# GameMaker

## A Commercial IDE for Game Development

# You Might Have Hear of…

Undertale

Deltarune

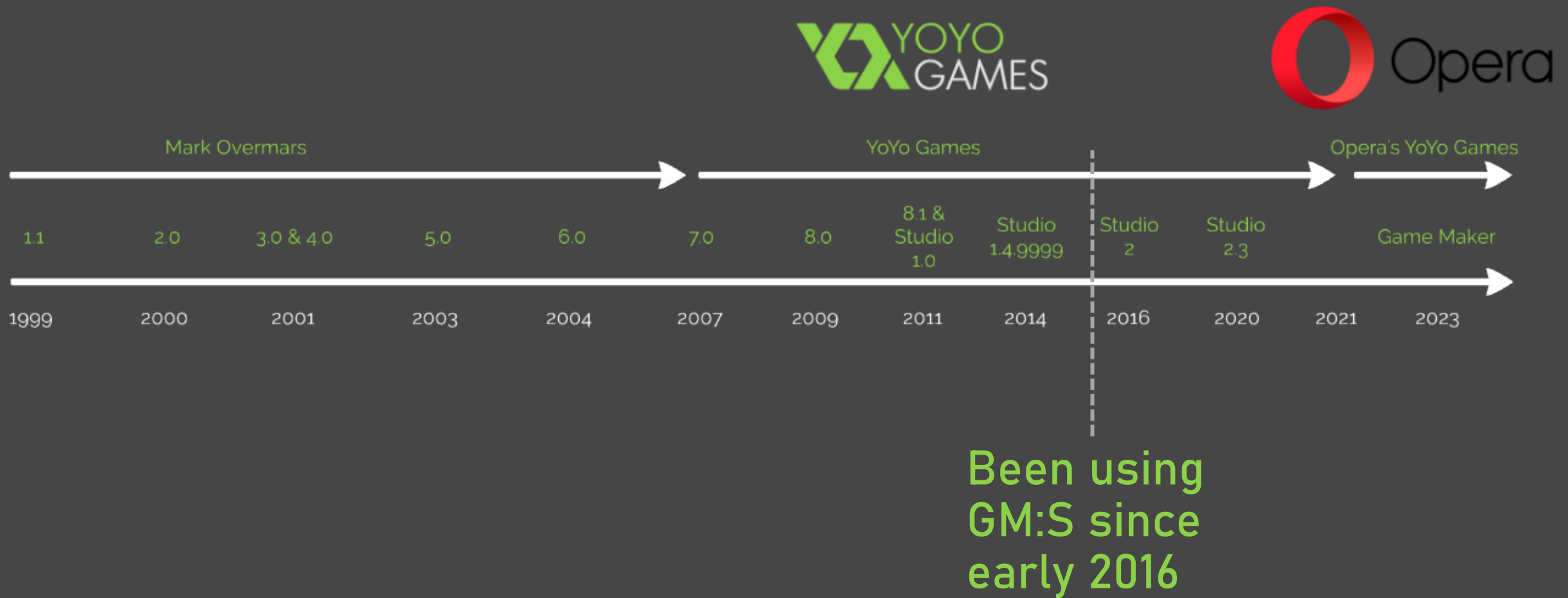Hotline Miami

Hyper Light Drifter

# Background



| 1.1 | 2.0 | 3.0 & 4.0 | 5.0 | 6.0 | 7.0 | 8.0 | 8.1 & Studio 1.0 | Studio 1.4.9999 | Studio 2 | Studio 2.3 | Game Maker |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1999 | 2000 | 2001 | 2003 | 2004 | 2007 | 2009 | 2011 | 2014 | 2016 | 2020 | 2021 | 2023 |

Mark Overmars

YoYo Games

Opera's YoYo Games

Been using GM:S since early 2016

# Feature Set

- Strong 2D capabilities
- Good backwards compatibility
  - Huge repository of tutorials dating back ages
- Very lax coding standards & No code capabilities
  - Prototyping made very easy
- Robust ecosystem of premade extensions and templates
- Very engaged community
- Free to start with for anyone
- Many supported platforms

# Lax Coding

```
if (condition == true
&& !other)
{
    do_something();
    //Code
}
```

↔

```
if bedingung = true
and other = 0
begin
    do_something()
    //Code
end
```

- Both is permitted
- Confusing naming style in the world of OOP:
  Class –> Object; Object –> Instance
- Even Scratch style Drag and Drop is possible

# Supported Platforms

- Windows, Mac (M1 & Intel), Linux
- Android, FireOS, IOS, IpadOS, tvOS
- Web & Opera GX
- Xbox One & Xbox Series Family
- PlayStation 4 & 5
- Nintendo Switch
- Microsoft UWP – Phone, MS Store, Xbox – Deprecated
- PlayStation 3 & Vita – Homebrew
- Even more homebrew platforms…
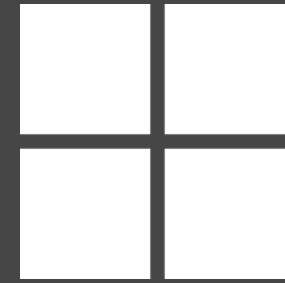
# Target Audience

- Beginners regardless of age and background
- Hobby (Indie) developers
- Artists making a game around their art
  - Such as how Toby Fox made Undertale with his own music

# Drawbacks

- Weak 3D capabilities
- Winding out of licensing commitments
  - Only subscriptions now, no more lifetime licenses
  - GameMaker: Studio ended –> Game Maker Studio 2 renamed –> GameMaker
  - My lifetime GM:S license has been revoked
- Multiplatform support breaks occasionally
- More advance users fight with the built in features
  - A lot happens implicitly
  - Reserved variables get auto applied
  - Breaks lots of OOP conventions
  - Doesn't enforce good style

# Should You Use it?

- Quite frankly, no.

- But I like it :)

# Live Coding

- Remaking my first simple game