# Tank Battle

In task 6.2D, I created a simple game involving player dodging robots. However, the game turned out to be somewhat challenging to play, and it deviates from the typical games we usually engage with. It feels like a mix of tank battles and aircraft combat. For this task, I want to design a game similar to Tank Battle that includes features like score tracking, game levels, and player lives.

The game will include the following features:

## Panel

1. Score Tracking: the score will increase by one each time the player shoots down an enemy tank. The score will be displayed in the upper left corner of the window.
2. Game Levels: the game level will increase every time 10 enemy tanks are destroyed.
3. Life Tracking: the player's lives will be displayed in the upper right corner of the window. Each time the player's tank is hit by an enemy tank's bullet, one life will be lost.

## Tanks

### Enemy Tank

The enemy tank can move up, down, left, and right, and it can shoot bullets, though only one at a time.

### Player Tank

The player's tank can also move up, down, left, and right, but it can fire up to three bullets at a time.

## Rules

1. The map will include blocks that tanks and bullets cannot pass through.
2. The game starts with 3 enemy tanks, and this number will gradually increase as the player advances through the levels.
3. Tanks cannot pass through each other when they collide.
4. Bullets will be fired in the direction the tank is moving.

## Class

The classes will be added.

Program: this class will run the game.

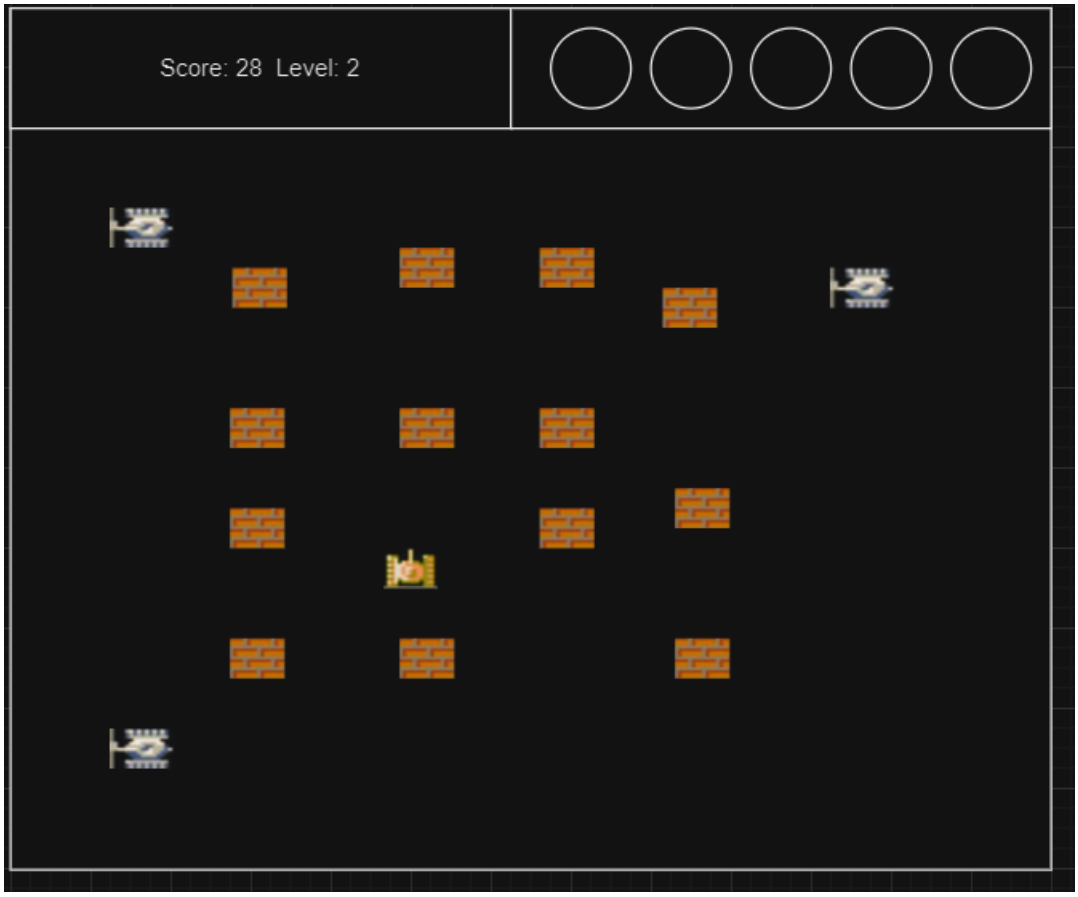
Panel: this class is used to draw the score, level, blocks, and player's lives.

Block: this class defines how to draw blocks.

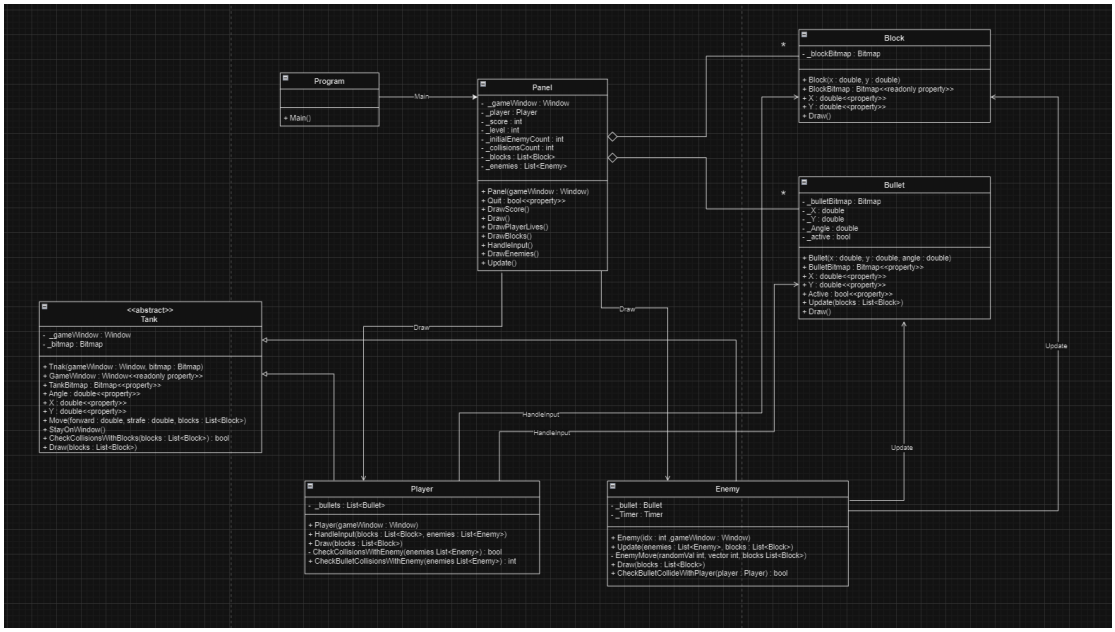
Tank: this class controls the operation of the enemy tank and the player's tank.

Bullet: this class defines the bullet's route.

## Draft




## Class Diagram



# Sequence Diagram