

Introduction Video

University of Aalto

Herschel Pravin Pawar
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= Self Introduction

= Who am I?



Herschel Pravin Pawar
sakurakat.systems



[GitHub:pawarherschel/UniOfAalto](https://github.com/pawarherschel/UniOfAalto)

= Coventry University
Summer School Game Jam

Fractured Elements

= Result

| Criteria | Rank | Score* | Raw Score |
|--------------|------|--------|-----------|
| Gameplay | 2 | 3.286 | 3.600 |
| Presentation | 2 | 3.469 | 3.800 |
| Creativity | 3 | 2.739 | 3.000 |
| Enjoyment | 3 | 2.921 | 3.200 |

Table 1: Coventry University Game Jam Results

Continuous Change

2D Platformer

= Main Mechanic

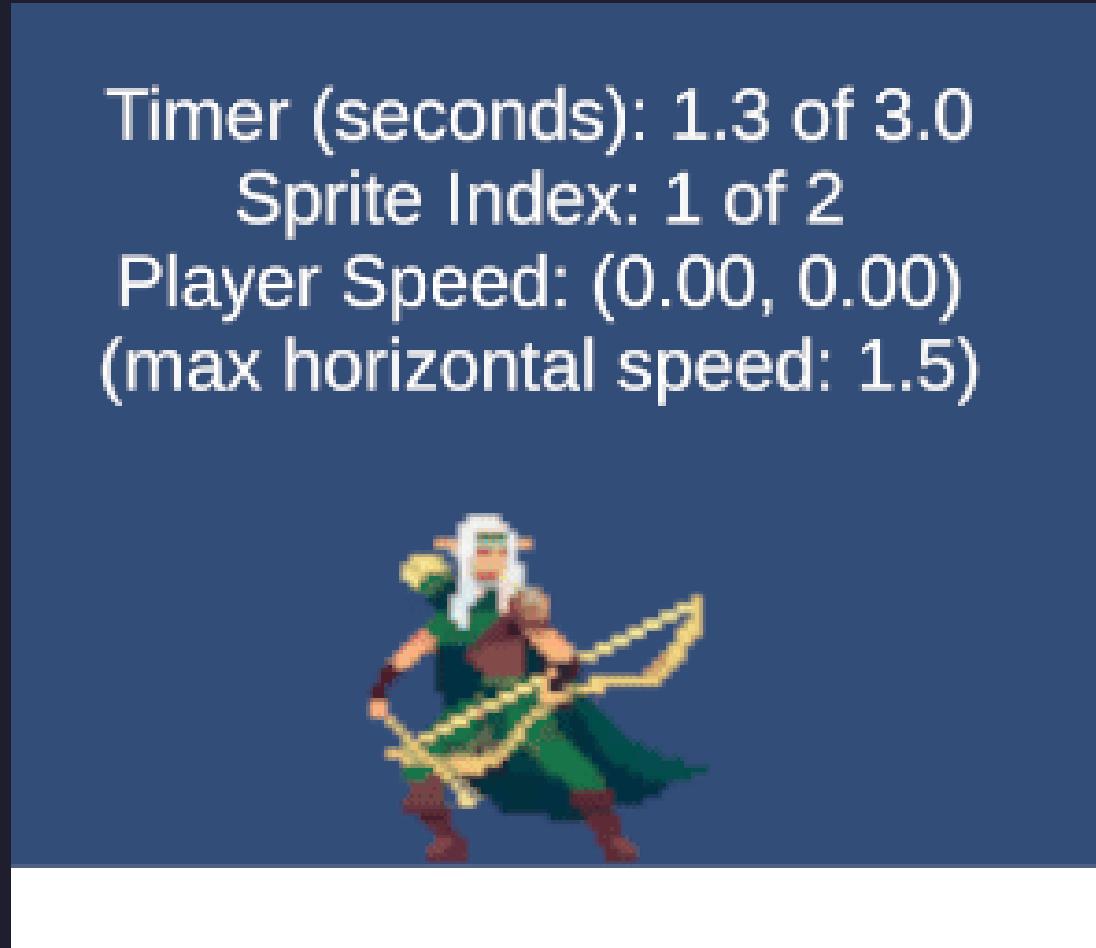


Figure 1: Hero Switching Mechanic

= The Team



Figure 2: Us

= Player Architecture

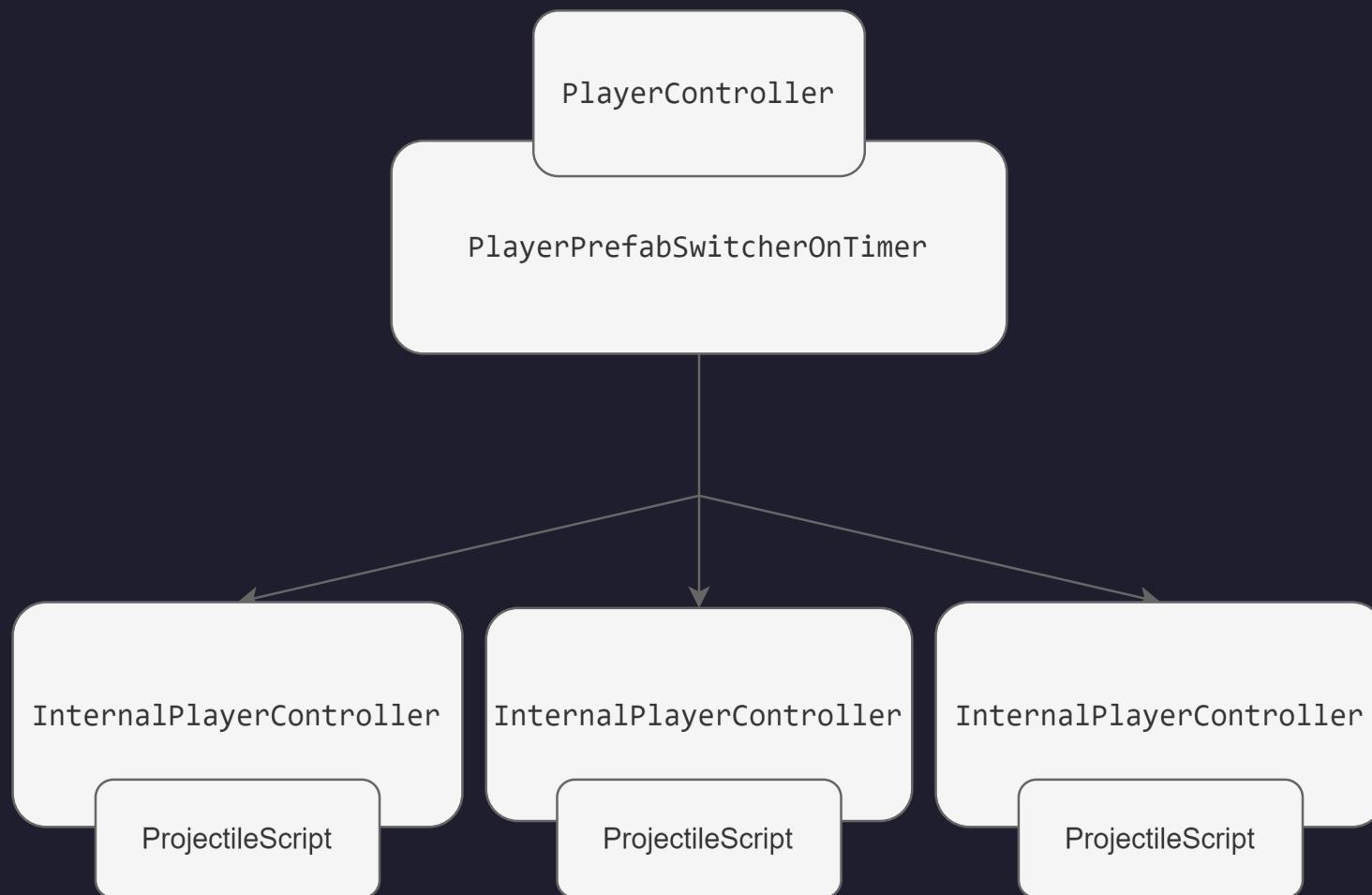


Figure 3: Player Architecture

= Game Maker ToolKit's
2023 Game Jam

Cosmos Conquerors

= Result

| Criteria | Rank | Score* | Raw Score |
|--------------|------|--------|-----------|
| Enjoyment | 4296 | 2.237 | 2.583 |
| Overall | 4652 | 2.285 | 2.639 |
| Presentation | 4720 | 2.237 | 2.583 |
| Creativity | 4780 | 2.382 | 2.750 |

