

Aspects of VR Entity Component Systems

Phillip G. Bradford

University of Connecticut

Outline

Inheritance is not a panacea - Game design

Entity: Bicycle

Components

Made of metal

Can be used by humans

Transportation

Bought/sold

Man made

Popular b-day presents

Physics 2D, 3D

Why not OOP?

Component Oriented System (COP)

Entities — each item in a scene

Components – groups of entities with functionality

Code & data split into: Entity-components and systems

System – acts on all entities containing the desired components

Entity Component Systems

Entity – general purpose object for each thing in a scene – no data and no methods

Components are made of entities – they hold information

Getting components in clusters (grouped by entity) from common pool

System should work with the components based on their entities