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Design Specification

Story

The story takes place in space, where the main character, Astro starts from the most distant planet, Pluto. After exploring Pluto, Astro goes to Neptune and continues his exploration through the rest of the planets found in The Milky Way until he reaches the sun, which is the final destination. Astro embarks on this dangerous journey to take a sample of the sun and bring it back to his galaxy, The Dairy Way, to create a new sun.

Since Astro's task is not an easy one, he will have to face many challenges along the way. He will often encounter various obstacles, such as asteroids and spikes. Although his journey may be tough, he is still eager and determined to travel and explore safely and accomplish his objective.

Characters

Astro



Astro is a stranger to our galaxy. He comes from the planet Dirt, which is found in The Dairy Way galaxy. The sun in his galaxy will soon die out so he is tasked with the challenge to collect a sample of the sun found in The Milky Way galaxy and create a new one to save his.

Theme

The game is created using an 8-bit style. The theme revolving around the game is inspired by assorted galaxy and universe visuals. The action takes place on all eight planets found in The Milky Way.

Astro starts on Pluto then he must go through, Neptune, Uranus, Saturn, Jupiter, Mars, Earth, Venus, Mercury, and eventually, the sun.

Functionality Specifications

Player Movement – The player can control Astro's movement by using WASD, and the space bar to jump.

Score – The score starts upon the initiation of the game. The score increases continuously as long as the player is able to progress, and still have lives.

Lives system – The player starts with three lives and can have a maximum of four lives. Extra lives can be acquired throughout the game from chests. If the player opens a chest when having four lives, he will not be able to collect it. Once all the lives have been used up, the game will end.

Respawn System – Whenever the player falls off the platforms, he will be respawned back to his previous position.

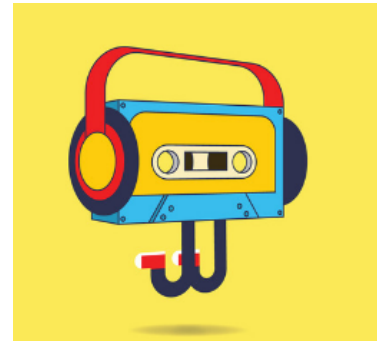
Moving tiles – Moving tiles that go left and right will be present in the game to help Astro to land safely on platforms.

Asteroid spawner – Asteroids spawn at different fixed points in the game.



Sound effects and Music

The sound effects will all be in 8-bit to match the rest of the game. All sound effects and music will be royalty free to avoid copyright. All tracks will be saved in a wav format for more sound clarity and better compatibility. Some websites that will be considered to be used are: <https://freesound.org>, <https://pixabay.com/sound-effects/>, and <https://sound-effects.bbcrewind.co.uk>.

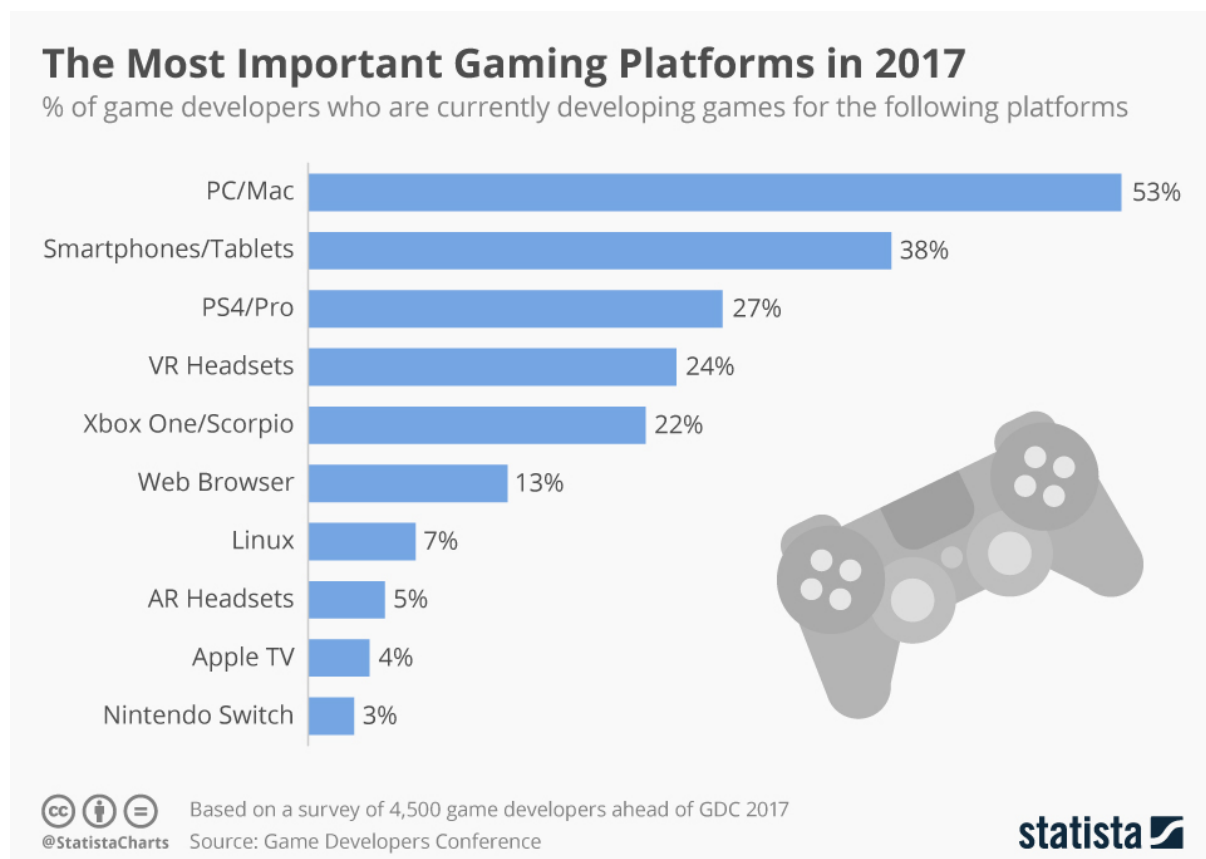


Platforms to be played on

Optimized to be played on:

- PC
- Mac

PC gaming will be prioritized since it is the most popular device people play games on.



Following engines will be used:

- Unity 2020.3

Available on itch.io