# Night of the Living Balloon Men

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# **Executive Summary**

### Abstract of Game Story

In the year 2030, the world decided that it wanted a new form of entertainment. Ratings for sport broadcasts fell as people were bored of watching the same players do what they did best. But, they didn't want to watch amateurs either, as they weren't good enough to put on a good show of the sport. In order to boost ratings, the greatest minds came together and came up with an idea. What do people like most? Cute animals right? What would they think is cute? Cute animals playing sports! So they got to work and thus, began the genetic engineering of cute penguins. Smart enough to understand humans and play sports, and lovable enough to capture the attention of humans.

Meet Pippy Waddler, a rookie in the PGA Tour. For five years since his genetic engineering, he has been training to be a professional golfer. After much practice and hard work, he has finally made it to the big leagues. During this 18 hole game, he has tied with his long time rival, Pengu, and just needs a hole in one for the 18th hole to finally be recognized as the champion.

Behind him, he can hear his hundreds of penguin fans cheering him on, as he gets ready for his final swing. Hundreds of red, yellow, and blue balloons waving around behind him, ready to be let go if he makes this shot. Just as he's about to make his shot, a sudden angry black cloud looms overhead and rumbles with thunder. Lightning suddenly strikes the field and all his fans.

Like a horror movie, the balloons all his fellow penguins were holding suddenly mutate, due to the electricity. They form angry eyes and sharp teeth, then turn to their holders and devour them in one go! Hungry for more food, they turn to Pippy. What can Pippy do now? What fate awaits him and how can he escape from the horde of zombie balloons?!

# Game Play Look and Feel

### Appearance

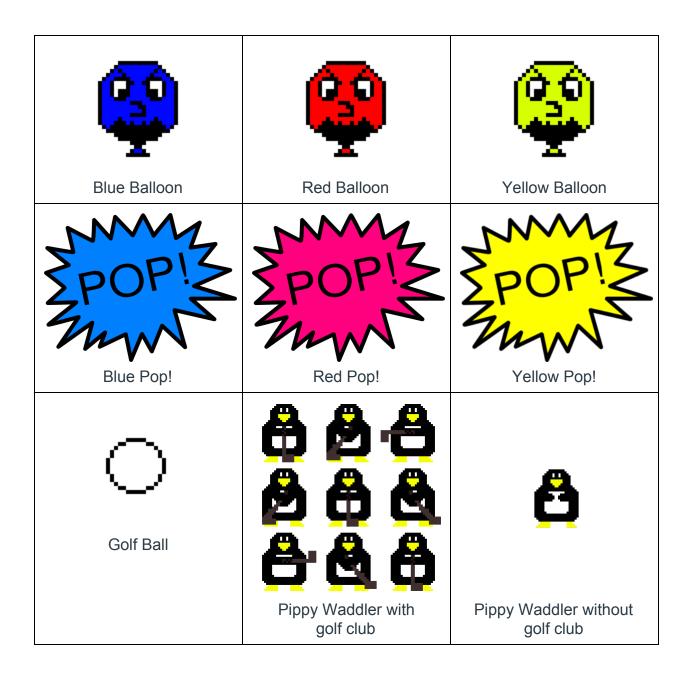
This game has a very arcade-like feel. There will be a playable character, who is stationary, located on the left-hand side of the screen on a raised platform. Although the character does not move, the character can swing his golf club to hit the golf ball.

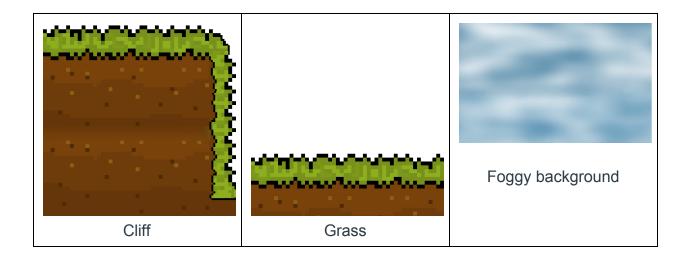
On the right hand side, zombie balloons will be slowly advance to the left, towards the playable character. These zombie balloons will just be a helium balloon with a zombie-like face drawn on them. The zombie balloons will be floating in the air towards the playable character. At times, these floating balloons can move up and down as they advance to the left. When a zombie balloon is popped, a "Pop!" sprite will be displayed. If a zombie balloon reaches the player, the player and all the zombie balloons will show a "Pop!" sprite.

