

Game Overview

Title: Gravity



Elevator Pitch

Embark on an epic adventure with Rolly in Gravity, the puzzle game where you must guide Rolly the Ball down lush, verdant green hills without going off the edge or colliding with The Heart Breakers. Your mission is to help Rolly find his one true love, Blue-Linda while navigating complex sloping hill mazes and outsmarting and sidestepping adversaries in beautifully crafted 3D environments. All while picking up the pace! After all, Rolly is a ball! He does not need brakes! Especially as a ball in love! Challenge your wit, reflexes, and imagination in this addictive quest. Can you help save Blue-Linda at every level from the Heart Breakers, who always seem to find a way to prevent Rolly and Blue-Linda from being together? Every level complete brings Rolly and Blue-Linda closer together as the power of love destroys the legion of Heart Breakers. But these bad hombres won't go down without a fight.

Concept Overview

Genre: First-Person Strategy, 3D Platformer

Target Audience

- Age: 18 – 30, Inter-generational
- Incorporate: Te Reo
- Gender: Any
- Income: Low-mid
- Learning Diversities: Visual
- Enjoys strategic problem-solving games
- Challenges in mental reflexes and motor skills

Monetisation: Free-to-play

Platform and System Requirements: Windows. There is later development potential for Android, iPhones, and other O/Ss like Linux and Apple.

Theme and Settings

Theme: Gravity is set in a 3D world with simple 3D object

The main character is a sphere called Rolly, whose mission is to reunite with his lover, Blue-Linda, on each level.

Project Scope

Development, Design, Art, QA, Testing: Thomas King (thomasking135@gmail.com)

Deadlines / Milestones

- **30th October to 30th November 2023**

- 3/11/23: Story developed
- 10/11/23: Level created
- 17/11/23: Character completed
- 24/11/23: UI defined
- 1/12/23: Game released

Game Setting Location

The game is set in a 3D world of cubes and spheres called Blockburg Heights. The game takes place on sloping hills whose gradient changes in steepness and length across levels, making the player react ever more quickly to avoid the Heart Breakers seeking to keep Rolly and Blue-Linda apart.



Figure 1 Rolly is getting ready to roll with it to get to his one true love!

Story

Rolly's dream is to reunite with his lover, Blue-Linda. He's the coolest sphere in all of Blockburg Heights. He isn't any square, folks! To achieve his goal, he must overcome the Heart Breakers, a gang of yellow cuboid baddies. The story follows Rolly's mission to continuously destroy the Heartbreaker's army by surmounting each level through the power of love. But the Heart Breakers aren't called the Heart Breakers for no reason. As Rolly passes each level, the slopes get steep; the Heart Breakers army rebuilds and Blue-Linda seems further and farther from reach. Rolly can't stop! Once he's rolling, he's rolling! He cannot get to Blue-Linda without you steering him left or right, keeping him on the path to true love without falling off the edge or running into one of the Heart Breakers.

Backstory

Rolly has always been in love with Blue-Linda. He believes it's their destiny to be together! So, you can imagine just how cheesed off he is when some bad guys calling themselves the aptly appropriate Heart Breakers come to Blockburg Heights and steal his lady. They are a bunch of unhip box-faced bullies who hate to see a world with love in it. They don't believe in love the way that Rolly does. Blue-Linda's pop also wants to see his beloved daughter returned from these despicable bad dudes.

He has even given Rolly his blessing for them to marry should he successfully save Blue-Linda from the clutches of this yellow army of pure evil.

Key Plot Elements

- Start on a sloping gradient platform.
- Face several badass scary cuboids that stand between them, reuniting with Blue-Linda.

Story Goals

- Pass the enemy cubes (the Heart Breakers) while staying on the plane/hill.
- To reunite with Blue-Linda on each level until every level has been completed and the two can marry happily ever after.

Cinematics

The game starts with a shot of the character and the Heart Breakers. The lush green hilly terrain provides a soothing guide of the path Rolly must follow to reach Blue-Linda. Beyond the lush grassy slope of the hill is the red sand, a reminder of the dangers of straying too far from the path. The yellow menacing faces of the antagonists (The Heart Breakers) further reinforce the risks of a nice-natured ball running into the no-good troublemakers.

