

To: Matthias Felleisen

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Subject: programming language for super-hot project

The language that we propose to use to develop this project is Python 3.7. Python serves as an effective language for general applications and exploratory work due to its language features and extensive library support for many software usages. There is built-in support for Unix-style I/O, raw sockets, and dynamic imports. There is a built-in unit testing framework called pyunit that we can use to unit test our code and a coverage module that can be attained for code coverage. There are also language built-ins for JSON parsing to work with and many frameworks to choose from for constructing GUIs.

The chosen IDE for the project is VSCode. It makes writing exploratory code easy by including features that make development quick and easy. It can detect the Python environment on the machine and determine whether the code has any obvious errors like imports that don't exist or syntax errors. It can also make life easy by plugging into useful command line development tools like pylint that help clean up code.

Most distributions of GNU/Linux, including the Linux CCIS servers, have packages for Python and pip, the Python package manager. Virtual environments can be used to organize the required plugins for the project easily as well. Our team's development machines also run Linux, so development should reflect well on the target deployment machines.