Coding Fundamentals ASPIRE

(8/11 - 12/12)

Helix Charter High School
Isabelle Viraldo

Week 5 [9/8 + 9/12]

Welcome!

- Mondays: Discussion + Activity
- Fridays: Review + Programming Exercise

What do you want to learn?

What do you care about?

What do you want to accomplish?

feedback!

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Topics I hope to cover:

- GitHub (How to use and let's set one up!)
- AI (Machine Learning vs Generative AI vs Image Detection, let's break it down (and make one of our own))
- How to code! (Some practical skills, and also best practices)
- Binary (What is it? Why is it important? Who cares?)
- Robotics (What do you need to get a robot working?)
- How does your computer work? (What do computers do when you're not looking?
- What do you want to learn?

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What is a Class?

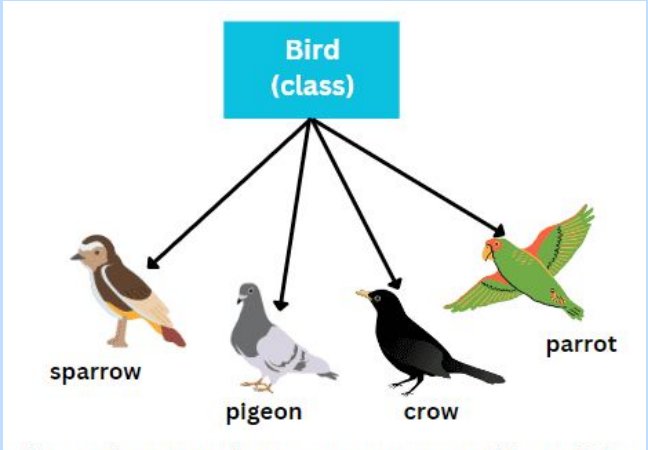
A custom object with unique:

Variables, functions, and types

Grouping data + behavior together

Reuse and make many other similar objects

Its like a skeleton, that you fill in the details with



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1. Spawn Zombie
2. inDesert=False
3. Set location
4. Can see player = false
5. Wander

(it becomes day)

6. inSunlight = True
7. Gets set on fire
8. Dies

1. Spawn Zombie
2. inDesert=True
3. Set location
4. Can see player = true
5. Kill player, must eat brains
6. wander

(it becomes day)

7. inSunlight = True
8. Nothing happens because its a chad husk with sun protection

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```
{
  "format_version": "1.8.0",
  "minecraft:client_entity": {
    "description": {
      "identifier": "minecraft:zombie",
      "materials":  {
          "default": "zombie",
          "masked": "zombie_masked"
        },
      "textures": {
       "default": "textures/entity/zombie/zombie",
      //Biome Layer
        "plains": "textures/entity/zombie/biomes/biome_plains_zombie2",
        "desert": "textures/entity/zombie/zombie"
       },
      "geometry": { "default": "geometry.zombie" },
      "scripts": {
        "pre_animation": [
          "variable.tcos0 = (Math.cos(query.modified_distance_moved * 38.17) *
query.modified_move_speed / variable.gliding_speed_value) * 57.3;"
        ]
      },
      "animations": {
        "humanoid_big_head": "animation.humanoid.big_head",
        "humanoid_base_pose": "animation.humanoid.base_pose.v1.0",
        "look_at_target_default": "animation.humanoid.look_at_target.default.v1.0",
        "look_at_target_gliding": "animation.humanoid.look_at_target.gliding.v1.0",
        "look_at_target_swimming": "animation.humanoid.look_at_target.swimming.v1.0",
        "move": "animation.humanoid.move.v1.0",
        "riding.arms": "animation.humanoid.riding.arms.v1.0",
```

Week 5 (9/8 + 9/12)

Coding activity! Get out your Chromebooks!

Everyone look up:

python online compiler

Or

Go to: https://tinyurl.com/yc4w9mdh

feedback!

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