Open-Source Report: TCP Connections

Proof of knowing your stuff in CSE312

Guidelines

Provided below is a template you must use to write your reports for your project.

Here are some things to note when working on your report, specifically about the **General Information & Licensing** section for each technology.

- **Code Repository**: Please link the code and not the documentation. If you'd like to refer to the documentation in the **Magic** section, you're more than welcome to, but we need to see the code you're referring to as well.
- **License Type**: Three letter acronym is fine.
- **License Description**: No need for the entire license here, just what separates it from the rest.
- **License Restrictions**: What can you *not* do as a result of using this technology in your project? Some licenses prevent you from using the project for commercial use, for example.

Also, feel free to extend the cell of any section if you feel you need more room.

If there's anything we can clarify, please don't hesitate to reach out! You can reach us using the methods outlined on the course website or see us during our office hours.

Flask

General Information & Licensing

Code Repository	Flask Repository
License Type	BSD 3-Clause "New" or "Revised" License via source
License Description	• All code is free for commercial and private use • Code is free to be modified • Code is free to distribute • No citations or credits are required when publishing code that uses code from this repo
License Restrictions	• Flask is not liable if we use their code and it breaks anything • Flask does not provide a warranty for their code

Magic

Flask has a function called “run” which takes generally a hostname and a port as parameters (there's more but not as relevant) and then uses those inputs to run a function called “run_simple” from the BaseWSGIServer (which extends HTTPServer, which inherits TCPServer from socketserver.py) class in serving.py from the werkzeug library that calls a ‘super’ function ‘serve_forever’ which is the super function of the socketserver function “serve_forever”.

Flask ‘run’ function
Where Flask calls ‘run_simple’
Where werkzeug defines ‘run_simple’
Where werkzeug defines super function ‘serve_forever’
Where werkzeug calls ‘serve_forever’ in ‘run_simple’
Where BaseWSGIServer class extends HTTPServer
Where HTTPServer is defined in server.py (from python Libs)
Where serve_forever is defined in socketserver.py
Where TCPServer is defined in socketserver.py