

Lecture 1 - Introduction

- ▶ Module Overview
- ▶ Content
- ▶ Assessment

About

- ▶ Background: SE and Game Dev
- ▶ PhD in CS
- ▶ Shipped code in Java, Kotlin, C++, JS & others
- ▶ Maintain FXGL game engine
- ▶ YouTube game dev channel

Structure

- ▶ Roughly 50%-50% lecture + tutorial per week
- ▶ Roughly (50%-50%) C++ / Unreal Engine
- ▶ Lecture: theory, game design
- ▶ Tutorial: practice, implementation

C++ Importance

- ▶ You **will** need a good grasp of C++ for your courses (DGD, CSG)
- ▶ 50% of content is a sensible compromise
- ▶ If feeling confident, we will attempt C++ *with* Unreal Engine

Game Architecture Theory

- ▶ Init
- ▶ Main Loop (Input, Update, Render)
- ▶ Cleanup

Game Architecture Implementation (Unreal Engine)

- ▶ Event BeginPlay
- ▶ Event OnTick
- ▶ Event EndPlay

C++

- ▶ MS Visual Studio 2019
- ▶ Pragmatic Approach
- ▶ Quick Demo

UE4

- ▶ Templates
- ▶ Blueprints
- ▶ Quick Demo

Assessment

- ▶ Implement an Unreal Engine game prototype (100%)
- ▶ Demo
- ▶ Good time to ask questions

Conclusion

- ▶ C++
- ▶ Unreal Engine
- ▶ Challenging but fun