**Game Design Document**

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**Name of the Game:**Jump Ninja

**Name of the Student:** Albert Inkoom **Tutorial:** 4

**Link to the game repository:** https://github.com/ainkoom/JumpNinja.git

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**1 Overview**

Jump NinJa is a game intended to be fun, addictive and remarkably interesting at the same time. The town of Lakuza has recently been taken over by a volcanic eruption. This has left town in shambles and all citizens have been relocated by the government except of one individual who was under sleeping spell and did not know what had happened. The main character ZinZinNo woke up from the spell and realized he had been trapped in hot rocks and Lava from the volcanic eruption.

The game is such an survival and fun game and the fundamental of the game is to avoid falling into any form of obstacle as you journey into the land of safety. In the game this is provided has pile of blocks where the character must jump from one block to the other. It is a PC game with future plans to migrate unto mobile and is target at all game lovers and

**1.1 Game abstract**

The town of Lakuza has recently been taken over by a volcanic eruption. All members of the community have been evacuated aside the main character who has to fight his way to safety before he dies.

**1.2 Objectives to be achieved by the game.**

The basis of the game is to avoid falling into any form of obstacle as you journey into the land of safety. In the game this is provided has pile of blocks where the character must jump from one block to the other. The constraints here is the game will be available via PC version now.

**1.3 Core gameplay**

**The play**

The game starts with the user pressing on the spacebar to jump. This is an extremely comfortable key to start from. There are also actions such as moving forward, back, ducking down and double jump in the air by pressing the spacebar continuously. The spacebar responds to the number of keystrokes, hence the more you tap it the higher your jump gets.

Initially, the user must tap the spacebar to start the player. Afterwards, the player moves/run forward by itself. We can control the many actions like jumping, attacking etc., by tapping and swiping in various ways and directions. The keys used are the forward, back, down and up arrows or A, S, W and D key to perform same actions. Since there are so many obstacle, players must think critically and be precise which sparks the fun in the game.

**1.4 Game features**

[This section describes the principal characteristics the game will have].

**1.4.1 Genre**

The genre of the game is Survival because the user starts the game in a very hostile environment with little to no tools to fend for themselves and at the end of the day make it to safety wholly depending on the tools and food they pick on their way to safety.

**1.4.2 Number of players**

Jump Ninja is a one player game.

**1.4.3 Game theme**

[Describe the guidelines to the aesthetics of the game. Some examples of game themes can be: post nuclear earth, Greek mythology or medieval].

**1.4.4 Story summary**

The town of Lakuza has recently been taken over by a volcanic eruption. This has left town in shambles and all citizens have been relocated by the government except of one individual who was under sleeping spell and did not know what had happened. The main character ZinZinNo woke up from the spell and realized he had been trapped in hot rocks and Lava from the volcanic eruption.

For a moment he felt it was a dream and practically was in a state of disbelief. The heat, gases and hot surface of the rocks did not permit him to stay in on location for so long since his health was drastically getting worse after staying in one location for a long time. The most ideal situation he thought to himself was to be hopping unto the surface of the rocks that had formed because of the eruption and prevent falling into the hot lava beneath him, which was not yet dried up. This must continue till he gets to the land of safety.

**2 Mechanics**

**2.1 Game elements categories**

Every level of the game presents its new challenge, obstacles and speed and requires a lot of thought process to complete all the levels. As stated, the premise is to arrive at a safe zone devoid of any obstacle to be able to start the next level. The game begins by moving from one safe spot “safe spot/ mountain top” void of the hot lava and in jumping and moving forward trying as much as possible to avoid colliding with the obstacles which are the blocks in this case. Also, the speed increases with respect to the level of the game.

**2.2 Rules**

To Jump: Spacebar or W. Also, The spacebar responds to the number of keystrokes, hence the more you tap it the higher your jump gets.

• Higher Jump: Continuous tap on space bar or W

• Move forward: Right arrow key or D.

• Move back: Left arrow key or A

• Down or Duck: Down arrow or S

• Speed or move faster: Ctrl + Right arrow or Ctrl + D.

**2.2.1 Interaction rules**

All obstacles including the stones falling from above, hot lave from below and the decoy stones are intended to reduce the characters health level which is a total of three. When all three are consumed the character dies and player has to start the current level again.

