This is why I commit to Python and rely on it to help me succeed

Why Python Fits Us

First and foremost, this is a language that both of us have good experience with. Paul has used Python as back-end in a side project and implicitly through using Django. Daniel uses it for his research at the Argallab and the Interactive Audio Lab. Both of us used it in CS 349, and also for coding practice.

Why Python Fits the Class

1. **Support for Running Local and Remote**: Both of us have Macs which came preinstalled with python, so all we have to do is type “python <file_name>” in order to run our programs. The Wilkinson lab computers also all come Python, executable via the command line.
2. **STDIN, I/O, TCP/IP Sockets**
    a. STDIN
        i. Import sys
        ii. For line in sys.stdin...
    b. I/O
        i. You can call open() on a filename with parameters such as ‘r’ to read and ‘w’ to write
        ii. Ex: fo = open("foo.txt", "wb")
    c. TCP/IP Sockets
        i. Python provides a socket module named “socket”
        ii. We don’t really understand what this is, but we found documentation here: https://docs.python.org/3/library/socket.html
3. **Modular Programming**: Python scripts that you write are referred to as modules, and you can import them, along with default modules and packages. Example: `import math` to do math operations. You can define functions, classes, interfaces, etc.
4. **JSON**: there’s a module called json that allows you to parse and write json (json.loads and json.dumps).
5. **Loading Code Dynamically**: you can use **__import__** on a module name to load it dynamically (again we didn’t know what this means, but we found documentation on it).
6. **Unit Testing**: you can use the framework unittest to write unit tests, and coverage.py for code coverage.
7. **IDE**: PyCharm and IDLE are examples that allow for exploratory programming in Python