**KODU**

***An investigation into Programming tiles***

From the main loop…

// Update all the objects currently in the game.

gameListManager.Update();

**Starting notes: …**

The core of each piece of programming/behavior is based on the “Atom.cs” class.

Actors\* are any item to interact with. Interactive items have a “brain.cs” class that processes its “ActorMemory” with its list of “Engram”’s which contain some basic info for movment, lifetime etc. It Also continas a “GameThing” wich has more detailed information about the actions associated with it (Verbs/ actuator).

Look At CardSpace.xml It contains **ALL Programming Elements** exposed in the game as Programming Tiles.

*ProgrammingElements* consist of:

* Actuators.cs
* Filters.cs
* Modifiers.cs
* Selector.cs
* Sensors.cs
* Actuators.cs
* Filters.cs
* Modifiers.cs
* Selector.cs
* Sensors.cs

Cards *CardType* (defined in card.xml) consist of tiles:

* sensor
* filter
* Selector
* Modifier
* Actuator
* Group

**Task, Adding new Programming tiles**

*ActorMenuItem.cs* : Pie selector menu item

*ProgrammingElement.cs* : Definitions for>> sensor reactions, filters and actions to execute. This is the base class for all programming elements

**Adding new tiles:**

Entries need to be added in XML files for the tiles to be built by the code base.

1) Required are entires in CardSpace.xml , and for text localization Cards.xml

Programming\CardSpace.cs processes CardSpace.xml entries to build the tiles. This class must be updated to reflect the any new programming elements. Make sure to check both for Sensor and Filter the **XmlArrayItem** attribute.

2)New art needs to be created in 2 locations:

The art (as 128x128 png) to be created in “C:\projects\BokuProto\Boku\Content\Textures\Tiles”

This file then needs to be processed (pipeline) into XNB files… which reside in the build folders.

Within the VS project, updates are required to reflect to inclusion of the new content (image) under kodu/content/textures/tiles.

When adding new filters/sensors, you must update the Enumeration **BrainCategories** within the file Boku\Programming\ProgrammingElements.cs.

**Note:** Debugging new tiles – Boku\UI\ReflexCard.BuildCompatibleNodeTree() is where tiles are filtered out of the pie selector.

**Notes on Implementing NEW tile functionality**

Good luck.

C:\projects\BokuProto\Boku\Programming\

GameActor is a: GameThing