Table 2: GMTK's 2023 Game Jam Results

= Themes

Roles Reversed

= Gameplay



Figure 4: Screenshot

= Main Mechanic



Figure 5: All Invaders Shooting

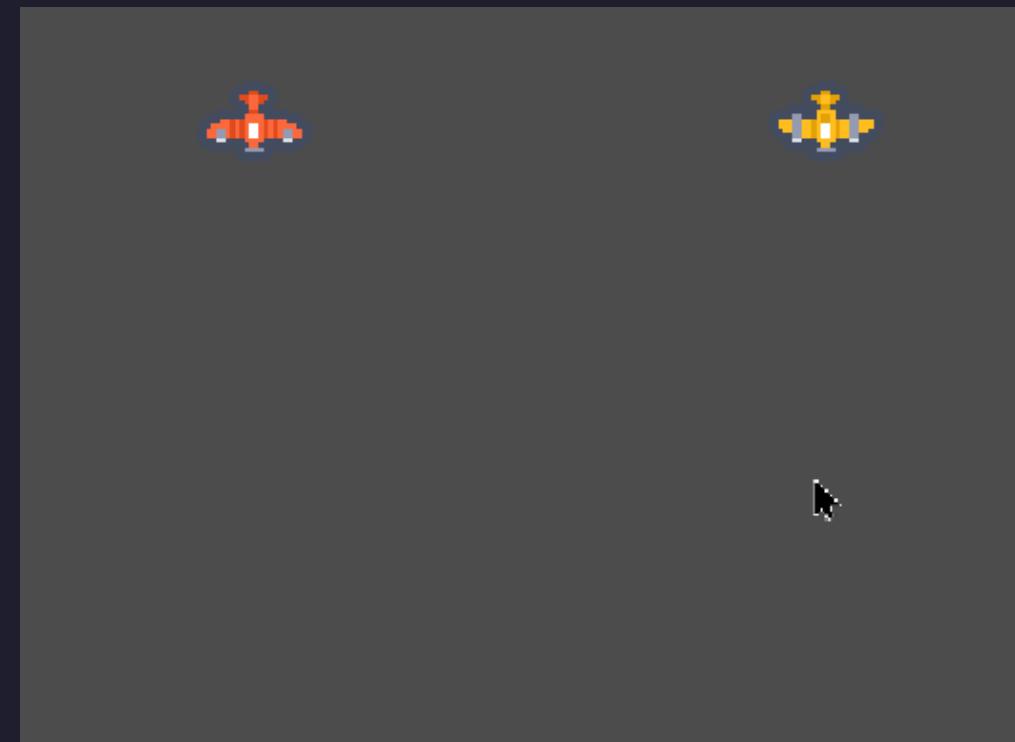


Figure 6: Two Invaders Shooting

= Bevy

Pong

= Other Projects

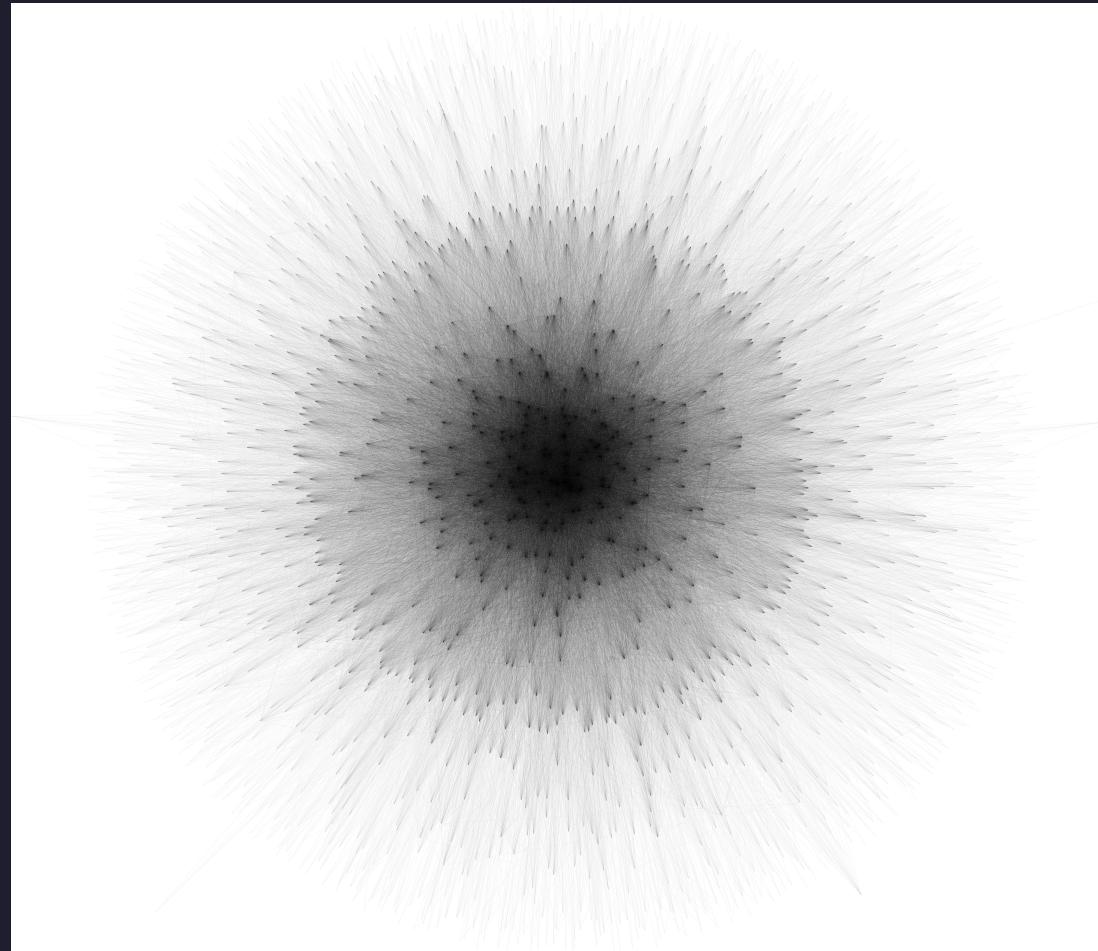


Figure 7: A *VERY* zoomed out view of the graph produced

= VRCX Insights

number of labels in the DOT file:

1835 labels

total lines in the DOT file:

102,560 lines

size of svg:

33.7 MB (35,402,018 bytes)

png output code (using typst):

```
#page(height: (7680pt * 5), width: (7680pt * 5))[
    #image("dot_edge_no_label.dot.neato.with_sand.svg")
]
```

size of png produced:

3.34 GB (3,597,062,134 bytes)

Booth Archiver

Figure 8: One of the spreadsheets generated by the program

= Krita/GIMP Palette Generator



Figure 9: Original Image



Figure 10: Quantized Image



Figure 11: Color palette generated with quantization level 5

= Kait



Figure 12: OC Kait - Made with the help of VRoid Studio

= Current Interests

= Current Interests

- WGPU – an implementation of WebGPU spec in rust – to offload work to the gpu
- Cranelift – an alternative to LLVM – creating custom scripting languages for game engines
- Stateless Abstractions – Inspired by NixOS, functional programming, WGPU – Creating good abstractions which reduce cognitive load
- Technical art – bridging programming, art, and mathematics – I am fascinated by gpus and shaders
- GPGPU – Hardware Acceleration – Offloading tasks and doing them in parallel
- Giving technical talks – Inspiring Others – Kate Compton inspired me, and I want to inspire others, just like her (video)

