

TITLE: Programming Language for the Next Unicorn
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DATE: October 2, 2018

Our team has selected Python as our programming language for the quarter. Both of us feel comfortable working with and learning more about Python, and it satisfies all the required functionalities needed by the project:

- i. Python 2.6.6 is installed on the t-lab servers. Using `$rpm -qa | grep python`, we see that many programs supporting Python functionality are also installed already on the server. Furthermore, previous courses such as EECS 348 and EECS 340 have had assigned projects and homework written using Python that are submitted or tested using t-lab servers.
- ii. Standard STDIN and I/O are both supported by Python, and libraries such as `sys` are used frequently for such operations. For example, `sys.argv` reads command line arguments into the Python script as a list. Output is easily achieved using the `print` function, and can also be written to a file using `f = open("filename")` and `f.write()`. TCP/IP is supported and we have implemented such sockets using Python in EECS 340.
- iii. Modular programming is possible in Python through importing packages and files.
- iv. Using the `'json'` package, we can use Python decode and encode JSON objects.
- v. Importing modules or classes dynamically in Python can be done using `__import__()`.
- vi. There is a unit test framework in Python. Many IDEs can also be used to support unit testing and test coverage. We can input test files into Python code using the command line as well.
- vii. Many well developed IDEs are available for use in building, executing, and debugging Python code, such as PyCharm, PyDev, Atom, Vim, and Spyder.