

**"it's time to kick ass and chew
bubble gum...",
a unity 3D live coding demo**

Debug.log(this);

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Unity 3d from a dev point of view

c++ engine

scripting provided by Mono (open source .Net)

c#, unityScript, boo

mono is actually an interesting choice

mono 2.6 (approx .Net 3.5)

code completion, refactoring tools (works best with visual studio)

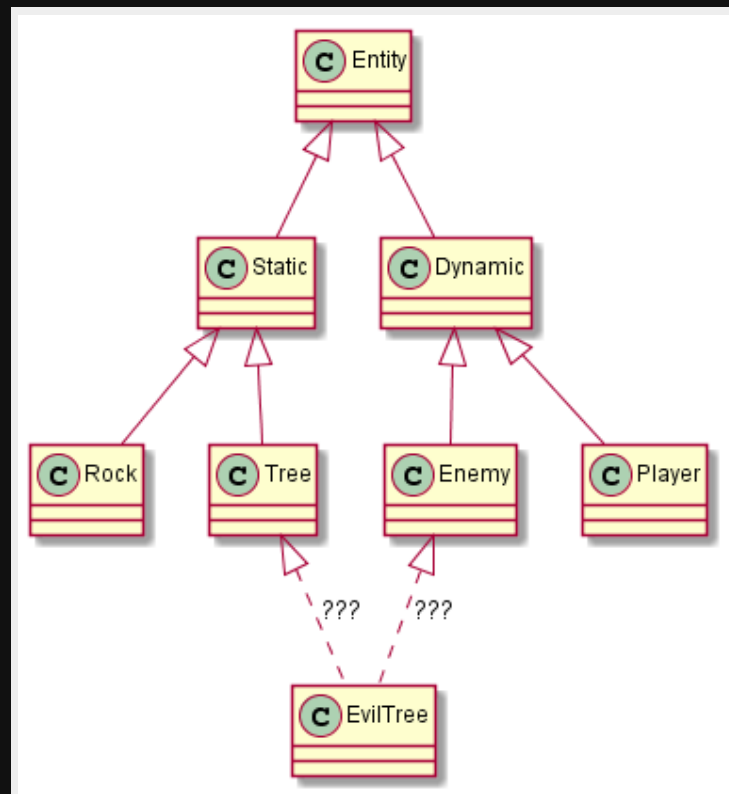
access to .Net (sockets, XML, etc.)

LINQ

How does it work?

Once upon a time (old shool OO)

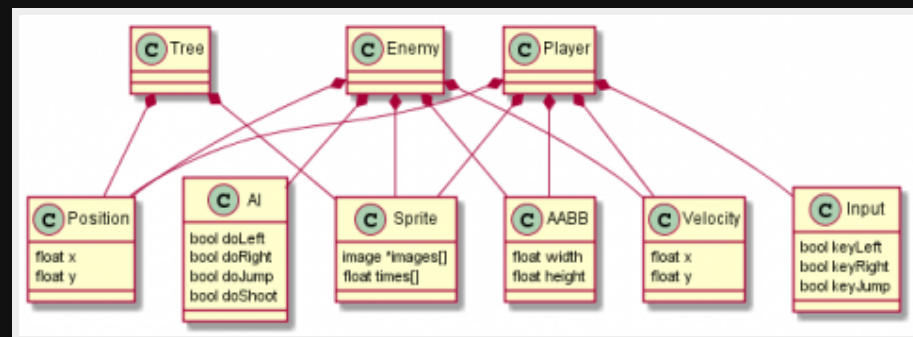
everything inherits from a base gameobject
results in a tree of doom (vertical complexity)



composition over inheritance

Component Entity Systems

configurable, reusable, better encapsulated



Entity

just an id

with a container of components
in Unity they are called GameObjects

Component

a minimal set of data needed for a specific purpose (SRP)

