Game Design Document

Gromov Alexander (20218463)

DSU International College

Game Programing

Puzzle-platformer “The Orb”

[The Orb 3](#_Toc160454672)

[Game overview: 3](#_Toc160454673)

[Game Concept: 3](#_Toc160454674)

[Genres: 3](#_Toc160454675)

[Game flow summary: 3](#_Toc160454676)

[Visual style: 3](#_Toc160454677)

[Gameplay: 3](#_Toc160454678)

[Progression: 3](#_Toc160454679)

[Objectives: 3](#_Toc160454680)

[Play flow: 3](#_Toc160454681)

[Mechanics: 3](#_Toc160454682)

[Controls: 3](#_Toc160454683)

[Difficulty: 4](#_Toc160454684)

[Replaying: 4](#_Toc160454685)

[Character: 4](#_Toc160454686)

[Levels 4](#_Toc160454687)

[Levels: 4](#_Toc160454688)

[Interface: 4](#_Toc160454689)

[Visual system: 4](#_Toc160454690)

[Control system: 4](#_Toc160454691)

[Technical 4](#_Toc160454692)

[Hardware requirement: 4](#_Toc160454693)

[Development hardware: 4](#_Toc160454694)

[Network requirements: 4](#_Toc160454695)

[Reference games 5](#_Toc160454696)

[Bounce 5](#_Toc160454697)

The Orb

Orb is a 2d game that incorporates elements from puzzle and platformer games. Player is given a set of levels that must be solved using game mechanics and physics.

Game overview:

Game Concept: use physics and switch between sizes to overcome challenges of the current level and to get to the next.

Genres: 2d platformer, puzzle

Game flow summary: player selects a level that will be loaded and tries to complete it by moving an orb, dodging spikes, overcoming obstacles and using physics to help them while collecting bonuses on the way, which combined with remaining lives will determine the amount of stars player gets on the score screen.

Visual style: pixel-art.

Gameplay:

Progression: Upon completing a level player gets access to a new level. If the player completes all levels with maximum stars, access to a secret level will be given.

Objectives: to complete all levels

Play flow: Player starts a game, selects a level and then tries to complete it.

Mechanics:

Controls: player moves the orb sideways and upwards with jumps.

Difficulty: First few levels will introduce the mechanics one by one. First one will show the basic controls: jump and roll sideways. The second will explain water, shows that medium and big sized orb floats on the top while small drowns. The third level introduces wind and that only big orb can fly catching the wind. The fourth will introduce spikes, they are either small (then the big and medium orb can roll on them safely), medium (the small orb can get under them unharmed with certain precision while the big orb simply rolls over) and big (both small and medium orb can get between spikes). This will also introduce health points, which adds together with bonus points on the level to give the stars in the end of the level.

Replaying: Each level has infinite amount of tries and can be replayed anytime.

Character: a small orb colored by player’s choosing.

Levels

Levels: levels will combine elements introduced in tutorials (spikes, wind tunnels, water, obstacles) gradually increasing in difficulty. Final level before the secret level will be testing the player and skills acquired after playing all other levels.

Interface:

Visual system: there will be a main menu, which shows all the levels and the stars collected. Then there will be an options menu, allowing to adjust graphics and other parameters. Also, there will be a save/load menu. And finally, there will be a pause menu inside each level, with access to options and save/load menu.

Control system: right and left arrows (or A and D keys) to roll sideways, up arrow/space to jump. Escape key will open a pause menu or main menu, depending if the player is currently completing a level or not.

Technical

Hardware requirement: as low as possible, it’s a simple game.

Development hardware: laptop and Wacom.

Network requirements: none.

Reference games

Bounce

