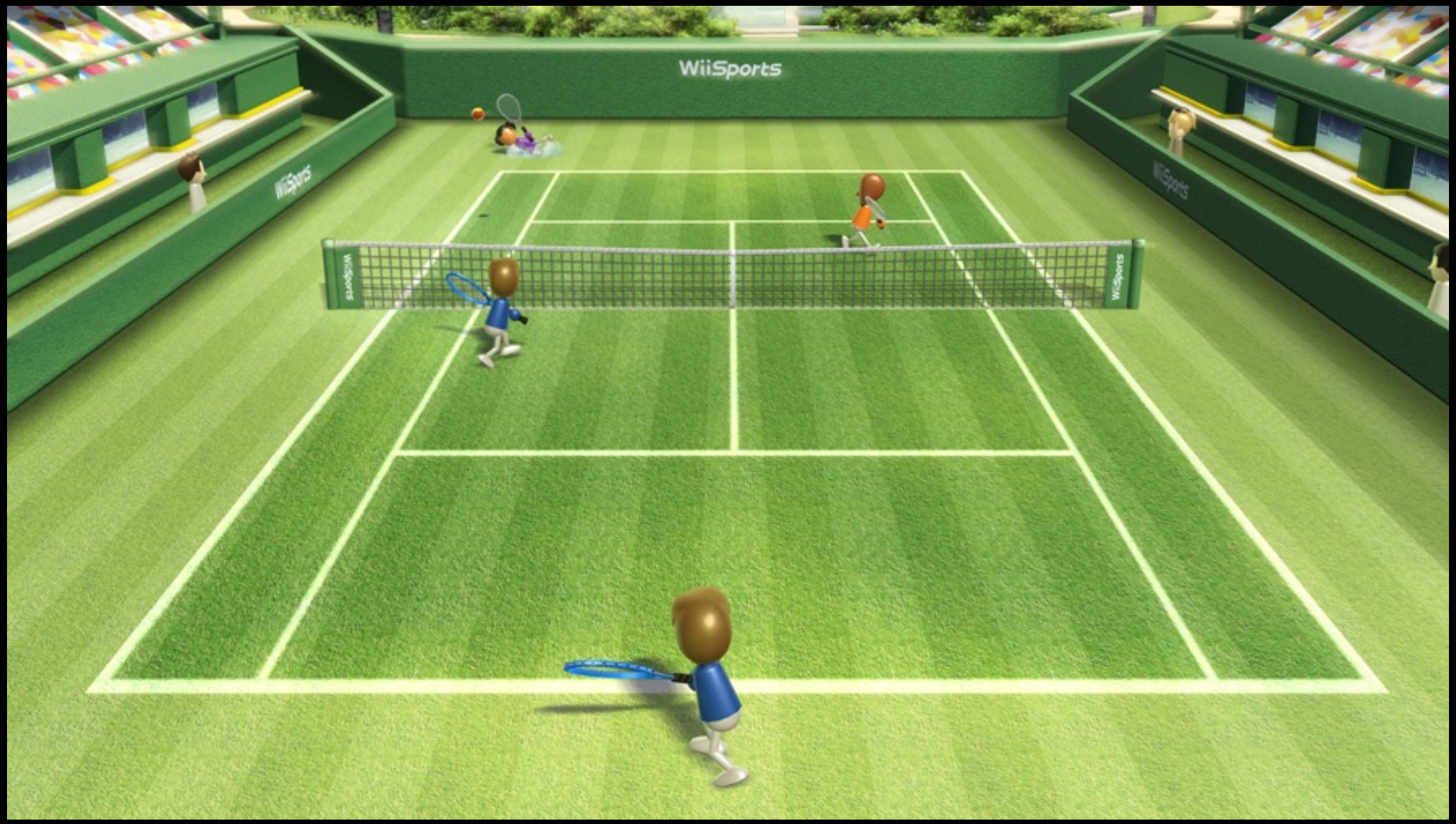
Gaming the System

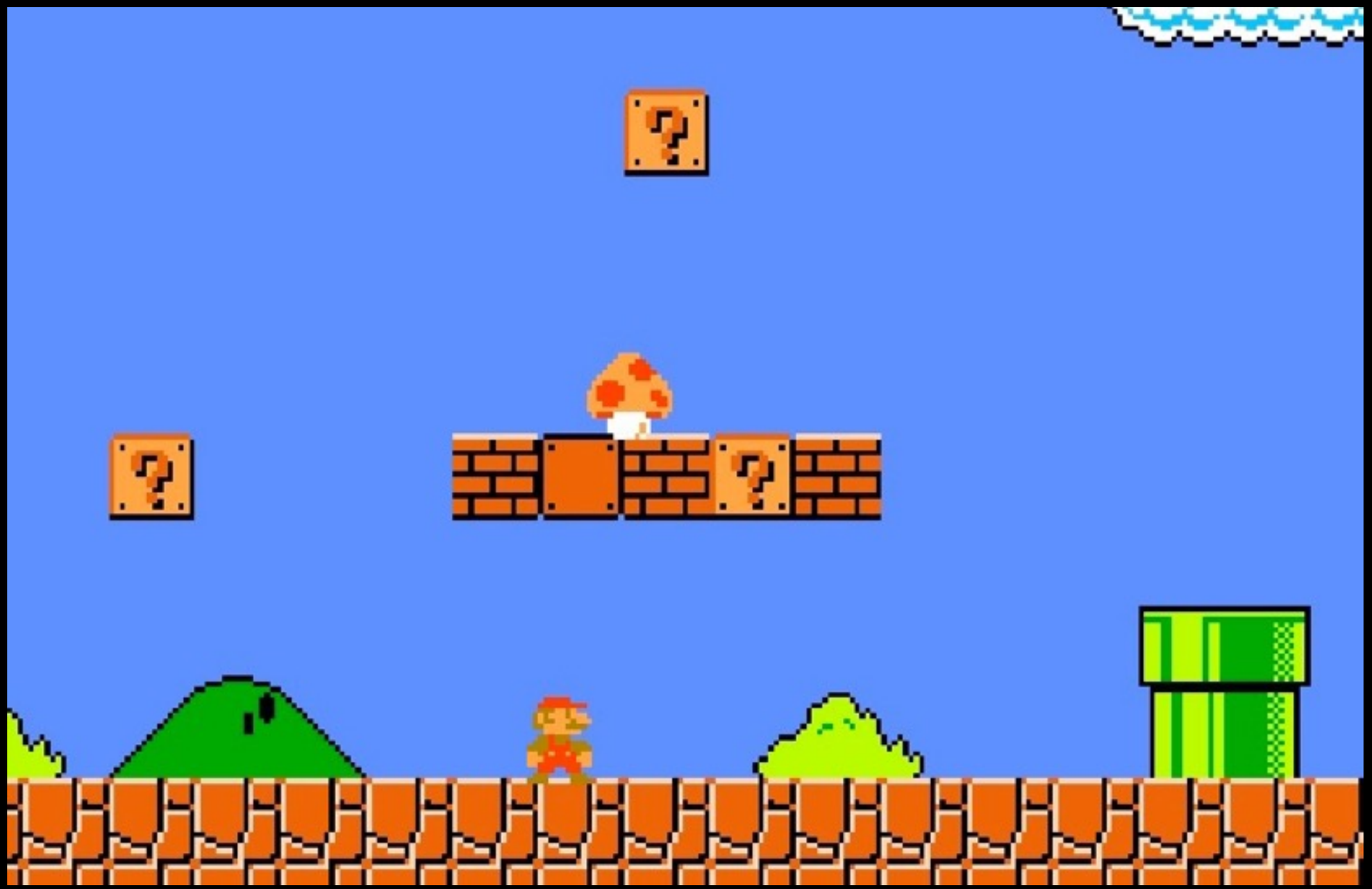
I want to make a game...

Is this a game?



What about this?

This?

