

GROUP15\_CLOUD10

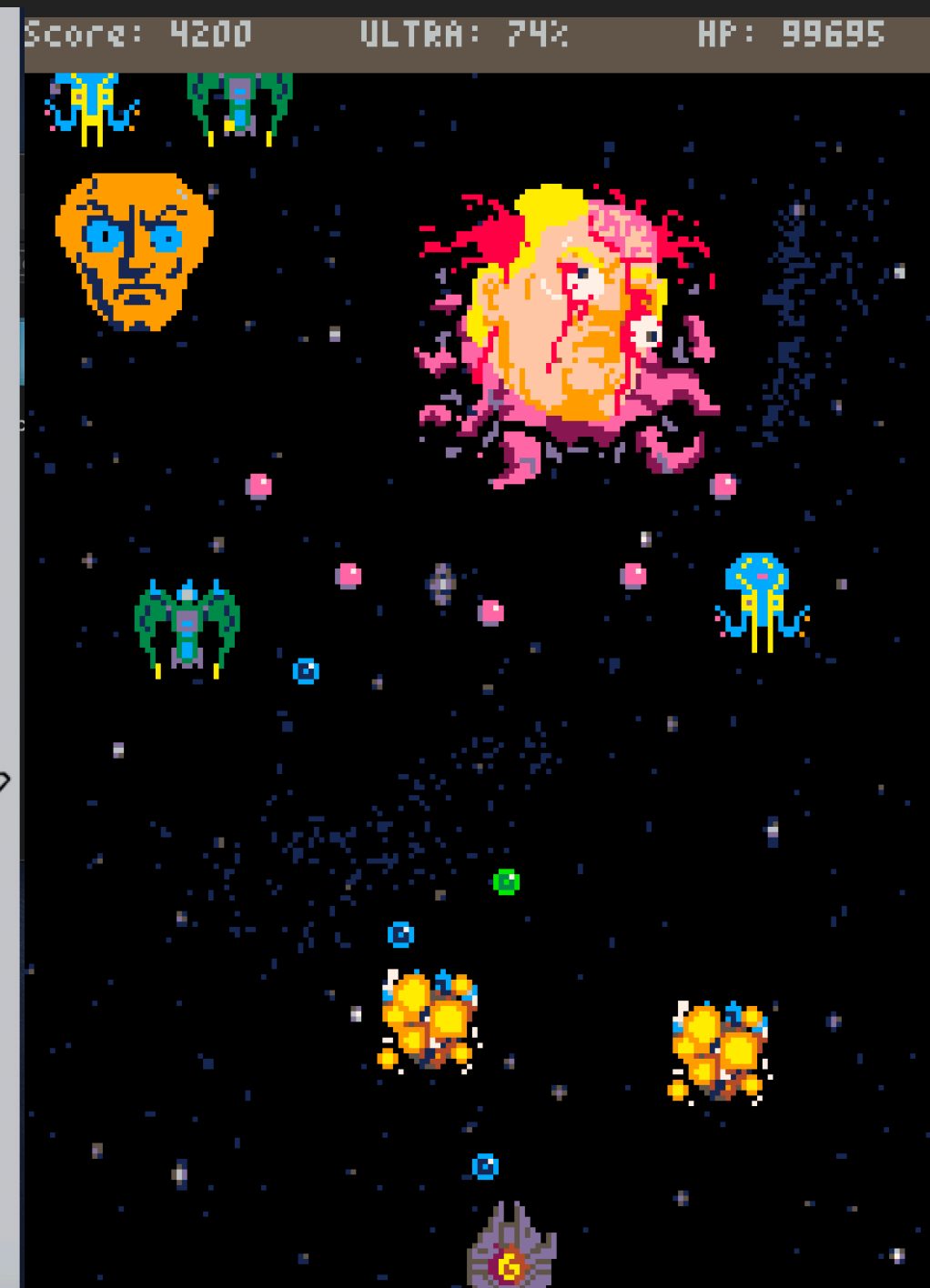
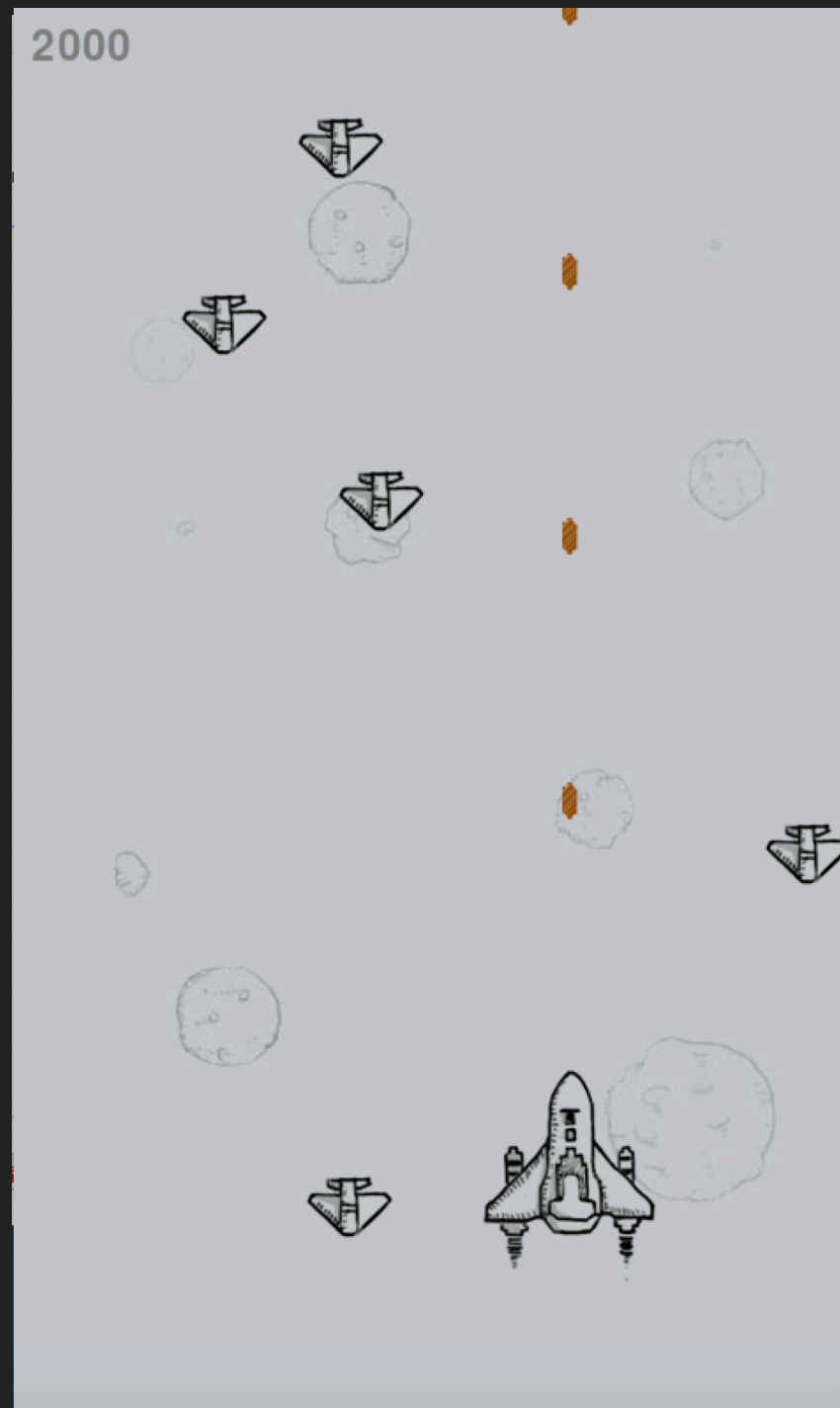
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**RETRO SHOOTING GAME**

