

YARF

Yet Another Reckless Frog

Abdil Kaya

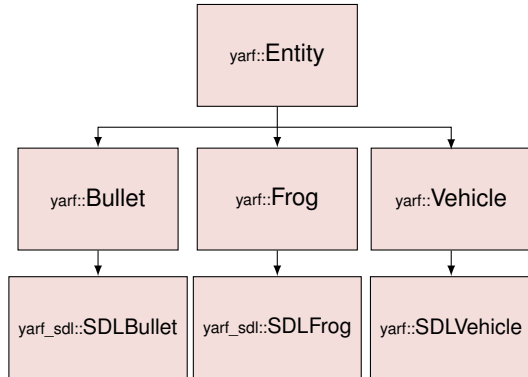
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Advanced Programming Techniques
2015-2016

Entity Structure

A combination of inheritances

■ Implementation Inheritance

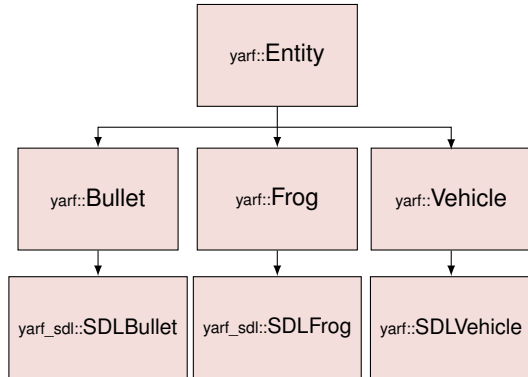


Entity Structure

A combination of inheritances

■ Implementation Inheritance

- implemented functions



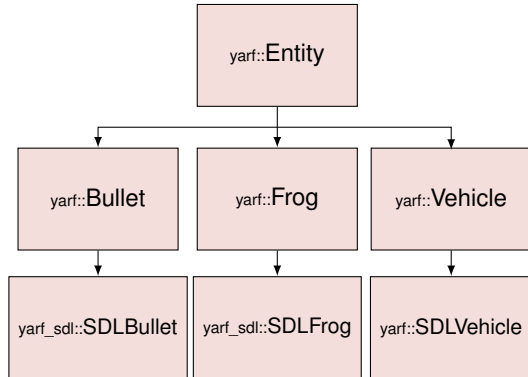
Entity Structure

A combination of inheritances

■ Implementation Inheritance

- implemented functions

■ Interface Inheritance



Entity Structure

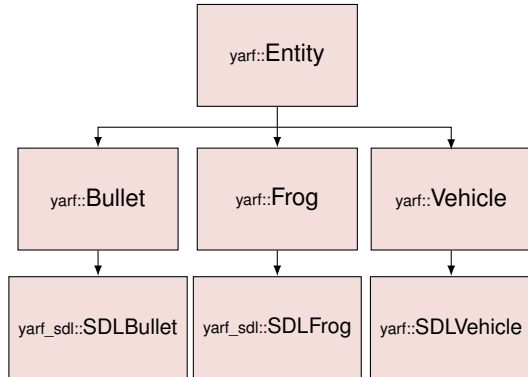
A combination of inheritances

■ Implementation Inheritance

- implemented functions

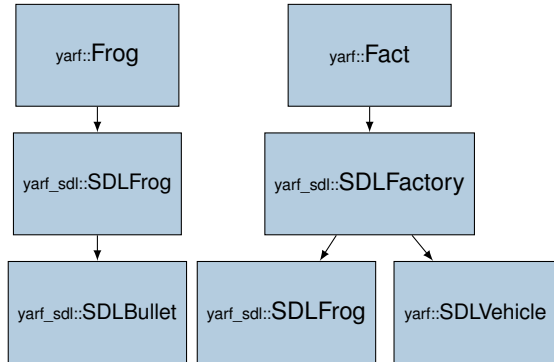
■ Interface Inheritance

- (pure) virtual functions



Entity Creation

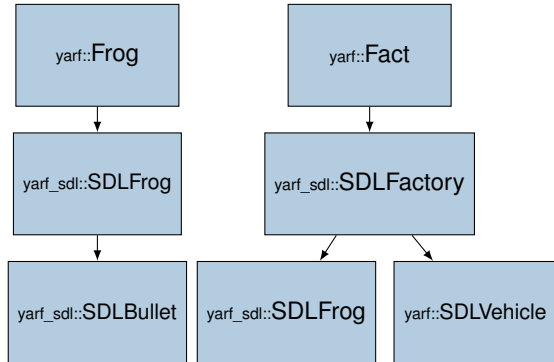
■ Fact as Abstract Factory



Entity Creation

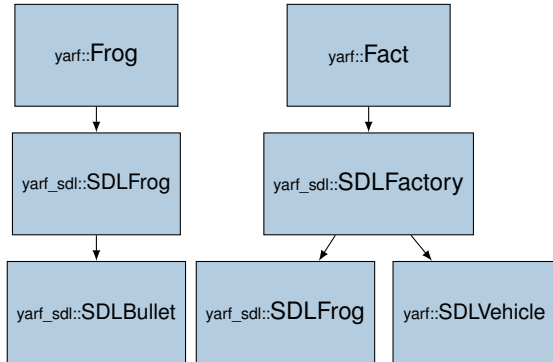
■ Fact as Abstract Factory

- Frog(s)
- Vehicles



Entity Creation

- Fact as Abstract Factory
 - Frog(s)
 - Vehicles
- Frog as Abstract Factory
 - Bullets



Additional Features

Mainly The Merits of Game/View Separation

Game Axis

- $[0, 4] \times [0, 3]$ axis

↓ *results in*

Visualisation Axis

- ?? x ?? axis

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Visualisation Axis

- ?? x ?? axis
- very scalable