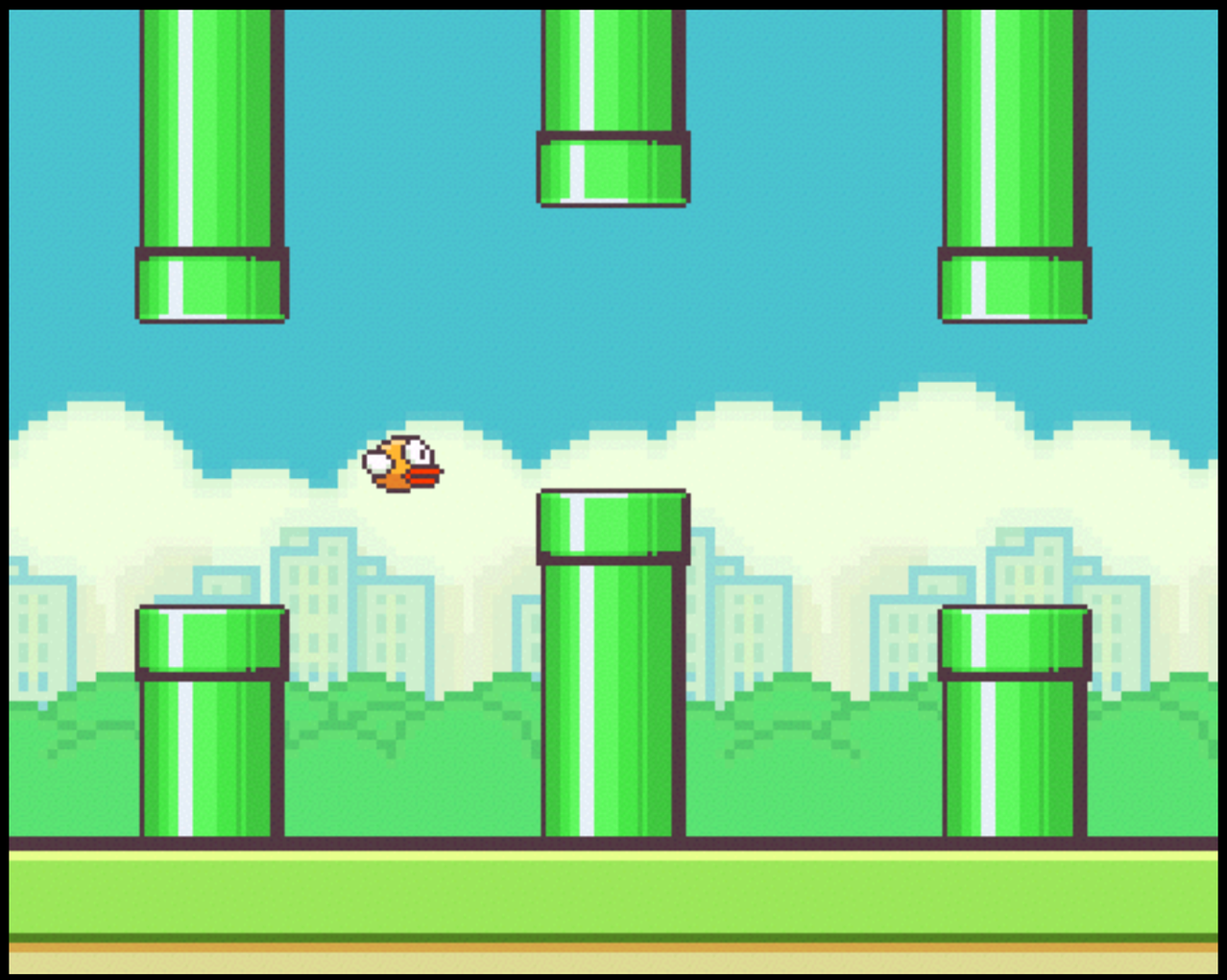


?

What even is this?

Tag?

. . .



“When you strip away the genre differences and the technological complexities, all games share four defining traits: a goal, rules, a feedback system, and voluntary participation.”

-Jane McGonigal

```
while (true) {
    getInput();
    update();
    render();
}
```

```
while (true) {
    getInput();
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    render();
}
```

Input Pseudocode

```
void getInput() {
    aDown = 0;
    bDown = 0;
    ...
    if A button down
        aDown = 1;
    if B buttom down
        bDown = 1;
    ...
}
```

```
while (true) {
    getInput();
    update();
    render();
}
```

Update Pseudocode

```
#define SPEED 5

void getInput() {
   //update player based on input
   player.velocity += aDown * SPEED
   //update objects based on physics
   //physics formulas to update player x,y
   //check for collisions
}
```

```
while (true) {
    getInput();
    update();
    render();
}
```

```
while (true) {
    getInput();
    update();
    render();
}
```

