

Game Design Document - You Only Get One Tool

Group 8 - Infinity

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Abstract

The game is a First Person 3D platform game. You play an adventurous man who wants to save his wife from the alien kingdom. These aliens however do not want to return their treat. This results in a hectic adventure with battles with many losers. The player runs through the kingdom searching his wife. The player finds many new weapons but as he can only one weapon at a time, he will lose his previous weapon every-time. The weapons are not only used to kill the aliens, but als to survive the boobytraps they have lying around. They can be used to travel faster and easier through the kindom.

1 Target audience

The target audience for this game are people whose ages range from 8-40 years. It is too difficult for children who are younger than 8 years old and it is not interesting for most people over 40. Also it targets players who don't like to play a game with a story that is too extensive, but prefer a game that you can play over and over to improve a high score, a game you can quit at any time, just to start over again next time.

2 Platform and Controls

Per level the player gets one tool which helps either passing the level, defeating enemies or both. At the end of a level a boss will be waiting, after which the player gets a new tool. The player walks and performs actions with the keyboard. Looking around is done by moving the mouse and using the tool is done by a left mouse button click.

The grappling hook gun is used to fire off a grappling hook, which has a rope attached. If the hook sticks to an object, the player can swing on the rope, climb up the rope or make it longer. This is a very efficient way of jumping from platform to platform. The grappling hook can also be used to defeat enemies, by grappling onto their weak spots.

The gravity gun shoots an orb that attracts objects. This can be used to shoot a gravity orb to a platform the player wants to jump to, so if he jumps he will get an additional force making him jump further. In addition if the player shoots an orb between two enemies, they will fly into each other causing them to die

both.

The pogo stick helps the player jump very high because of its springlike way of working. If the player jumps up at the right moment he will get extra jumping power, making him jump higher and thus farther. The pogo stick can be used to jump onto enemies as well. If you do this, the stick will drill into the enemies skull, causing it to die.

The double knife is used to cut into a platform, after which the player can climb onto it by cutting the knives on and on a bit higher into the platform. In this way he can jump to a platform more easily because he will not fall off, but stick to the side after which he can recover and climb on top. Enemies can be killed with the knife as well.

The block shooter gun is used to instantiate blocks that can be jumped on. The blocks will be created at a fixed distance and they will disappear after a short while. As long as the blocks exist the player can use them to jump onto them in order to cover large distances between platforms. If an enemy is inside such a block when it is instantiated, the enemy dies.

3 Story, characters and settings of the game

There is no story mode in the game. The game is based however on a guy whose wife was kidnapped by aliens. He then gets on his feet to chase the bad aliens that stole her. He tries to hunt them down, but everytime he gets further into the game, the aliens do so as well, so you can't really make progression. There are different kinds of aliens. Most of them are normal and easy to beat, but at the end of most levels there is a boss, which is much harder to beat.

4 Artificial Intelligence

There are two kinds of enemies in the game. In the level itself there are enemies that perform a fixed number of actions, like flying in a circle and shoot at the player. The bosses at the end of each level however are much more intelligent. They will learn from the player by fighting against him. It learns to recognize the player's moves and he will anticipate to it. For example if the player always jumps to the right if he wants to dodge an attack, the enemy learns to anticipate to that so after a while he will attack a bit more to the right so he can still hit the player. Bosses can also learn how to attack a player when he is hiding somewhere. They find out how to lure the player out.

5 Level/Environment design

The game is randomly generated. It exists of small and some bigger platforms that are located in open air. There is a path between the platforms, but it is not too obvious as there are many platforms on the side in between the path. The player needs to get from platform to platform in order to get to the end of the level. On some of the platforms there is an enemy flying around, which attacks the player if it comes too close. On most platforms there will be vegetation. The vegetation will be randomly generated as well. There will be a few different levels. Some levels will have a different design than the floating platforms. They

will be inside a building. In this building will be one path from beginning to end and many other paths with a dead end. Those labyrinth-like paths are just for confusing the player and to hide enemies, power-ups and traps. Fighting the bosses will be done in more open areas so the boss and the player have the space to move around in an epic battle on life and death. If the player wins and defeats the boss, he gets a new tool and proceeds to the next level. Although there are enemies the player has to fight with, focus in the game lies on getting to the end of the level. It is all about using your tools wisely. Because everything is randomly generated, there is no end of the game. Everytime you beat a level, you get a different weapon and go to a new level. This means that you can get the same weapon more than once before you have had them all.

6 Gameplay and mechanics

With the mouse the player can look look around and aim at objects or points in space. Walking, jumping and performing actions other than looking or shooting is done by the keyboard. The player can move around freely and explore the world. because there is often more than one path from start to end you have more freedom.

7 Art

7.1 Style

The game is built on a low-poly art style. This means that everything is built of relatively large triangles. Every triangle has a little bit of a different colour than its neighbours so they can be distinguished. This also means that we use flat shading. The shadow is calculated per plane instead of per pixel. We use mostly soft pastel colours which change over time, giving the game a bit of a spooky atmosphere. Because the environment is randomly generated, no two objects are exactly the same. This counts for vegetation as well. Because there is no repetition it looks more lifelike.

7.2 Models and Textures

In-game we barely use any textures. Most elements are either created in Blender or randomly generated from a material without texture. We will however use textures for particle effects and for the UI. Models of enemies are created in 3D in the same low-poly art style as the environment. They are also boned and animated in order for them to move as realistically as possible.

8 Sound and Music

The main soundtrack has an electronic style and it is meant to be adventurous and explorative. It should give the player the feeling that he does not have to take a hurry to get to the end, but more that he should explore the world he has landed in. For the bosses you fight against there are other soundtracks which are faster and more lively, because the player is in great danger.

The sound is, in contrast with the world, as realistic as possible. This is done to take the player deeper into the game. It is to make the user feel more concerned with it.

9 User Interface and Gamer Controls

The user needs both mouse and keyboard to control the game. The game starts with a menu in which the user can check high scores and achievements, adjust some settings like toggle sound or image quality, continue a saved game or start a new game. The player can pause the game as well. If he does this, a pause screen pops up in which some settings can be adjusted. Also he can choose to quit the game or start over.