CSE 312 Project Phase 2

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Eventlet Report

For this project, when we were developing our social media website, we narrowed down Eventlet and decided to go ahead with it. Eventlet doesn't affect our code and how we write it. It affects how one runs the program and makes it easier. It is a concurrent networking library for Python which lets us create Eventlet Green Threads which are considered lightweight compared to other alternatives. This means they have a cheaper cost in terms of memory, CPU and system calls. It also provides scalable I/O which is non-blocking. For the 2nd Sprint for CSE312's Project, Eventlet gave us the flexibility to use it from the Python interpreter which is applied only in small portion of our whole project. That means we didn't have to implement multithreading and concurrency in every class and only in the ones that needed it. We have never used it explicitly that means we have never imported the eventlet library in our code but flask_socketIO uses it implicitly which makes running the code way easier for our social media website. This technology, for our project, enables us to use websockets. In our project, the __init__.py imports os and SocketIO which lets us use multithreading implicitly and then we make use of a usual WSGI app which runs on Python and utilizes asynchronous operations. Then we establish a usual port and bind our WSGI application to it and run it on our browsers.

As far as licensing goes, the Eventlet Networking Library comes under the MIT license. According to the official documentation about Eventlet the SPDX: Short Identifier is issued by MIT and it means that we can copy this software and use it without restriction including distributing and sublicensing as long as we cite them and give them credit.

External Links and Documentation Sources:

1)Documentation on Eventlet→ https://eventlet.net/

2)How we integrated eventlet with our socket_io →

https://flask-socketio.readthedocs.io/en/latest/

3)We used some references from here to make our app run →

https://python-socketio.readthedocs.io/en/latest/server.html