15 14 13 12
11 10 9 8
7 6 5 4
3 1 2 _

Game Engines

Choo choo

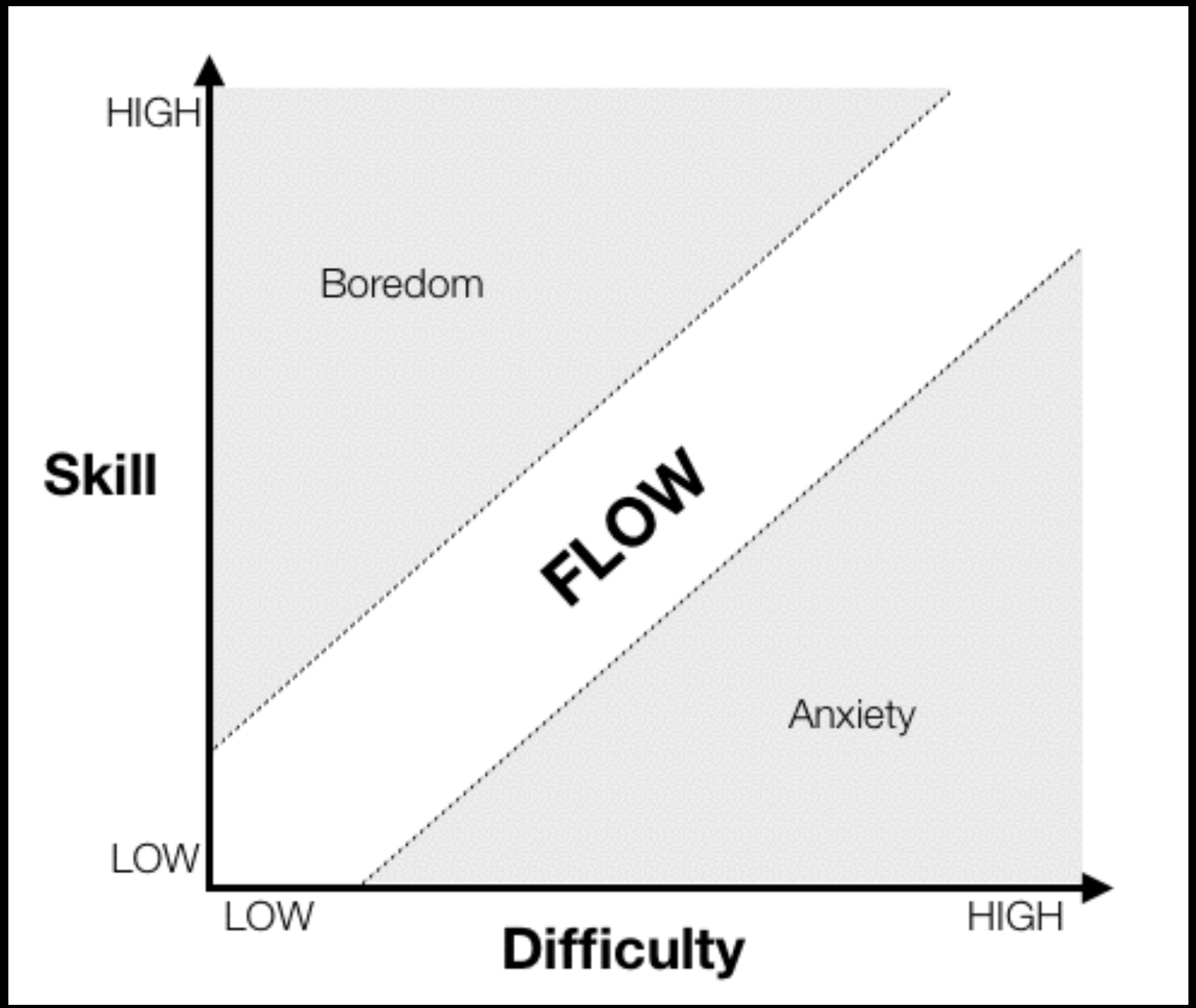
GAME ON

Unity and Final Projects

Pros and Cons

How do I make it fun?

A brief game design primer


HIGH
Boredom
Skill
FLOW
Anxiety
LOW
LOW
HIGH
Difficulty

Resources!

- Tomorrow's Lecture! AI design
- Unity tutorials
- Handmade Hero youtube series
- *The Art of Game Design*