

Game Ideas Overview

1. Flappy bird:

Title: Fly or Fry

Introduction:

Game in which you control a bird that flies between columns of green tubes and should not touch them. The bird will fly up with each tap of the screen, if you don't do multiple taps, it falls due to gravity.

Objective: To create an easy and addictive game as the original Flappy Bird mechanics.

Goals:

- Make the bird controllable (move up and down).
- Procedurally generate pipe positionings.
- Create a scoring system related to the quantity of pipes crossed.
- Design the scrolling to go on forever.

Technical requirements:

- Built-In: Unity Physics (Both for Gravity and Collision Detection / Resolution)
- Graphics: Basic 2D sprites for bird and pipes
- Buttons: Detect tap to control the bird
- Real-time: Score Calculation and Display

Reference:

<https://search.proquest.com/openview/91e31d4f66e134697c57ead6257ee2a8/1?pq-origsite=gscholar&cbl=18750&diss=y>

2. Red Runner:

Title: Run-tastic

Introduction:

An endless runner showcasing a character (the runner) who runs the whole way up in front of obstructions. The player needs to swipe the screen in order for runner jumps or slide through different obstacles.

Objective: Make a fun endless runner with incrementally difficult obstacles

Goals:

- More puzzle types with their arrangement
- Design jumping and slide in sleek control.

- Create a score based on how far you traveled and what obstacles you kept away from.
- Add power-ups and collectibles to make things more strategic.

Technical requirements:

- Unity physics for character movement.
- Graphics 2D sprites for the runner and obstacles
- Swipe detection for jumping and sliding (Controls)
- Scoring: Point-per-distance performance-based scoring

Reference:

https://www.academia.edu/download/70212231/IRJET_V8I5305.pdf

3. Space Shooter:

Title: Space Wars

Introduction:

This is a space-based top-down shooting game with a player ship. Shoot down enemies and avoid obstacles while picking up power-ups to enhance your fighting skills.

Objectives: We want to create an epic space shooter, which will feature powerful foes, fantastic explosion impacts and some powerups!

Goals:

- Include many types of enemies and their ways of attack.
- Introduce a responsive control spaceship.
- Weapons that can be upgraded along with several other power-ups available
- The scoring system based on the count of the enemies killed and the number of steps made.

Technical requirements:

- Physics Engine: Unity's built-in physics system for spacecraft & enemy movement
- Graphics: Spaceship, enemies, and their projectiles are represented as 2D sprites.
- Use arrows or tilt to navigate the spacecraft.
- Play: Kill for score and reach milestones.

Reference:

<https://repositori.uji.es/xmlui/handle/10234/207874>