

Ouroboros Runner Game Design Document

1. Introduction

Ouroboros Runner is a side-scrolling endless-runner that focuses on the adventure of a single villager as he attempts to defeat a giant mythical snake demon that threatens his entire world. The objectives of the player are to collect the legendary weapons that are imbedded into the the creature as well as survive while running on top of it. The villager that acts as the player's avatar can only avoid obstacles by jumping above them. The game is over when the villager is hit by any one obstacle, and over time, the number of these obstacles will increase. When the player receives a Game Over, their score will be recorded as the time they spent alive (in seconds) added to the number of weapons they collected on that run (with a bonus number of points for every fifth weapon they acquire).

[Note: Any time the term villager is used in this document, it is to be treated as interchangeable with player avatar.]

2. Interface

During gameplay, the player is able to control only when the villager jumps, and does so by pressing the spacebar or by tapping the screen (mobile). All other player control exists only in navigating the menus by using a mouse, trackpad, or touchscreen. The main menu is displayed as soon as the player starts up the game. The main menu gives the player the options: Start Game, Credits, Help, and Exit Game.

- A. **Start Game:** will bring the player to the actual game after the intro cutscene. Gameplay will begin immediately upon seeing the player avatar on screen.
- B. **Credits:** will display the relevant information regarding the creation of Ouroboros Runner, such as email addresses and names.
- C. **Help:** will bring up a small lore explanation and a simple outline of the objective and controls.

[Note: The Help text below is technically a placeholder for the final display in the game, so the wording or tense may change with the final version.]

- a. **Lore:** The Ouroboros is a giant fictional serpent that is constantly in the state of eating its own tail. The Ouroboros in this game is chasing its tail and causing the mass destruction of multiple worlds. The unlikely hero of this game is a simple

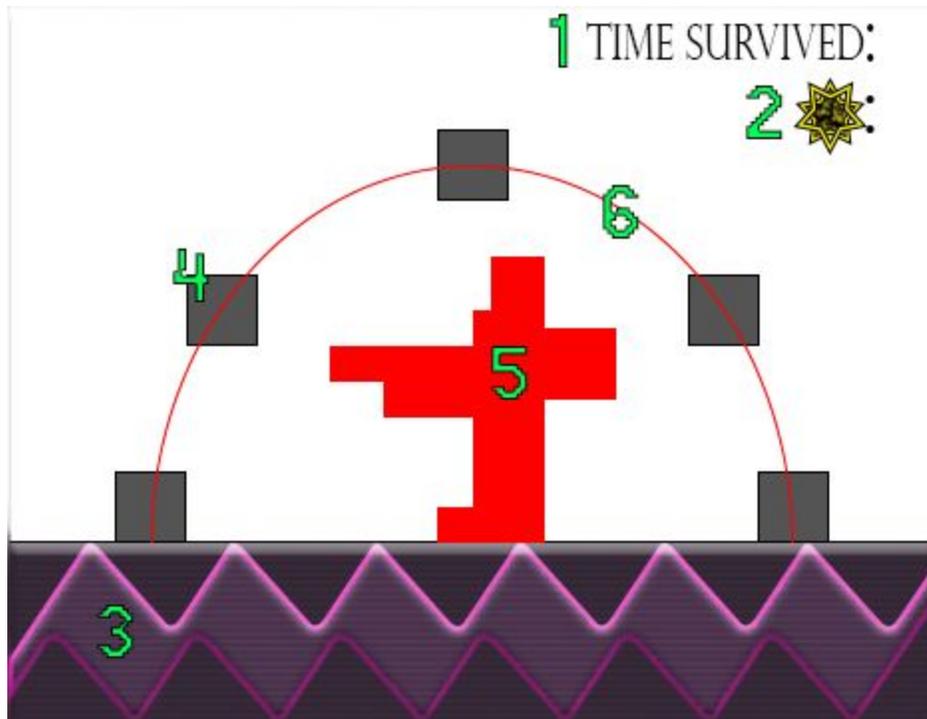
villager of the world that the Ouroboros is currently destroying. The villager has heard of the Snake's legend, and how one can possibly stop its chaos. Over the vast millennia, the creature has accumulated a myriad of weapons that other heroes have embedded into its scales in unsuccessful attempts to stop it. The legend says that if someone can collect enough of these weapons and make it to the creature's face, they may be able to defeat it.

- b. **Objective:** The player controls this humble villager as they run on top of the Ouroboros. The villager travels quickly towards the monster's face and must both survive on top of the Snake as well as pick up the weapons found in its body. The obstacles the villager must avoid come in the form of trees, ruins, and rubble that have grown or been deposited along the creature. The player should try and collect as many weapons as possible because they get a bonus for every five weapons that are collected.
 - c. **Controls:** The main mechanic of Ouroboros Runner is simply jumping in an effort to avoid the obstacles and collect the weapons. The player can jump using the spacebar or by touching the screen (mobile). The character's jump travels in a parabolic arc that requires quick enough reaction times in order to gain the necessary height to clear particularly tall walls or trees. The jump will last longer and go farther and higher when the spacebar or screen is held down for more time. The player automatically collects weapons when the avatar comes in contact with any of them.
- D. **Exit Game:** will close the window and quit the game.