The background will be a blue sky covered in fog. The ground will have some grass. The playable character will be on a cliff that has some grass as well. When the game first starts, the directions for controls will be shown for a few seconds, then it will fade away as the zombie balloons start to spawn.

A power bar will be displayed at the top of the screen to show the user how strong their swing will be. A life icon will also be located at the top of the screen. The icon will show the player's head with a number next to it to represent remaining lives. The top of the screen will also display the score for the player. And an exit button will be displayed for the player to quit.

The main menu screen will have a play and exit button. The background of the menu screen will have a penguin on the left side. From the right, red, yellow, and blue balloons will float across the screen towards the penguin, then off the screen.





EXIT	PLAY	
Exit Button	Play Button	Power Bar Background
Power Bar Indicator		

## **Player Roles and Actions**

The player sits in an unmovable position on the far left side of the screen. On the far right side of the screen the zombie balloons come in a steady wave. The player hits balls at the zombie balloons to pop them.

The player can control where and how the ball flies. This is determined by the power bar. The player can use the mouse left-click to control the power of a shot. Once pushed the powerbar starts to oscillate from 0% to 100% and then back. Once the mouse left-click is released the ball is sent flying at a velocity based on the power.

The player must pop the zombie balloons by hitting them with golf balls. If the zombie balloon gets to the left side of the screen without being popped it will attack the player and kill them.

Points are scored as follows:

- 100 points for popping a basic blue zombie balloon.
- 200 points for popping a mid-level yellow zombie balloon.
- 300 points for popping a high-level red zombie balloon.

The player starts with 3 lives. 2,000 points are needed to get a new life. If a player loses one life, the current level is reset. If the player loses all of their lives they must restart the game from the beginning.

### Strategies and Motivations

He/she must hold down the mouse left-click and watch the power bar to determine the power of the shot. The power will determine where the golf ball will land.

The motivation is to kill as many zombie balloons as possible, in order to proceed to the next level. Also, to prevent the zombie balloons from reaching the base of the cliff and dealing damage to the player.

# Level Summary/Story Progression

#### Level 1:

At level 1, the player must kill all the blue zombie balloons that approach the cliff. The blue zombie balloons will float along at a slow pace until they reach the cliff. Once they are at the cliff, all balloons pop and the player loses a life. Once the wave of blue zombie balloons have been eliminated, the player will advance to level 2.

#### Level 2:

At level 2, the player must still kill all the red zombie balloons. At this level, the yellow zombie balloons will still be floating along, but they will be going at double the speed of blue zombie balloons. Like level 1, the player must defeat all the red zombie balloons before advancing to the next level. Failure to kill a red zombie balloon before it reaches the cliff will result in the player losing a life..

#### Level 3:

At level 3, the player must kill all the yellow zombie balloons. At this level, the yellow zombie balloons will be floating in the sky. They will move up and down as the float across the screen, towards the player. The player must kill all the yellow zombie balloons in order to advance to level 4. If any zombie balloons reach the player, it will cause the player to lose a life.

#### Level 4:

At level 4, the player must kill all blue, red, and yellow zombie balloons. At this level, blue and red zombie balloons will be moving along towards the cliff. Yellow zombie balloons will also be floating in the sky, moving towards the player. The player must kill all the zombie balloons in order to win the level. If any zombie balloons reach the player, it will cause the player to lose a life. If the player defeats the wave of blue, yellow, and red zombie balloons, he/she will have beaten the game.

After Level 4:

Once level 4 is over the game goes into a sort of free play mode. The player can continue to pop balloons until they lose all of their lives.

# **Development Specification**

## Hardware

- Windows PC
- Keyboard

# Software

This game will be created using Unity 2D. As such it will be able to compile to an executable and will be able to be run on any Windows PC that has sufficient permissions to run an executable.

# Algorithm Style

- When ball is launched it needs to take into account the amount of time the mouse left-click has been held down.
- When ball hits balloon the direction of the resulting vector needs to be magnified by an amount so the ball can bounce around.
- Balloons need to be able to spawn randomly on the y axis.
- Balloons need to be able to have sinusoidal paths while traveling across the screen.
- Balloons will need to spawn in a time frame that is not too fast to defeat but not too slow that it is easy to win.
- Different balloon types should all use the same basic algorithm just all have a different movement path.
- Ball needs to respawn when it has left the screen.
- Other physics such as gravity and collisions are handled by the unity game engine.