The intro cinematic shows a cheery Rolly full of confidence that he can win back Blue-Linda from the evil Heart Breakers who have taken her hostage.



Figure 2 Intro cinematic appearing at the menu showing an upbeat, chipper Rolly on his way to rescue his darling

The level cinematic has bouncy, upbeat music on a loop that captures Rolly's optimistic spirit. It adds emotion to the level, inspiring the player to feel Rolly's passion and to guide him smoothly towards Blue-Linda waiting for him at the bottom of the hill.

Playable Character

Rolly (Playable Character)

- Description: A friendly sea-green-hued ball.
- Abilities: Can move from side to side.
- Personality: Prefers to steer his way away from danger. He's not an aggressive kind of ball.

Rolly Character Skin Material



Figure 3 Rolly material skin: A sea-green, slightly metallic skin

Non-Playable Character

The Heart Breakers

- Description: Gold-coloured baddie cuboids.
- Behaviour: Stationary and spaced at different positions across the plane.
- Interaction: Colliding with Rolly results in a life loss.

The Heart Breaker Character Skin Material



Figure 4 The Gold Digger. An angry yellow cuboid

Blue-Linda

- Description: Blue-coloured capture capsule/sill.
- Behaviour: Stationary and spaced at the end of the sloping pane.
- Interaction: Colliding with Rolly results in the completion of the level.

Blue-Linda Character Skin Material



Figure 5 Blue-Linda the Pill. The object of Rolly's desire! She's one hot mama!

Game Play and Mechanics

Core Loop

- The player has three lives to attempt to capture the Pill.

- Lose a life if Rolly falls off the platform or collides with an enemy AI (the Heart Breakers).
- The game ends if the player guiding Rolly reaches Blue-Linda or loses three lives. In the fully developed game, a collision between Rolly and Blue-Linda would trigger the next level until all levels are complete.

Game Progression

- The player progresses (wins) when they move Rolly past the Heart Breaker enemies and collide with Blue-Linda, the capsule-shaped collectable.

Features

- The player can either move to right or left to sidestep the enemy Heart Breakers while ensuring they stay on the grassy hill plane/slope.

Mechanics

Movement and Other Player Controls

- ← Move left
- → Move right
- [Space Bar] Restart

Objects

- Rolly (the main protagonist)
- The Heart Breakers, the enemy objects
- The main platform (the grassy slope)
- The falling platform (where Rolly dies if he falls onto it). Presented as a sand bunker
- Blue-Linda the Capsule (the collectable triggering the win condition)

Actions

- Rolly can collide with objects, including enemy objects and the collectable (Blue-Linda)
- The player loses a life if Rolly collides with the falling platform or the enemy boxes.
- Colliding with Blue-Linda (the collectable at the end of the slope) triggers the winning condition.

Levels

Level 1: Summary

- Description: Rolly starts on a sloping rectangular plane with several enemy AIs standing in his path down the piste to where the Blue-Linda the Pill collectable stands.

- Objectives: Pass the enemy objects by sliding from left to right and collect Blue-Linda to win.
- Location: The game is set in a 3D world of colourful cuboid and spherical objects called Blockburg. It's nighttime in Blockburg Heights as the box-faced bandits called the Heart Breakers conduct most of their nefarious and naughty antics after sunset.

Assets

Art

- Simple 3D cuboid and spherical objects are available on Unity.
- Artwork generated on Canva. AI, characters and materials.

Music

- Looping game track sourced from <https://www.free-stock-music.com>

Fonts

Arial, Simple Typography

Game Requirements Rubric

Level Design

The game features a 3D level with a unique environment for the player to explore. Bright materials distinguish objects, and the camera follows the player. Text UIs highlight objectives/goals. The game increases in intensity over time with the addition of steeper slopes, tighter angles on slopes, longer tracks, and more adversary objects and obstacles thrown onto the game playing field.

Future Suggestions to Improve the Game

- Moving Heart Breakers characters rather than just stationary ones
- More objects in the path (in addition to the bad guys) to increase reflections and actions.
- A timer to complete the level.
- Added collectables and rewards (like coins or tokens)
- A point-scoring system
- A high score table.
- A pause control.
- Ability to start from a saved/ or completed scenes
- The ability to change the colour of Rolly.