Game Development Project
Game "Survivor"

Presented by Nikita Ferents, Mark Turonok

Project Overview

Our project is a 2D sandbox survival game.
It challenges players to survive against endless waves of zombies on a flat endless terrain map. Players can gather resources, build structures, and purchase buffs like guns and bombs to enhance their survival. The objective is to kill as many zombies as possible, with increasing difficulty every 5 points.
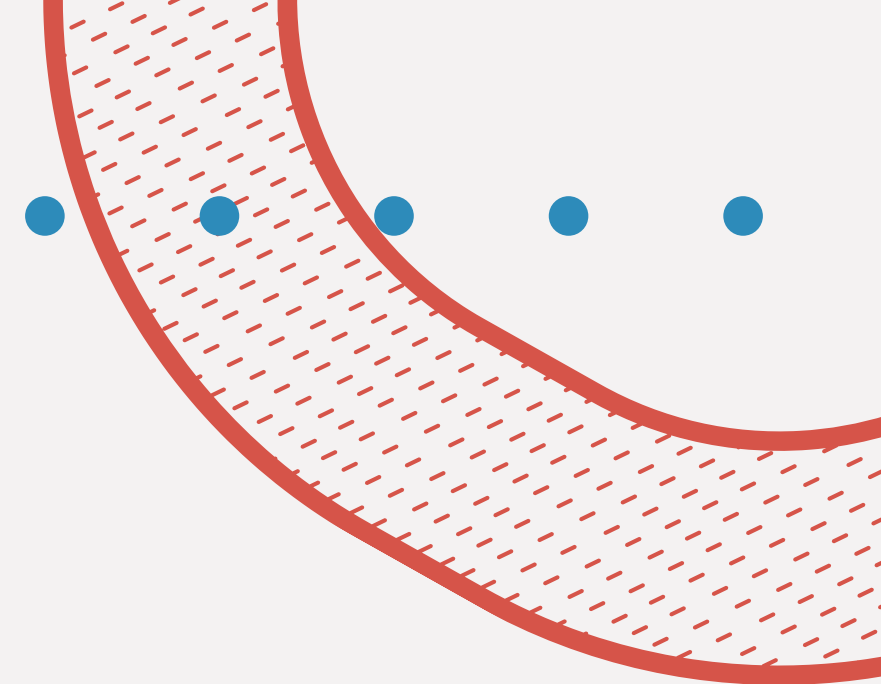
Map mechanics

Flat terrain with a top layer of grass.

Underground layers contain stone and randomly spawned gold.

Map is endless and have a "chunks" system, which loads and unloads a parts of the map depending on a position of a player

Resources

Gold:

Found underground

Gold can be spent in the in-game shop to purchase buffs such as new weapon, heal and stats increase

Blocks:

Grass, stone, and gold can be gathered and stored in the inventory

Blocks can be used in the world, placed to create a ntew terrain and structures

Player Abilities

Move and jump around the map

Gather blocks from the map into inventory

Inventory has 6 slots which can store up to 8 blocks each

Place blocks from inventory to build structures

Enemy Mechanics

There are 2 types of enemies - Zombies and Giant Skeletons. They differ by hp points amount, speed, and difficulty

Enemies spawn periodically and endlessly while the player is alive. Zombies - from the beginning, while Giant Skeletons start to spawn after player proceed further in the game

