2D Game Design Project

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**Executive Summary**

Abstract of Game Story

**Player 1: Mario**

 It has been a few months since he has rescued the Princess from Bowser's castle, but his life has not yet returned to normal. Every time Mario tries to walk to work, a party, or even a tennis game, he finds himself under attack by miscellaneous creatures. Mario is just trying to walk home after a long day of working at Mario Bros. Plumbing with his brother Luigi, but today some annoying Lakitu is flying around trying to kill him. But it's ok; Mario is used to it. He needs the exercise anyways.

**Player 2: Lakitu**

 Lakitu is tired of his job. Throwing Spiny Eggs around isn't as fulfilling as he thought it would be when he signed up for this. All he wants is to spend time at home with his family, but the bills keep on piling up. One day, Lakitu aspires to work as a cameraman in the film industry. He wants to ask about getting a promotion or being transferred to the TV department, but it has been months since he has last heard from his boss. Since the automated paychecks keep coming in, he continues sullenly working his weekly schedule.

**Game Play Look and Feel**

Appearance

* Side scrolling platformer
* 2D graphics from the 16-bit Mario games
* UI includes number of lives for Mario, an energy bar for Lakitu, and a timer.
* Levels are a timed race to the finish, Lakitu must stop Mario from reaching the end.

Player Roles and Actions



**Mario**: Player 1's character

Can move left, right, and jump with the A, D, and W keys. Avoid obstacles such as bottomless pits and Spinies.

Reach the end of the level before being killed or running out of time.



**Lakitu**: Player 2’s character

Can move left and right through the sky using the arrow keys.

Can throw Spiny Eggs down at Mario using the mouse.

Strategies and Motivations

Mario’s Strategy: Dodge spiny eggs. Try to make Lakitu throw Spiny Eggs in such a way that they will miss you, by moving and then turning around.

Mario’s Motivation: To make his way home without dying.

Lakitu’s Strategy: Throw spinies in such a way that Mario is forced to turn around, fall down a pit, or trick him into jumping at the wrong times. Save up energy to throw multiple Spiny Eggs in succession.

Lakitu’s Motivation: To kill Mario before he can reach the safety of his home.

Level Summary / Story Progression

More ground obstacles for Mario as further levels are reached.

Fire rate limit and/or total number of Spiny Eggs for Lakitu goes down as further levels are reached.

The story progresses in that each level is another day.

**Development Specifications**

Hardware:

Keyboard and a mouse

Software:

Windows XP or higher

HTML5 capable web browser or Windows 8.

Algorithm Style:

* 2D Sprite Animation.
* Camera auto scrolls through the level.
* Typical platforming movement for Mario.
* Lakitu moves left and right only, throws Spiny Eggs towards the mouse cursor.
* Lakitu has an energy bar that fills up over time, throwing a Spiny Egg uses a set amount of energy.
* Some Spiny Eggs will bounce upon hitting the ground, others will turn into Spinies and start walking.