can choose not to pick this up for a more challenging experience and as a way to score a top score.



Movement Speed

The movement speed powerup will increase the player's movement speed. This power up, like the lantern, will be optional as the player can choose not to pick this up for a challenging experience, but it is highly recommended to pick this powerup up if you intend to do a speedrun.



Audio

Upon picking up this powerup the game audio will be enabled and all the music and sound effects will turn on. This powerup is purely for the theme and the plot element, so it is entirely optional and does not disturb the gameplay.

Explosive Rounds

The Explosive Rounds gives the player the ability to shoot and destroy destructible walls along with dealing more damage with your weapon. The explosive rounds will open up more paths for the player to travel through and allow for a more aggressive play through. The explosive rounds will be necessary for the player to progress through the game so pick it up as soon as it appears.



Jetpack

Players can use the Jetpack to jump over 2 grid squares and will be able to avoid obstacles such as holes. This, however, does not make the player invulnerable and the player can still be damaged by projectiles, flames, and enemies. The Jetpack is essential to complete the game so be on the lookout for this.



Controls

The game follows the simple format of “wasd” control for movement, “j” key for attack, “spacebar” for single grid jump and double tap spacebar to perform a double jump when in possession of a jetpack. There will also be a pause menu when the player hits “esc”, the player can change game volume and text speed, as well as return to the main menu.

Mechanics

Player

A cyborg sent back in time, the player is the controllable character performing all the controls and will be followed by the game camera as it moves. The character will only have one health and will already have a weapon with him at the start of the game. There will be a hidden timer and the score will be calculated based on the player’s performance (ie. clear time, player deaths, etc.)



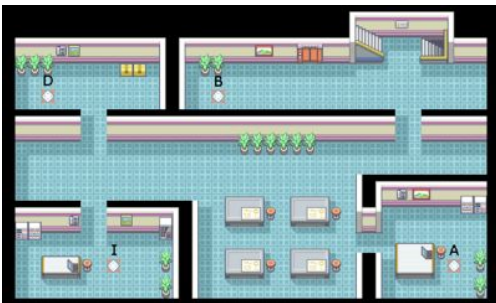


Breakable Walls

Crooked shape walls, visually different from the other walls, are capable of being torn down with the use of weapons containing explosive rounds.

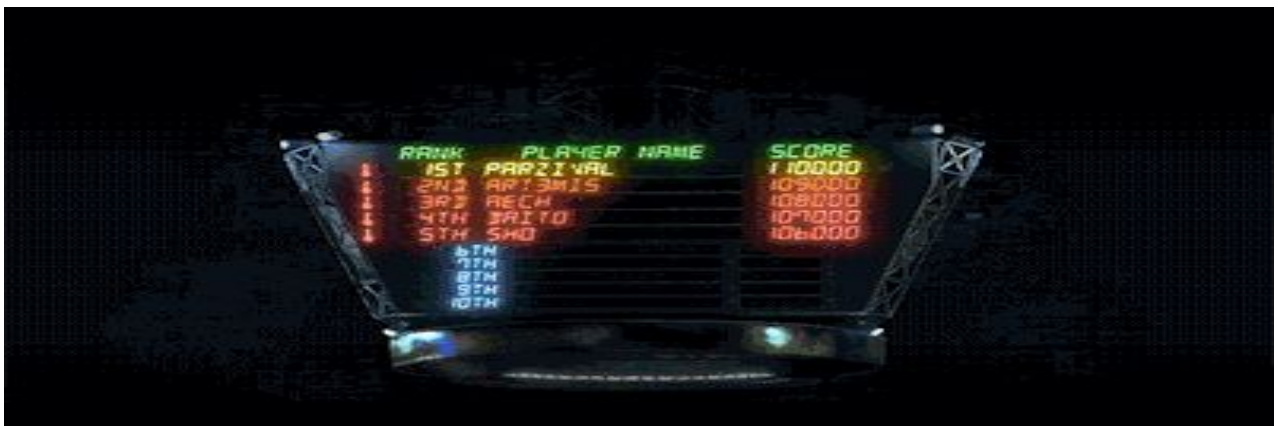
Teleporter

Specific device that is part of the scenery that changes the space in which the player is, making it appear on another space also within the current scenery or current level.



