GALAXY SHOOTER

Game Concept:

"Galaxy Shooter" is a 3D Unity-based arcade-style space shooter game where players control a spaceship to destroy enemy ships, earn points, and survive for as long as possible. The goal is to achieve the highest score while avoiding enemy attacks and obstacles. This is the **first version** of the game, developed as a personal project, with plans for future expansions and enhancements.

Core Features:

1. Player Mechanics:

- **o** Basic Movement:
 - The spaceship moves freely along the **X** and **Y** axes using keyboard controls (e.g., arrow keys or WASD).
- **Shooting Mechanic:**
 - Players can shoot lasers at enemy spaceships with a designated fire button (e.g., spacebar).
- Player HUD:
 - Real-time display of **XY coordinates**, current score, and remaining lives.

2. Enemy Mechanics:

- Enemy Spawn System:
 - Enemy ships spawn randomly and increase in number as the game progresses.
- Dvnamic Difficulty:
 - The **spawn rate** of enemies increases over time, making the game progressively harder.
- Collision Mechanics:
 - Player loses a life when hit by an enemy ship or projectile.
- Point System:
 - Destroying enemy ships awards points, contributing to the high score.

3. Game Design:

- Endless Gameplay:
 - No fixed level; the game continues until the player runs out of lives.
- **o** High Score Tracker:
 - The game records and displays the highest score achieved in a session.

4. Graphics and Visuals:

- o **3D Assets:**
 - Spaceships, lasers, and explosions are created using 3D models and particle systems.
- **Background Design:**
 - A dynamic galaxy background that scrolls to create a sense of movement.

- Special Effects:
 - Laser beams, enemy explosions, and ship damage visuals for added immersion.
- 5. Sound Effects and Music:
 - Dynamic Background Music: Increases in intensity as the game becomes harder.
 - o **Sound Effects:** Laser fire, explosions, and collision sounds for better feedback.

Additional Features in First Version:

- Score Multipliers:
 - o Destroying multiple enemies consecutively rewards higher points.
- Health System:
 - o Players have a limited number of lives, displayed on the HUD.
- Power-ups:
 - o Shield, speed increase, or double-fire power-ups to help players survive longer.

Tools and Technologies:

- **Unity 3D:** The game engine used for development.
- C#: To implement movement, shooting mechanics, enemy spawning, and game logic.
- Blender/Asset Store Models: For spaceship and enemy models.