Coding Fundamentals ASPIRE

[8/11 - 12/12]

Week 3 (8/25 + 8/29)

Welcome!

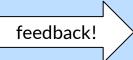
Mondays: Discussion + Activity

Fridays: Review + Programming Exercise

What do you want to learn?

What do you care about?

What do you want to accomplish?





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?

What is a Function?

Takes input -> does something -> gives output

Why use Functions?

Functions

- def
- name
- parameters
- return

```
def double(n):
    return n * 2
print(double(5))
```

Python's Standard Format

Define Functions

Define main function

Standard entrypoint for running programs

```
#define your functions up here
def double(n):
   return n * 2
# main program
def main():
    #put your real code here
    print(double(5))
#this is just standard
if name == " main ":
   main()
```

Coding activity! Get out your Chromebooks!

Everyone look up:

python online compiler

Or

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





Week 3 (8/25 + <u>8/29</u>)

Programming Challenge:

Make a Role Playing Game

- 1. Get input from the user
- 2. Use at least one if/else statement
- 3. Use at least one function multiple times
- 4. Use the python standard main function

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