Score System

The players high score will be displayed after the game is over. Score is calculated by $999 - ((\text{time taken}) + (50 * \text{number of deaths}) + (100 * (\# \text{ of lantern pickup})))$





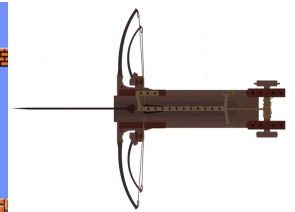
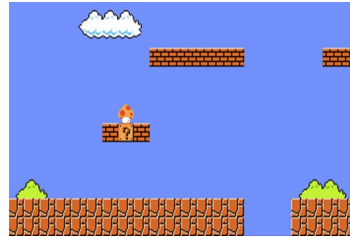
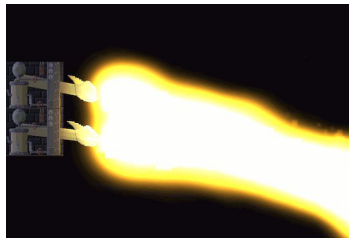
Fog of War

The “fog of war” limits the players line of sight, meaning that the player will not see what is happening beyond the fog nor will they see the layout of the map. This handicaps the player to be more careful and take a more methodical approach. The radius of the player’s sight can be increased with the help of powerups and

Death

Player will die if any of the following events occurred:

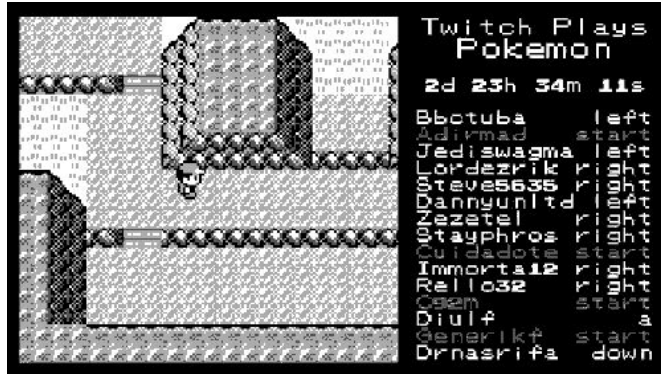
- One collision against a Zombie (Z)
- Step into a place labeled as H; fell into a hole
- One collision against fire; Flamethrowers (F) shoot fire.
- One collision against an arrow; archers (A) shoot arrows.



Weapon

The weapon gives the player the ability to shoot and harm enemies such as zombies and archers. Later, upon picking up explosive rounds, the player can use the weapon to destroy breakable walls to open up new paths.