## INTRODUCTION

- ▶ Background
- ▶ Scope and Purpose
  - ▶ Entertainment Driven
  - ▶ 8-bits graphic style



# MODULES

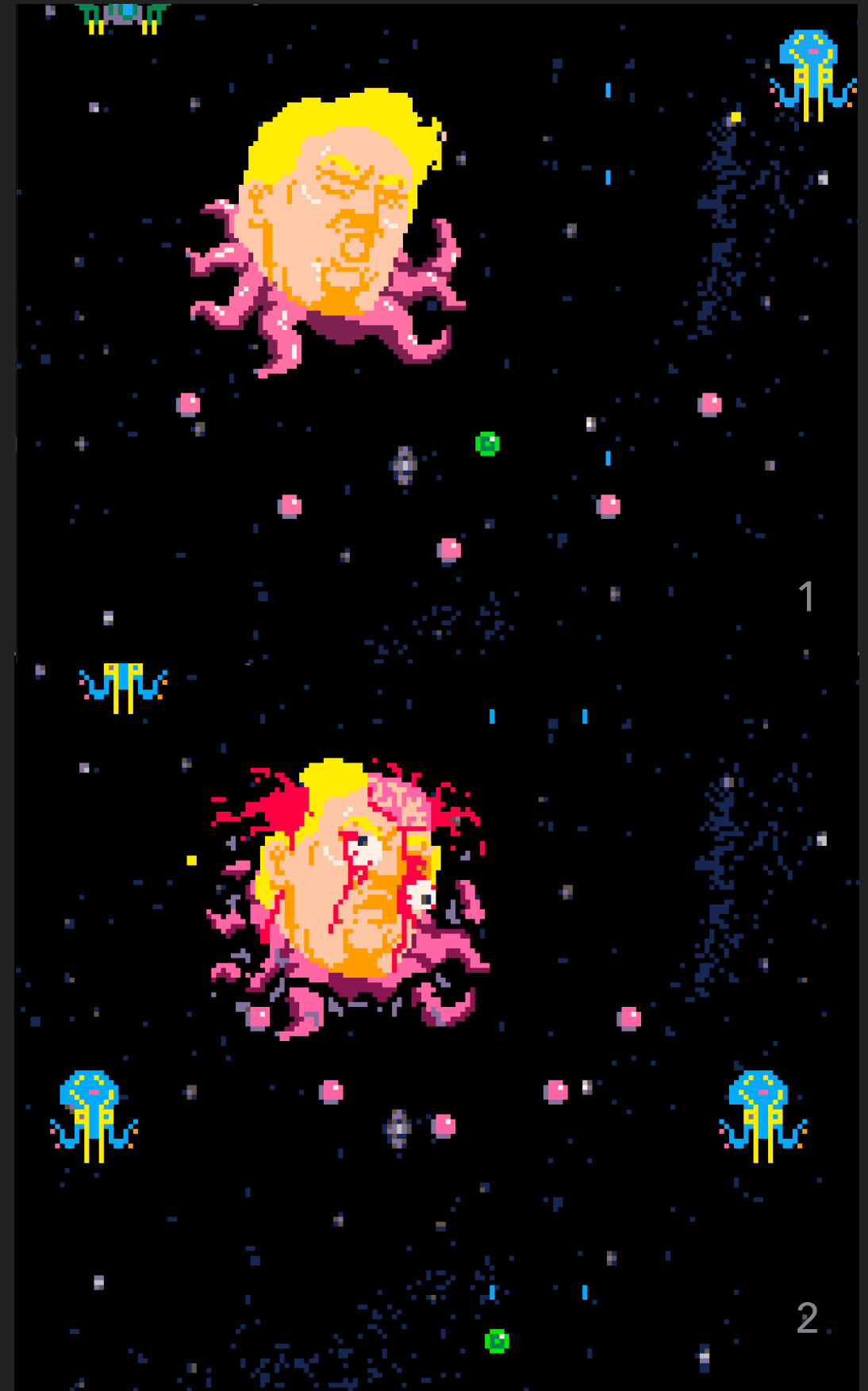
- ▶ Modular software design.
  - ▶ Boss
  - ▶ Smart Bullet
  - ▶ Player
  - ▶ Gift
  - ▶ Music
  - ▶ Enemy

# BOSS

- ▶ Secret : how the boss behaves and
- ▶ Features :
  - ▶ Boss I features
  - ▶ Boss II features

