CSE312 TCP connections Report

Web Framework: Flask / Python

General Information & Licensing

Code Repository	https://github.com/pallets/flask
License Type	rst
License Description	- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. - Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. - Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.
License Restrictions	THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Magic ★★ ° ˙ ˚ ☽ ° ⌒ ☄ ° ˚ ★ ⩘ ✦ ៚

- CSE312_GroupProject-/Server/auth.py (Line 72 - 73)
- Link:
  https://github.com/XuyangLi-12088/CSE312_GroupProject-/blob/master/Server/auth.py

```python
if __name__ == '__main__':

    app.run(host = "0.0.0.0", port = 8080, debug = True)
```

- App.run called "run" function in flask/app.py (Line 1067)
- Link: https://github.com/pallets/flask/blob/main/src/flask/app.py
  - Pass "host", "port", "debug" values into the "run" function
  - Check value of "host", "port", and "debug"
  - If no "host" or no "port", set to default value
    - Host: "127.0.0.1"; Port: "5000"
  - Pass the value of "host" and "port" into run_simple() function in werkzeug/serving.py (Line 936)
- In "run_simple()" function (Line 936)
  - Call prepare_socket() function on the host and port (Line 882)
    - Remove the existing socket file
    - Catch connection issues and show them
  - Call make_server() function on the host and port (Line 828)
    - Create a server base on the host and port
  - Check if the server is running as a subprocess or not
  - Check if use_reloader == True
    - Call serve_forever() function
      - Handle one request at a time until shutdown