= Why Aalto

= Acknowledgement

= Acknowledgement

- fivepb for helping me push through when I wasn't able to
- mlembug for going through the script
- Shashank and Divyesh for checking the presentation
- Henna for helping me practice and pushing me towards getting higher education
- and many many many other people

= Heavily Inspired by

- [Acerola](#) for the general vibes of the presentation
- [No Boilerplate](#) for the introduction

Made with ❤️ using

- [typst](#) [Typst](#) – an alternative to LaTeX – // sorry couldn't figure out how to do make the logo visible
- [投Touying](#) [Touying](#) – Slides
-  [Catppuccin Theme](#) – Colors 
- [JetBrains Mono](#) – General font
- [NotoSerif](#) — Font for more “creative” aspects

= Appendix

= List of Images

- Figure 1: Hero Switching Mechanic 
- Figure 2: Us 
- Figure 3: Player Architecture 
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- Figure 6: Two Invaders Shooting 
- Figure 7: A *VERY* zoomed out view of the graph produced 
- Figure 8: One of the spreadsheets generated by the program 
- Figure 9: Original Image 
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- Figure 11: Color palette generated with quantization level 5 
- Figure 12: OC Kait - Made with the help of VRoid Studio 

= List of Tables

- Table 1: [Coventry University Game Jam Results](#)
- Table 2: [GMTK's 2023 Game Jam Results](#)



= Table of Links

| pg no | Accompanying Text | Link Destination |
|--|---|---|
|  | sakurakat.systems | https://sakurakat.systems |
|  | GitHub:pawarherschel/ UniOfAalto | https://github.com/pawarherschel/UniOfAalto |
|  | Coventry University Summer School Game Jam | https://github.com/pawarherschel/CovUniGJ2024 |
|  | Fractured Elements | https://pawarherschel.itch.io/fractured-elements |
|  | Coventry University Game Jam Results | https://itch.io/jam/summer-school-24/rate/2856755 |

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|--|-----------------------------------|---|
|  | Game Maker ToolKits 2023 Game Jam | https://github.com/pawarherschel/GMTK2023 |
|  | Cosmos Conquerors | https://pawarherschel.itch.io/cosmos-conquerors |
|  | GMTKs 2023 Game Jam Results | https://itch.io/jam/gmtk-2023/rate/2155150 |
|  | Bevy | https://bevyengine.org/ |
|  | Pong | https://github.com/pawarherschel/bevy-pong |

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| pg no | Accompanying Text | Link Destination |
|---|------------------------------|---|
|  | VRCX Insights | https://github.com/pawarherschel/vrcx-insights |
|  | VRCX Insights | https://github.com/pawarherschel/vrcx-insights |
|  | Booth Archiver | https://github.com/pawarherschel/booth_archiver |
|  | Krita/GIMP Palette Generator | https://github.com/pawarherschel/krita-palette-creator |
|  | WGpu | https://wgpu.rs/ |

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|---|-------------------|---|
|  | Cranelift | https://cranelift.dev/ |
|  | Kate Compton | https://www.galaxykate.com/ |
|  | video | https://www.youtube.com/watch?v=WumyfLEa6bU |
|  | Acerola | https://www.youtube.com/@Acerola_t |
|  | No Boilerplate | https://www.youtube.com/@NoBoilerplate |
|  | Typst | https://typst.app/ |

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|---|--------------------------------------|---|
|  | Touying | https://touying-typ.github.io/ |
|  | Catppuccin Theme | https://catppuccin.com/ |
|  | JetBrains Mono | https://www.jetbrains.com/lp/mono/ |
|  | NotoSerif | https://fonts.google.com/noto/specimen/Noto+Serif |
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