

Game Concept: "Geometric Tank Shooter"

AB3817

Janne Arkko

Objective:

Navigate a cube-based tank in the 3D space, shooting various geometrical objects such as donuts, spheres, and cubes for points. Avoid collisions with the incoming objects to survive. The game continues until the tank is hit by an object.

Game Elements:

1. Tank: A 3D tank composed of cubes, capable of movement in the XYZ-axis.
2. Projectiles: Cubes shot by the tank to destroy incoming geometrical objects.
3. Geometrical Objects: Randomly spawning 3D shapes (donuts, spheres, cubes) that approach the tank.

Gameplay:

- The tank starts in the center of the game space.
- Geometrical objects spawn randomly around the tank and move towards it.
- The tank can be controlled in the XYZ-axis to dodge incoming objects.
- Tap or click to shoot projectiles at the geometrical objects.
- Each successful hit on a geometrical object earns a point.
- The game continues until a geometrical object collides with the tank.
- The objective is to survive as long as possible, collecting points for each destroyed object.

Scoring:

- Score is determined by the number of successfully destroyed geometrical objects.
- The player aims to achieve the highest score before the tank is hit.

End Conditions:

- The game ends when a geometrical object collides with the tank.
- The player's score is displayed as the final result.

Controls:

- Keyboard or Arrow Keys: Control tank movement in the XYZ-axis.
- Spacebar or Mouse Click: Shoot projectiles.

Visual Style:

- Minimalistic and abstract, focusing on pre-defined geometry (cubes, spheres, donuts).
- Wireframe or solid color rendering for objects.

Sound:

- Simple shooting and collision sound effects if applicable.

This concept aims for a straightforward and engaging gameplay loop, considering the limited development time and resources for the small game engine.