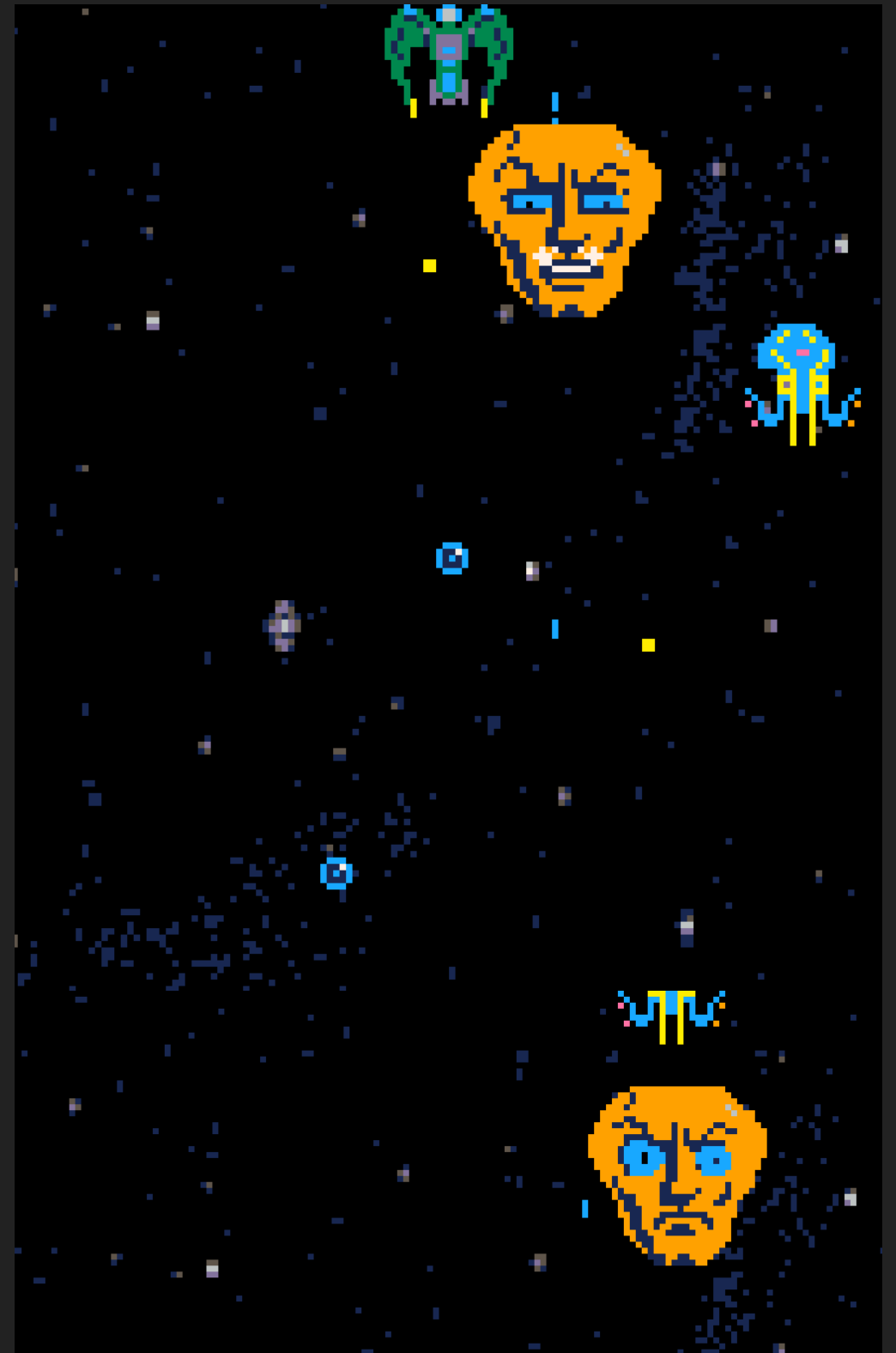
## BOSS I FEATURES

- ▶ Has one smart bullet and five normal bullets.
- ▶ Animation.



## BOSS II FEATURES

- ▶ Bullets shoot sequentially.
- ▶ Animation.



# SMART BULLET

- ▶ Secret: how the smart bullet behaves.
- ▶ Feature: modify its direction according to player's coordinates on the field.

# PLAYER

- ▶ Secret: how the player behaves and how the state of player changes.
- ▶ Features:
  - ▶ Two fire modes.





