GAME DESIGN DOCUMENT

Turtle Boosta

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1. Executive Summary, Quick overview

Turtle Boosta is a platformer game with multiple smaller levels, where the goal for the player is to achieve the best possible times in these levels. The main character, a turtle will have a rocket launcher strapped to it's back, which is used by the player to bounce across the stages, avoiding hazards and achieving best possible time.

The variety of the chapters and stages will provide fun and interesting gameplay through allowing different kind of challenges for the player to grind. The world will be colourful, simple and pleasant to look at.

Turtle Boosta will be on desktop platforms, and played with mouse and keyboard.

2. Target Audience

Through the nature of the gameplay having a simple learning curve, and including a timer, Turtle Boosta targets towards both casual and hardcore gamers. The casual audience will get enjoyment by attempting to clear the stages that increase in difficulty level, and the more experienced gamers will have fun as they try to clear the levels as fast as possible, attempting to earn a medal from each stage.

3. Main Characters

Lubi the European Pond turtle, usually just referred as Lubi, is the main protagonist of the game. He's determined to reach a new land, after his current home is hit by a drought. He has a rocket launcher strapped to his shell, which allows him to move a lot quicker than by just walking.

There is no other characters in the game.

4. Main Features

4.1 Main mechanics

The game consists of chapters, which contain multiple smaller levels, in which the player is supposed to reach the end of the level as quickly as possible. The player is supposed to maneuver these stages using the rocket launcher to boost themselves. The stages contain different obstacles, increasing in difficulty the further they advance in the game.

4.2 Movement

The main character is able to move left and right slowly, but the primary method of movement is *"rocket jumping",* or *"rocket boosting"*, where the player character shoots a rocket in its vicinity, which on explosion causes a force to push them with great velocity away from the impact. This movement method is familiar from older first-person shooter games, such as Quake, or Team Fortress. The reason to implement this type of movement is to differentiate it from other games with similar

progression and gameplay, and also add an skill factor to this game to make it more interesting for the player.

4.3 Physics

Due to the nature of the gameplay, the physics will be a big part of the game. For the physics, the game will be using Unity's rigidbodies. The gravity, the force of the rockets, the falling speed and all other forces have to be carefully tested to maximize the smoothness of the gameplay.