Enemies run, pursue and attempt to kill the player

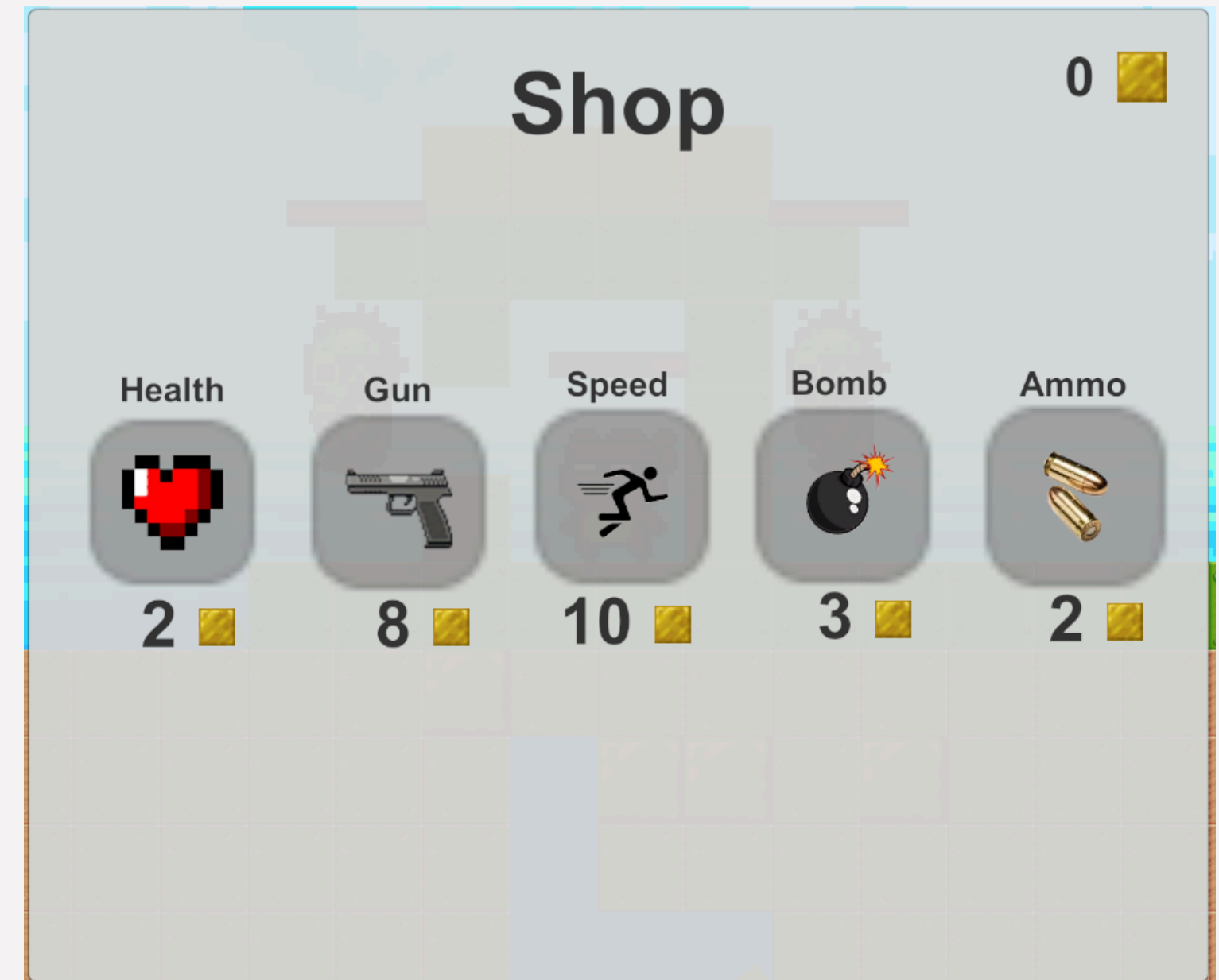Increasing difficulty with every 5 points scored

In-Game Shop

Health: Restores player's health.

Gun: Allows shooting zombies from a distance with increased damage

Speed: Increases player's movement speed.

Bomb: Deals massive damage to zombies, the player, and the terrain and pushing them away

Ammo: Required for using the gun.

Gameplay Loop

01
Survival

- Defend against waves of zombies.
- Kill zombies to score points.

02
Gathering & Building

- Collect resources from the terrain.
- Use blocks to build defensive structures.

03
Shopping

- Spend gold in the shop to buy buffs.
- Strategically choose buffs to enhance survival chances.