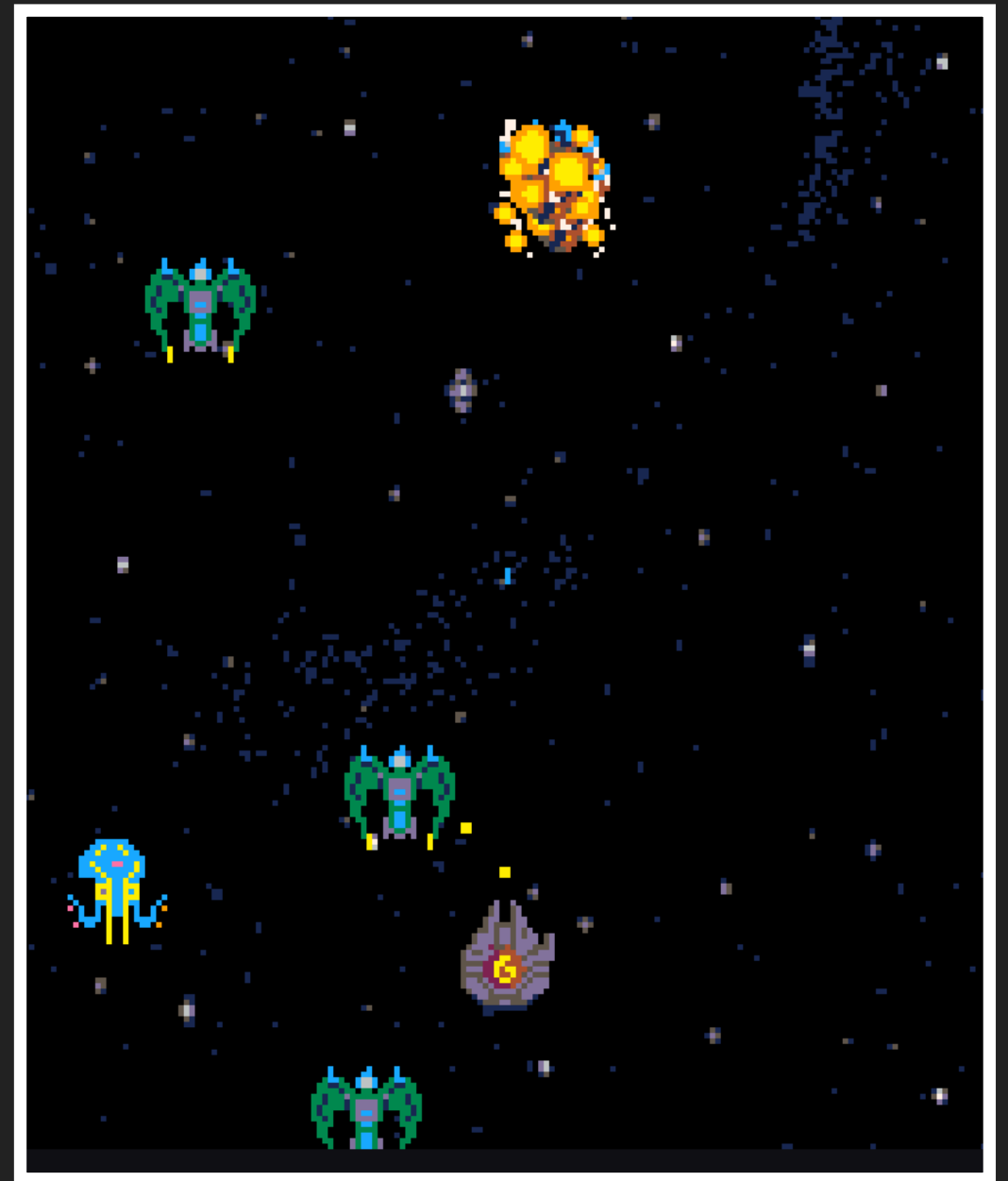
## MUSIC

- ▶ Secret: how the BGM and sound effects are stored
- ▶ Features:
  - ▶ stores the melody
  - ▶ Sets tone, volume, effect and speed
  - ▶ Combine different tracks and Play music

```
pyxel.sound(0).set(
    "e2e2c2g1 g1g1c2e2 d2d2d2g2 g2g2rr" "c2c2a1e1 e1e1a1c2 b1b1b1e2 e2e",
    "p",
    "6",
    "vffn fnff vffs vfnn",
    25,
)
pyxel.sound(1).set(
    "r a1b1c2 b1b1c2d2 g2g2g2g2 c2c2d2e2" "f2f2f2e2 f2e2d2c2 d2d2d2d2 g",
    "s",
    "6",
    "nnff vfff vvvv vfff svff vfff vvvv svnn",
    25,
)
pyxel.sound(2).set(
    "c1g1c1g1 c1g1c1g1 b0g1b0g1 b0g1b0g1" "a0e1a0e1 a0e1a0e1 g0d1g0d1 g",
    "t",
    "7",
    "n",
    25,
)
pyxel.sound(3).set(
    "f0c1f0c1 g0d1g0d1 c1g1c1g1 a0e1a0e1" "f0c1f0c1 f0c1f0c1 g0d1g0d1 g",
    "t",
    "7",
    "n",
    25,
)
pyxel.sound(4).set(
    "f0ra4r f0ra4r f0ra4r f0f0a4r", "n", "6622 6622 6622 6422", "f", 25
)
pyxel.sound(5).set(
    "c1d1f1g1a1b1", "t", "66", "n"*4 +"f", 7
```

# ENEMY

- ▶ Secret: How enemy objects are controlled
- ▶ Features:
  - ▶ Two types of enemy
  - ▶ Animation when destroyed
  - ▶ enable/disable collision function



## HIGHEST SCORE

- ▶ Local txt file called score.txt
- ▶ Initialized to 0
- ▶ Overwrite if the current score beats the best (highest) score.



## SUMMARY

- ▶ Key features
  - ▶ Pixel styled
  - ▶ Animation
- ▶ Qualities:
  - ▶ Usability
  - ▶ Performance
  - ▶ Reusability
  - ▶ Maintainability
  - ▶ Correctness/Reliability