**2.2.2 Artificial Intelligence**

[Describe here how the game elements should react under different circumstances in the game].

**2.3 Game world elements**

Other elements such as trees, birds and houses in the background does not have any direct representation to the game. They only add to the aesthetics of the game.

**2.4 Game log elements**

The game is made up of levels and stages. There are three stages in each level. Until all three stages are met, a level cannot be completed. There is also a score base system which calculates the points based on the distance covered, health level and obstacles avoided.

**2.5 Other elements**

[Describe any other element that can’t be classified on any other element classification in the mechanics].

**2.6 Assets list**

[This section contains the list of every game asset that needs to be created to finish the game].

**3 Dynamics**

In each level, the players face different obstacles and challenges. Also, the speed intensity increases as the level progresses making it more difficult.

**3.1 Game World**

it presents the feel of 3D due to the shades in the blocks and obstacles. Setting are colourful to depict real life examples though in a more contrasty way.

**3.1.1 Game theme details**

[Describe the world environment, its ambientation. Put in details how the game world should look, sound and feel].

**3.1.2 Missions/levels/chapters Flow**

The game follows a sequential pattern. The end goal is to reunite with the characters family. As such each state and level takes you closer to the end goal. Each level and stage ends you on a temporary safe ground. The setting and themes of the background changes with each stage and level.

**3.2 Missions/levels/chapters elements**

The main element is to avoid getting in contact with falling rocks, stepping into the hot lava or colliding with obstacles. The game follows a sequential pattern. The end goal is to reunite with the characters family. As such each state and level takes you closer to the end goal. Each level and stage ends you on a temporary safe ground. The setting and themes of the background changes with each stage and level.

**3.2.1 Objectives**

* The game playable characters can navigate around the world and levels through a set of movement mechanics using left, right, up and down.
* Falling objects, colliding or falling can end the characters life thereby reducing their health.
* Food gives extra health whiles red hearts gives extra life.

**3.2.2 Rewards**

A player gets new set of health and lives when a new level is reached. Unlike the stages where the character continues with the available health and lives till they gain extra or die.

**3.2.3 Challenges**

All obstacles including the stones falling from above, hot lave from below and the decoy stones are intended to reduce the characters health level which is a total of three. When all three are consumed the character dies and player has to start the current level again.

**3.3 Special areas**

Food the user finds in the game gives an extra health whiles a red heart gives extra health. All is dependent on the amount the player has. If both health and the hearts are full they go to waste. The game does not allow the character to carry more than three.

**3.4 Game interface**

The title screen gives you a summary of the game and option to see ranking scores from various players. There is also an option button where the player can find saved games and to be able to choose attire color for character.

**3.5 Controls interface**

To Jump: Spacebar or W. Also, The spacebar responds to the number of keystrokes, hence the more you tap it the higher your jump gets.

• Higher Jump: Continuous tap on space bar or W

• Move forward: Right arrow key or D.

• Move back: Left arrow key or A

• Down or Duck: Down arrow or S

• Speed or move faster: Ctrl + Right arrow or Ctrl + D.

**3.6 Game Balance**

All elements are preconfigured. Especially, each level increases the speed of the player. Each level or stage comes with the speed and pattern of falling particles or arrangement of same objects for the character.

**4 Visuals and Sounds**

the sound corresponds to the movement giving a sense of physical presence in the game. It also makes the game enjoyable as you journey along.

**4.1 Game visuals**

Though a first person game, it takes advantage of 3D objects. It is a very competitive game as players will yearn to get to the highest level and boast of the most number of points. it presents the feel of 3D due to the shades in the blocks and obstacles. Movements are only limited to up, down, forward and back.

**4.2 Game sounds**

The game makes use of simple sound files to depict various sound effects for jumping, colliding, falling and end of game.

**5 Document information**

**5.1 Definition, acronyms and abbreviations.**

N/A

|  |  |
| --- | --- |
| **Term or abbreviation** | **Definition and acronyms** |
|  |  |
|  |  |
|  |  |

**5.2 Document references.**

[List all the documents referenced by this GDD and specify where they can be found].

**6 Attachments**

[Add any other information or relevant document to the design of the game].