04
Challenge

- Enhance your skill and strategically use recourses to Proceed further in the game as the gameplay changes with time
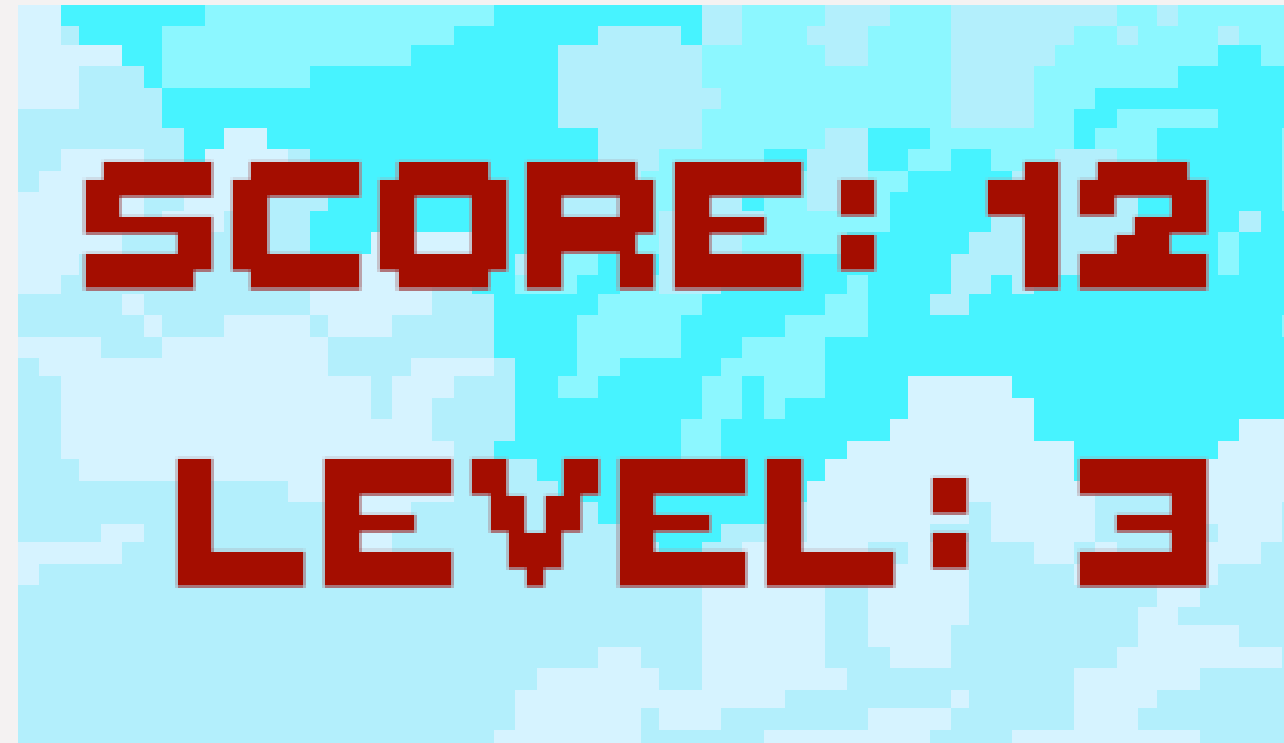
Game Progression

Scoring

Each zombie killed grants 1 point.

Every 5 points increases the difficulty level.

Difficulty level inftroduces new enemies as wel as harder time to survive

SCORE: 12

LEVEL: 3

End Game

The game ends when the player is killed

Menu options: Replay the game or exit

In-Game HUD

PRESS 'A''D' TO MOVE
PRESS 'SPACEBAR' TO JUMP
PRESS 'LMB' TO INTERACT
PRESS 'RMB' TO PLACE BLOCKS
PRESS 'E' TO OPEN SHOP

Health bars of the player and the enemies

Score display

Inventory access

Gold count

Guide for the player controls

Conclusion

The game encourages repeated plays to achieve higher scores, with increasing difficulty keeping the challenge fresh. Balancing resource gathering, building, and fighting zombies and skeletons adds strategic depth, as players must choose the right buffs at the right time to enhance their survival.

This blend of survival and strategy elements ensures engaging and dynamic gameplay.

Thank You

Game Development Project

Game "Survivor"

Presented by Nikita Ferents, Mark Turonok