Exploration of Design Patterns in Game Development

Technical Work Term Report (Work Term 3)

APSC 310
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What is design pattern?
No it's not tartans or pokka dots.

1   Background ? (Better section title)

1.1   Game Development Components

There are many parts to a video game. It can be grouped into: rendering, physics / simulation, AI, UI, sound / music. online, controls (input handling), online / networking. All tied together by the game engine.

Having all the systems working together monolithically is bad, becuase it's difficult to maintain, prone to errors and bugs, and hard to collaborate as sub-systems are too tightly coupled.

This problem is not exclusive to video game development

1.2   Gang of Four

In software development, the phrase "Gang of Four" refers to the four authors of the Design Patterns book. The book features the most common design patterns widely in use today.

2   Creational Design Patterns

3   Behaviour Design Patterns

4   Structural Design Patterns

5   Architectural Patterns

5.1   Entity-Component-System

5.2   Model-View-Controller

6   Conclusions

References

A　Sample Code