

GAME ENGINE

# Source

- The Chernobyl
- GAMES 104: Modern Game Engine – Theory and Practice

# Framework

- Basic Elements
  - Structure and layer...
- Rendering
- Animation
- Physics
- Gameplay
  - Event system, scripts system, graph driven
- Misc. Systems
  - Effects, navigation, camera...
- Tool set
  - C++ reflection, data scheme (reflection: complex
- Online gaming
  - Synchronization, consistency

Advanced tech:

Motion matching

Procedural content generation (PCG)

Data-oriented programming (DOP)

Job system

(UE5 amazing systems)

Lumen

Nanite

# Designing

- Entry point
- Application layout
- Window layout
  - Input
  - ->Events
- Renderer
- Render API abstraction
- Debugging support
- Scripting language
- Memory systems
- Entity-component systems (ECS)
- Physics
- File I/O, VFS
- Build System

Game engine is actually dll library

In a solution, add two projects engine(dll) and sandbox(exe)

Sandbox add reference to engine. (link)