To: Instructors of CS 4500
From: Jennifer Der and Timothy Haas
Subject: Is Python the Right Fit?
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Python is a flexible language that allows us to do many things. It has a number of libraries and packages that are available for us to import and use in our project. However, there are some drawbacks to libraries, and some noise to sort through when researching the tools we can use. Almost anyone is able to publish a Python package for others to use, so this makes sorting through what tools we should use for the project a bit more difficult and time consuming. This part of Python is a double edged sword, since there are many more chances to make mistakes in choosing tools. Python itself also provides many built-in tools that we have found useful in our exploratory projects thus far. Being able to import tools such as the built-in JSON library, or the threading library makes the development process easier. We do not need to deal with installing these tools on the server or on other operating systems before running our programs, and instead can rely on built-in tools in Python instead. These built-in tools are well documented, and there are many people who use the same tools so this makes learning and debugging these specific tools easier. Some drawbacks to this aspect of Python are that there are many ways to accomplish the same functionality in Python and there are not resources that clearly document best practices. Also, it is sometimes difficult to discern in forums which version, Python 2 versus Python 3, people are asking questions about; the two can vary greatly in terms of how to import packages, which methods to use, and what syntax is preferred.