Assignment 5. 2D Game

What Game ?

Name : Space Gun

Target : Control the ship. to shoot as much as possible
avoid bad people's shoot.

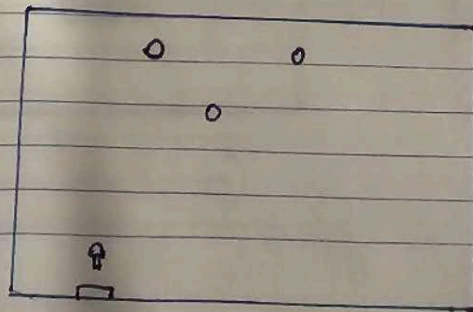## So what elements in the game ?

The Game include space ship   bad people   and   Bullet

Space Ship : Player can control Left and Right to shoot the Bullet

Bad people : From Screen top to to bottom move

Bullet : From Spaceship, shoot to the bad people, hit bad people can
get the Score.

What Game looks like in the window :

o means : bad people
⌐ means : space ship
♀ means : Bullet.

③ Add badpeople's behaviour

badpeople can have different behaviour. like more speed. or Random move
or shoot.

④ Game over test system
When player touch bad people for more than 3 times. Game Over.

```
bool gameover = false;
void checkGameOver ()
{
    foreach (var enemy in enemies)
        if (Raylib . CheckCollisionRecs (enemy. ship)
        {
            GameOver = true;
        }
}
```
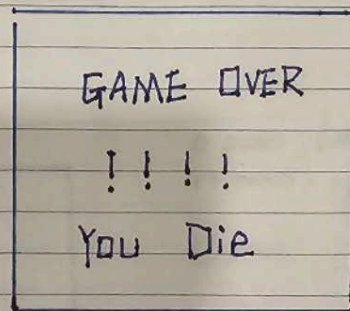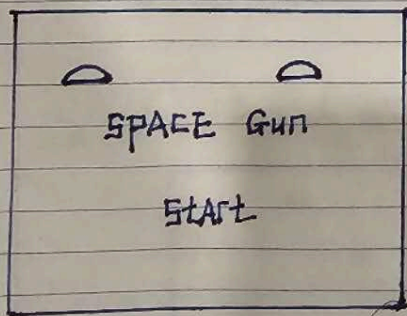
Game Start and Game Over Screen.

```
┌─────────────────────┐      ┌─────────────────────┐
│    ⌒         ⌒       │      │                     │
│                     │      │    GAME OVER         │
│    SPACE Gun        │      │                     │
│                     │      │     ! ! ! !          │
│     Start           │      │                     │
│                     │      │    You Die           │
└─────────────────────┘      └─────────────────────┘
```

Code structure thinking:

① Initalize and set the window
Set Games Window and framerate.

② define Game elements
Define attributes of ship. Bullets and bad people

Window height and width: 800 × 600
use AWSD to control the game

Additional thoughts.

① Add collision test. (to make sure whether bullet hits the enemy.)

② Add Score get System

```
int score = 0
void update score ()
{
    score += 10
}
```