

# Over time, developers have realised that a lot of code never changes between different games.

#### Examples

Math code Level editing **Physics** Compatibility layer

Image loading

Playing audio

People started collecting this common code into Libraries (e.g., LibGDX).

By programmers, for programmers.

### Examples of libraries

C++ Java C# LibGDX SFML XNA SDL LWJGL

As games became bigger, artists grew in importance.

One well designed piece of code could be applied to thousands of different game objects.

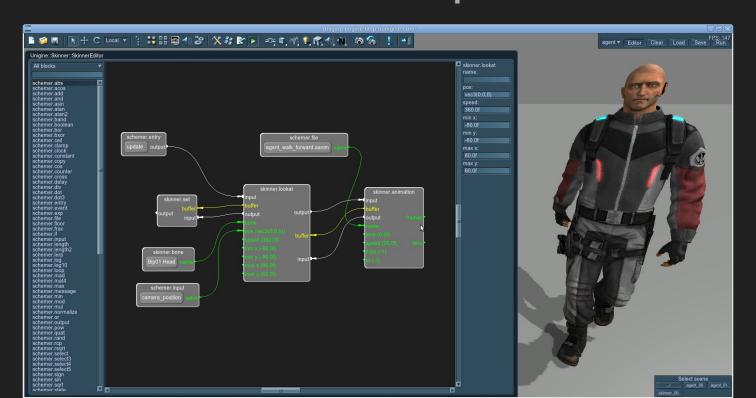
## However,

#### Artist + Code

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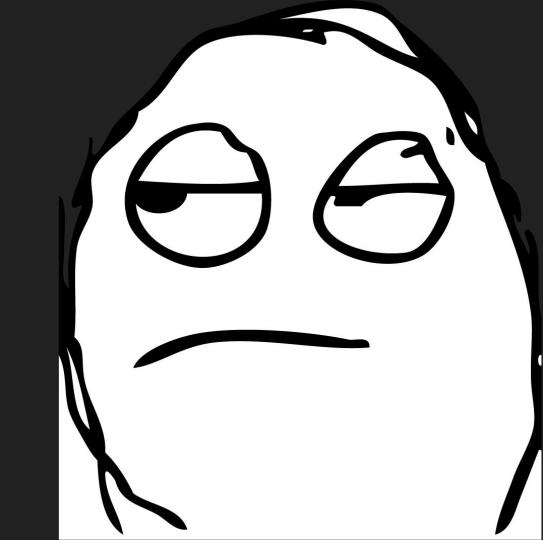


## Thus, focus shifted from code libraries to development tools.



# By programmers, for artists.





# And for programmers too!



# A Game Engine is like an IDE. For games. 8)



#### So, what options do I have?

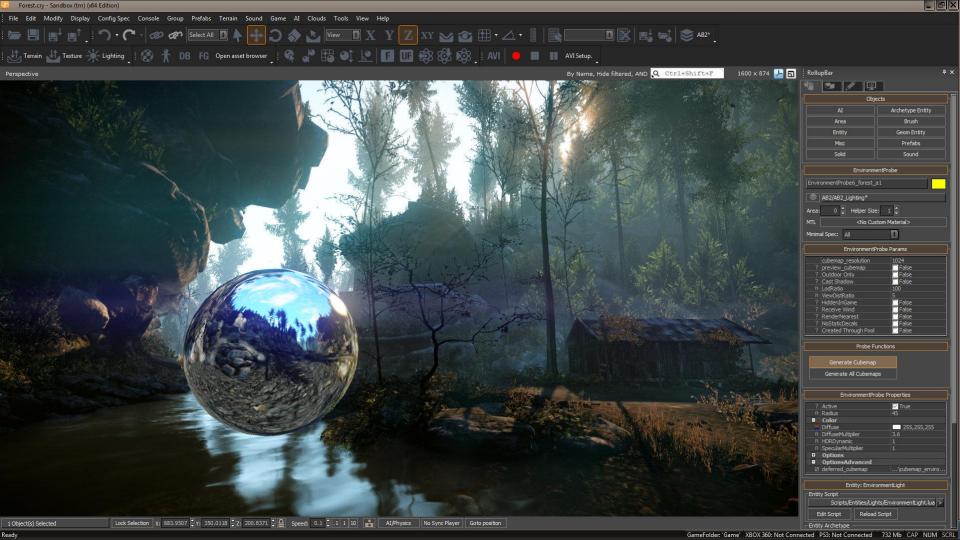
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# Engine No. 1

#### Cryengine





# Games using it

Crysis 2/3 Ryse Warface Sniper: Ghost Warrior 2

## Positive

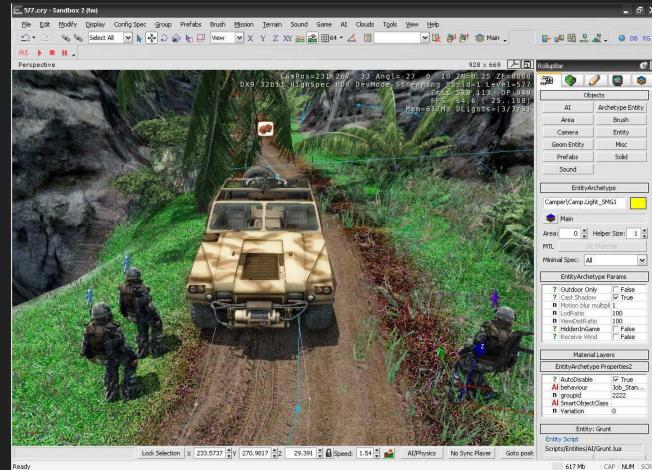
Game editor can be used to edit existing games (Modding) Graphics are excellent! Realtime lighting Visual scripting Intuitive level editor

## Negative

Bad support for small developers
Difficult to release your game
Designed for powerful computers
3D based



#### Crysis editor (Cryengine 2)



Modding allows you to design games without having to make any of the assets.

It's super fun!:)

# Engine No. 2



## Positive

Awesome graphics Powerful visuals scripting Full control (Open source) Powerful tools Supports 2D Multi-platform

## Negative

Very complicated! Cutting edge technology.

# Engine No. 2



### Positive

Excellent tools
Easy scripting system
Simple to use

## Negative

Old, having some legacy cruft. Not suitable for large scale games.

# All three showcased live during class:)

### Notable Mentions:

Cocos 2D
Source Engine
RPG Game Maker