3. Gameplay

During gameplay, the display will be in landscape mode, portraying the villager on the left side of the screen running towards the right side of the screen along the snake. The snake's body will act as the floor and take up the bottom quarter of the screen. The player's current score will be displayed in the top right of the screen, divided into time survived and weapons collected. The scrolling background that exists behind the main focus of the player's attention will swap randomly between four different plates, but this will not change the number of weapons or obstacles that spawn. The background displayed does, however, change the art for the obstacles between rocks, trees, and ruins. None of the art styles for the obstacles make them any more or less difficult than each other.

[Note: Below is a visual approximation of the screen during gameplay. Included are the most important parts of a single run in simplified form.]



1. **Time Survived:** next to this text is a point value that displays the number of seconds the player has survived during the current run.
2. **Weapons Collected:** next to this icon is a point value for weapons collected, as well as the added value of point bonuses for each fifth weapon the player collects.
3. **The Ouroboros:** the floor in Ouroboros runner is always going to be the snake itself, and while the tileset that represents the monster will change, the height of its body on the screen will always remain the same.
4. **Avatar Hitbox (mid-jump):** the grey box represents the player's avatar during a jump. The visible character will be slightly larger than the hitbox itself, meaning part of the character's art will stretch outside of this boundary.
5. **Obstacle Hitbox:** this approximation of a tree-type obstacle is a collection of red boxes rather than the actual art in the final game. If the grey box were to hit the red area, the game would be over for the player.
6. **Jump Arc:** this red arc represents the villager's motion as it jumps. While it is present in this concept image, there are no indicators of the exact path of a player's jump during actual gameplay.

The interactable objects seen during gameplay are as follows: the villager, the weapons that need to be collected, and the obstacles that need to be avoided. The villager is the

player's avatar and can be controlled by jumping in order to come into contact with weapons and avoid coming into contact with obstacles. The player's avatar, the villager, is represented in gameplay by a completely square hitbox. The villager jumps in a parabolic arc that will cover a greater vertical distance and reach a taller height when the spacebar (or screen for mobile) is held down for longer.

The weapons that the player will need to collect in order to obtain a higher score are depicted as grey swords with glowing gold auras around them. The villager will automatically collect these when the villager touches a weapon. There is no extra input or button press on the part of the player to collect the weapons. The weapons are spawned closer to obstacles than in open spaces more often, making obtaining them riskier than simply trying to survive for a longer period of time.

The obstacles the villager must avoid are rocks, ruins, and trees that will spawn randomly on the right side of the screen based on the variety of background plate that is currently on screen, and increase in frequency as more time passes. The only significant difference in each obstacle type is the art that represents it. If the villager hits any of these obstacles, the game will be over for that run, and the score will be tallied on the end results screen that will be immediately displayed after an appropriate sound cue and a fade to black (Displayed Below). After the End Results screen is displayed, the player has the options to either quit to the main menu or play again.

[Note: The Game Over screen displayed below is a placeholder image, and is subject to change before the final version is finished.]



1. **SCORE:** Next to this text will always be the end tally of the player's score.
2. **Main Menu:** This option takes the player back to the main menu.
3. **Play Again:** This option takes the player directly back into a new run without having to replay the intro cuscene.

4. Scoring

The player's score is found by adding together the time the villager has spent alive with the number of weapons collected during the run, in addition to the bonuses for every fifth weapon collected. Each time the player collects five weapons, they will receive a score bonus that starts with a single extra point, and increases by two points per successive bonus. For example, if a player had survived on a specific run for one minute and twelve seconds, with twenty-three items collected, they would receive one hundred eleven [111] points.

[Note: Four other examples of point tallying are displayed in the table below. These examples may not be practically achievable when the final game is made. These examples are simply for basic understanding and reference. The point representations are in red font, with the exception of the Total Score column that displays only the final score of the hypothetical run in red font.]

Time Survived	Number of Weapons	Number of Bonuses	Total Score
1:12 (72 seconds)	23	4 (1+3+5+7)	72+23+16= 111
2:01 (121 seconds)	14	2 (1+3)	121+14+4= 139
0:58 (58 seconds)	35	7 (1+3+5+7+9+11+13)	58+35+49= 142
1:15 (75 seconds)	4	0	75+4+0= 79
1:52 (112 seconds)	17	3 (1+3+5)	112+17+9= 138

5. Mood Board/Art Direction

The main three foci of the art in this game are the villager, the Ouroboros, and the ruins that act as the setting and surroundings. The Villager is depicted mainly as a generic hero, taking much of the physique and costume design cues from classic Kung Fu action-movie characters. The Ouroboros is a large serpent, but has the distinct scale colors of varieties of purple. The ruins and trees are separated into shades of green and

beige, and are often mixed together for the visual effect of overgrowth and significant passage of time.

Ouroboros Runner

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A	B	C	D	E	F	G
H	I	J	K	L	M	N
O	P	Q	R	S	T	U
V	W	X	Y	Z		

Font Reference

0f5104	51402d	312051
167806	785f43	492f78
22b709	c69c6e	4d3380
1ea308	a3815b	6340a3
146b05	6b553b	412a6b

Color Palettes

