"Nand Blasters"

From Logical Gates to Glory!

Game by: Ido Rosenberg & Idan Harel Gross

Concept:

Nand Blasters is a fast-paced, two-player shooting game where players aim to eliminate their opponent by firing bullets while evading enemy attacks. The game blends strategy and reflexes, creating an engaging and competitive experience.

Architecture:

The system architecture consists of four main components:

1. **Main**
    - **Purpose:** Acts as the entry point for the game, initializing the system and starting the main game loop. Additionally, it provides options for players to view a tutorial or play again after a match concludes.
    - **Main Logic:** Sets up the game screen, and manages game flow.
2. **ShootingGame**
    - **Purpose:** The core logic of the game, handling interactions between players, bullets, and collisions. It runs a single game loop.
    - **Main Logic:** Manages game rules, tracks player health, detects hits, and updates the game state in real time. Handles input for controlling the soldier's actions.
3. **Soldier**
    - **Purpose:** Represents a player character in the game.
    - **Main Logic:** Defines the player's graphical movement, firing mechanics, and health status.
4. **Bullet**
    - **Purpose:** Represents a projectile fired by a soldier.
    - **Main Logic:** Defines bullet location and graphical movement.

Motivation:

We chose to create Nand Blasters because it combines our interest in gaming and our desire to challenge ourselves with a project that involves game mechanics, collision detection, and player interaction. It also serves as a fun way to explore Jack programming and reinforce our understanding of system architecture.

Link to our Demo Video:

https://drive.google.com/file/d/1dYXd2mZ8dhg2hzQ7TBX1BuktMLWH6gMj/view?usp=sharing

Names and Emails:

Ido Rosenberg – ido.rosenberg@post.runi.ac.il

Idan Harel Gross – idanharel.gross@post.runi.ac.il