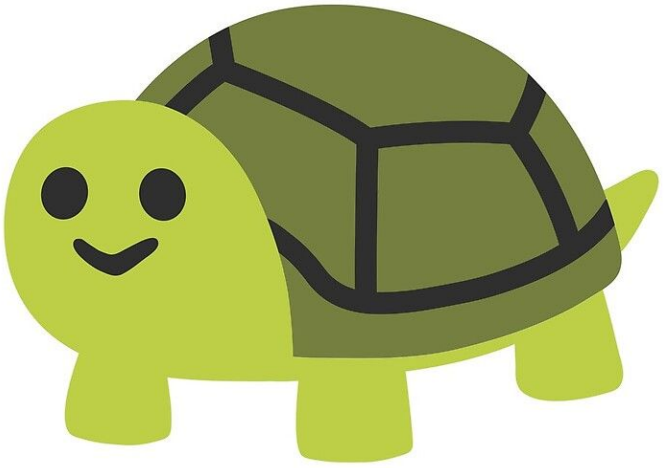
4.4 Multiplayer mode

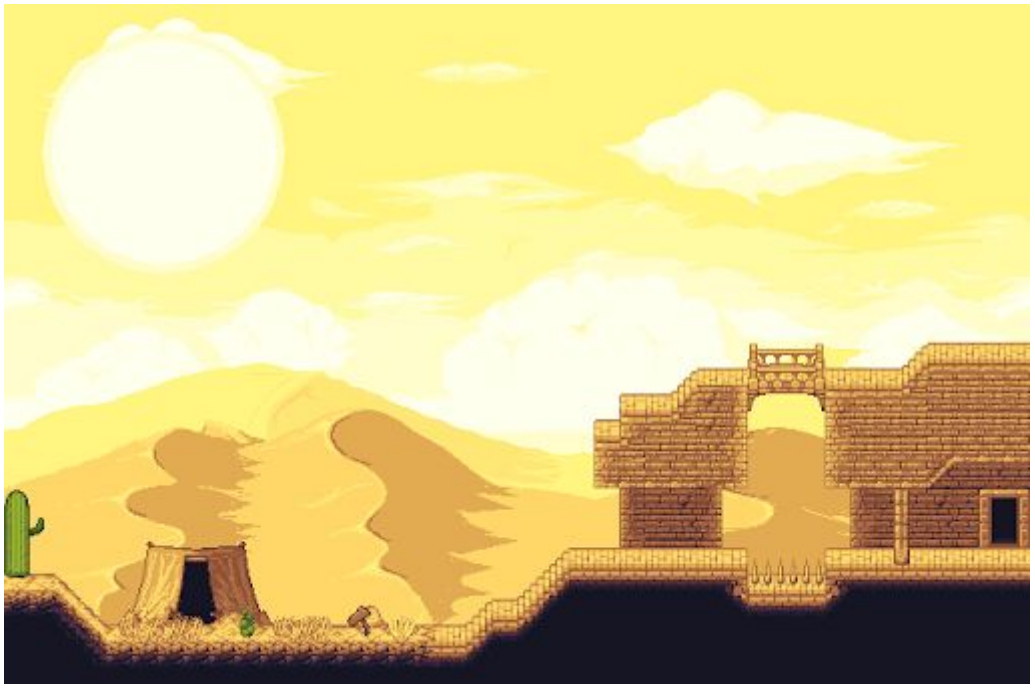
A multiplayer mode will not be included in Turtle Boosta

5. Genre, Setting, Concept Art book

Turtle Boosta will be categorized as a platformer, but not in a traditional sense, as the gameplay is not a direct 'from point A to point B', but rather consists of smaller stages, that the player repeats multiple times, in attempts to achieve a better score.

The settings and the general 'art-style' for Turtle Boosta is a colorful and cartoony. The setting will be further detailed in the progression chapter.





6. Enemies, NPCs, Other objects

Due to the nature of the gameplay, there will be no direct enemies or NPCs, but the levels will have environmental hazards, that can either slow down the player, or result in a game over, if not properly avoided. Each chapter has its own hazards, to make them more distinctive. The hazards are listed in the story overview, per chapter basis.

7. Storyboard, script

The main goal for the story is to allow for the game to have multiple biomes and world. The story is presented through simple artboards/slideshows, shown together between chapters.

7.1 Story overview

As the main idea, the main character's home is hit by drought and he has to travel to a better location, through multiple different biomes.

7.2 Progression, World 1

The first world is an autumn forest biome, with yellow-to-orange ambiance. This world will have water traps, in which the player can bounce like a skipping stone, but if incorrectly entered, will sink in to.

7.3 Progression, World 2

After the main character has overpassed a sea, he arrives at the second world. The second world is desert biome with yellow sand and blue skies. The desert biome will include dangerous cactuses, that if touched, will result in game over.

7.4 Progression, World 3

The third world is mountain biome, where the main character arrives after the desert biome. This biome contains a lot more vertical challenges, and is colour themed as white, blue and gray. A planned hazard for this world is icy surfaces, which will have no friction, and the rockets will bounce off of them, but depending on how difficult the levels will be, this hazard might not end up in the final game.

8. Technical definitions, Tech guide

8.1 Platforms, versions

Turtle Boosta will be built for PC, Mac and Linux platforms, since Unity Engine can be built for the main three platforms easily. The only version available to public is the main release of the game, and additional patches may be added if game breaking bugs are discovered.

8.2 Control Scheme

Turtle Boosta controls with mouse and keyboard. The controller layout will be the traditional WASD for movement, mouse to aim your weapon, and left click to shoot.

9. Business definitions

9.1 In-app purchases

The game will not include in-app purchases, the game will be completely freeware.

9.2 DLC packs

DLC packs are not planned, but if game is met with great acclaim, potential extensions could be added, such as level editor and more chapters.

10. Outsourced/Bought Assets

I will be using two scripts for this game that are openly licensed; A mesh generator for the polygon collider, so creating terrains will be a bit quicker and a shader for repeating textures across the polygon terrain.