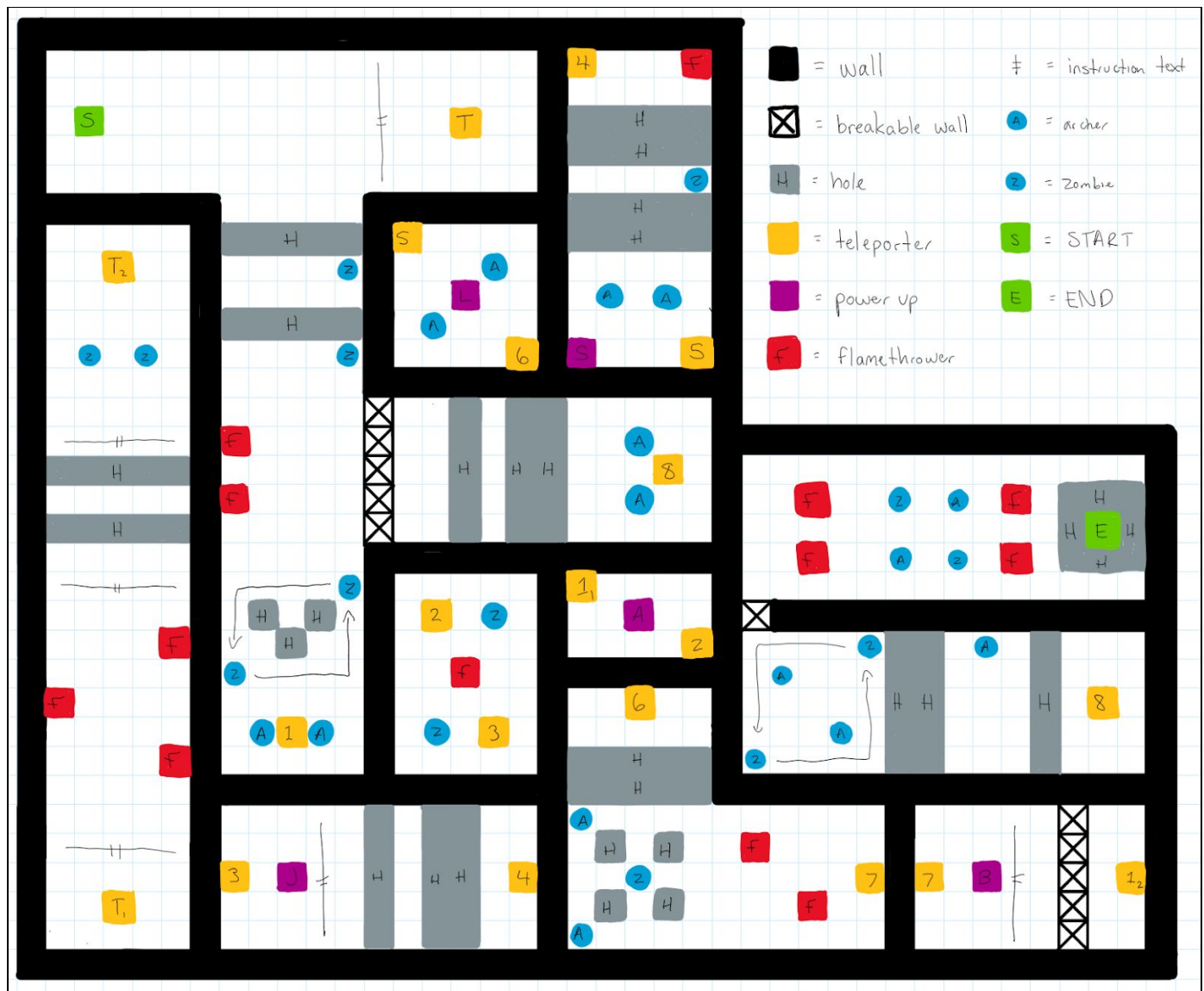




Jumping

The player has the ability to jump 1 grid square on all 4 directions to get over a hole. If the player process a jetpack they can perform a double jump that covers 2 grid squares, but understand the player cannot change directions in the middle of the jump and will land on the direction where they first perform the jump. Note jumping does not mean that the player is invulnerable while jumping as they can still die to projectiles flames etc.

Map



All Objects

- Character and any object cannot occupy the same space
- Projectiles shot by enemies/blocks will kill you but will not kill other enemies
- Walls will interrupt player and enemy projectiles

Red Objects

- Can NOT be destroyed by players gun
- Colliding with red object will NOT kill you
- Stationary objects

Blue Objects

- CAN be destroyed by players gun
- Colliding with blue object will kill you
- Moving objects

Wall

- Boundary
- Cannot be broken or passed through

X - Breakable Wall

- Boundary
- Can be broken after player receives explosive rounds power up

H - Hole

- Player must jump over these obstacles
- Two H's side-by-side means player must have jetpack power up to cross

- Teleporter

- Teleports player to teleporter with matching number
- If Teleporter has subscript, teleport it to the teleporting with the same base but no subscript
- o Eg. T2 will teleport you to T

Power Ups

- Grants the player a power up (some mandatory and some not)
- o A = audio
- o J = jetpack
- o S = movement speed
- o L = lantern
- o B = explosive rounds

F - Flamethrower

- Sprays fire in up, down, left, and right directions, up to 3 blocks
- Flamethrower turns off and on intermittently

Instruction Text

- Lines represent trigger for instructional text popups
- o Eg. Explaining what button to use to activate a power up

A - Archers

- Ranged attacker
- Shoots arrows intermittently

Z - Zombies

- Melee attacker