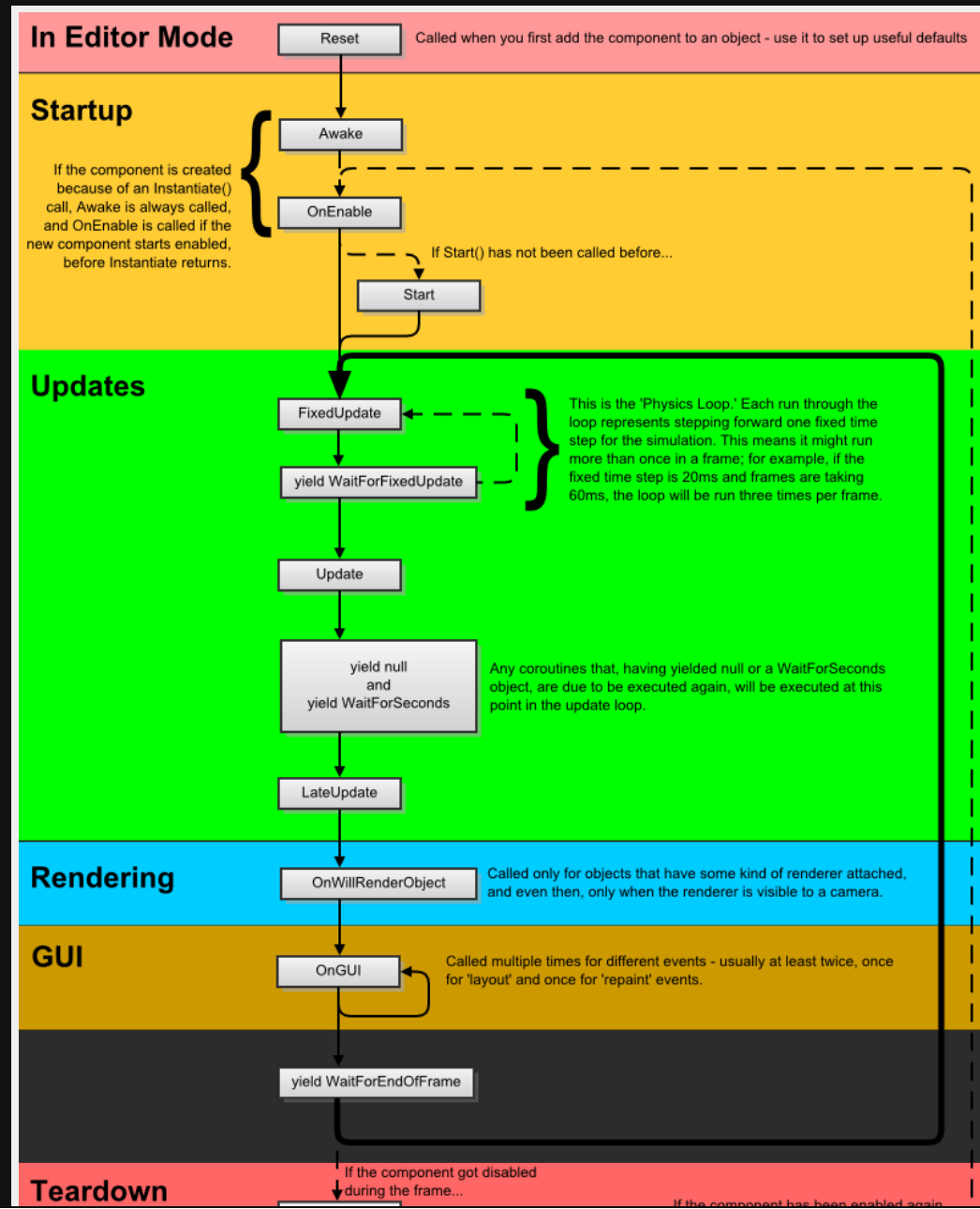
an Object of Type MonoBehaviour in Unity

Transform, Material, Collider, and your own scripts

systems

single purpose function that traverse the entities, and update each component

the game loop and its events



an interesting read

<http://www.chris-granger.com/2012/12/11/anatomy-of-a-knockout/>

resources

- embedded Asset Store
- <http://docs.unity3d.com/Documentation/ScriptReference/>
- <http://unitygems.com/>

let's code

<https://github.com/david-demainlalune/SoftShakeAsteroids>