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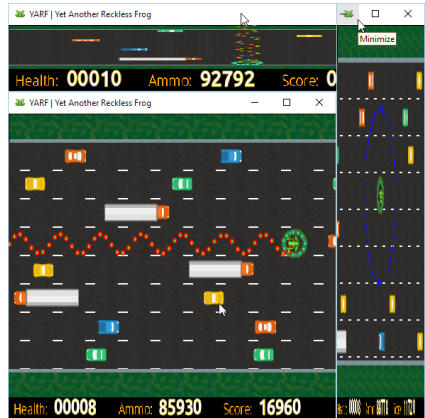
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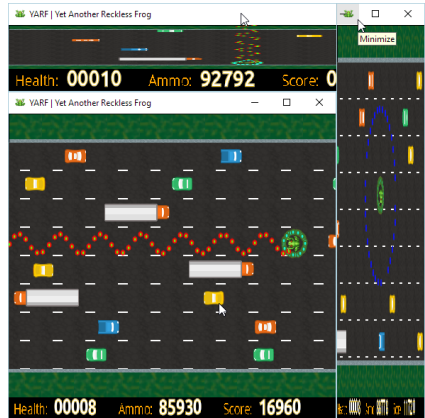
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- constant/adjustable



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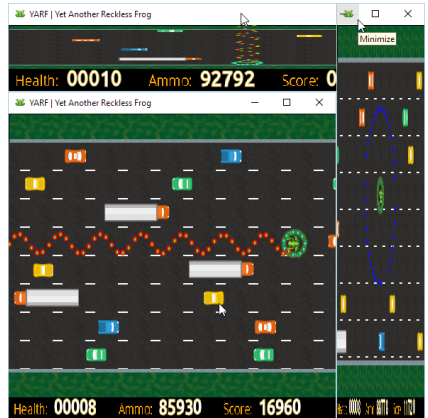
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Visualisation Axis

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TPS

- constant/adjustable
- game speeds unaffected



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Multifunctional Bullets



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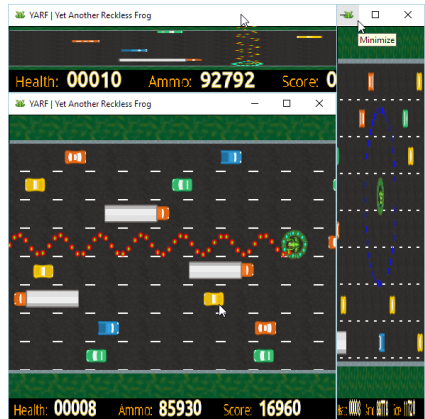
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Multifunctional Bullets

- offence



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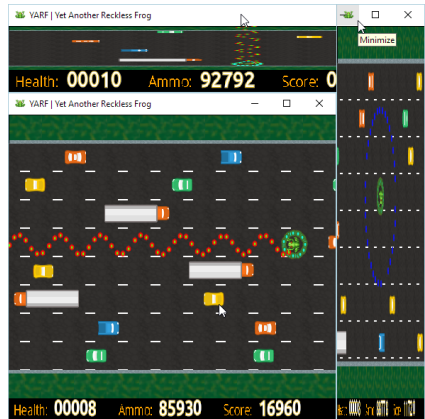
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Multifunctional Bullets

- offence
- defence



Additional Features

A Single Texture Atlas

- Passed onto entities by its address



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- Allows for low memory usage ✓



▼	YARF.exe (32 bit)	0%	9.3 MB
	YARF Yet Another Reckless Frog		

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Unfinished Features

- 1 Bonus Entities: ✗
- 2 Enemy Projectiles: ✗

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