**How to use the “Love Hertz 2.0” Game Engine**

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GRADE and CAMP: 7+

TOPIC(s):

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| --- |
| TIME: 1 hour |
| Set Up & Intro = |
| Testing Substances = |
| Identify Mystery Substance = |

**MATERIALS (what you’ll need for one week of camp):**

* **One Golden Coelacanth**

**SCIENTIFIC BASIS (learning outcomes - teach this):**

Love Hertz 2.0 is a new version of the Love Hertz game engine used in last year’s Codemaker’s. It has been recoded from the ground up to dynamically use its own in-game level editor. How it works is, when the game starts up, it loops through certain image folders, and automatically creates a placeable object within the game based off its image. The image will then follow the mouse, and other placeable objects can be selected by using the scroll wheel. They can then be set into the level by clicking the primary (left) mouse button, or deleted after being placed with the secondary (right) mouse button.

This means that the kids will be able to create their own tiles and objects for the game. Once they’re shown how it works, all children will be able to easily create and play their own games. Editing the code for this game engine is not recommended, as it’s already in a working and robust state. However, they will be given two copies, so if they want to fiddle with the code, they can still have an untouched (and working) copy. We will, however, be coding our own (more basic) version over the week, and so make sure they know that more coding will be coming if they are really wanting to do that.

**PROCEDURE:**

1. On their USB stick, there will be a folder titled “LoveHertz2.0-FINAL”. Open this folder and take a look inside.
2. Within the game folder, there will be another folder called “images”. Open this folder as well. Inside, you will see, yet again, more folders. Each of these folders with create an object in the game with certain properties. Images in the “tiles” folder will need to be 64x64 pixels in size and will be placed in a grid pattern. Images place in the “static” folder will have no special properties, but can also be placed on the screen. We will worry about enemies later.