

2. Plants vs Zombies Game (C++/SFML)

Description:

A C++ implementation of the Plants vs Zombies tower defense game using SFML for graphics and audio. It features plant placement, zombie waves, resource management, and collision detection. This object-oriented recreation integrated GUI elements and event-driven programming. This project was developed during my 2nd semester.

Key Features:

- Multiple plant types (Sunflower, Peashooter)
- Zombie spawning with different behaviors
- Resource (sun) collection system
- Collision detection between projectiles and zombies
- Score tracking
- Inventory management

Technical Highlights:

- Inheritance-based plant/zombie hierarchy
- SFML for graphics and audio
- Game state management
- Animation handling
- Object pooling for projectiles

Dependencies:

- SFML
- C++11 or later