CS/COE 1520
www.cs.pitt.edu/~nlf4/cs1520/
Server-side scripting with Flask
Flask

- A micro web framework written in Python
- First release was in 2010
  - Current version (1.0.2) was released in May 2018
- Currently powers LinkedIn and Pinterest
from flask import Flask
app = Flask(__name__)

@app.route("/")
def hello():
    return "Hello World!"

if __name__ == "__main__":
    app.run()
Cookies

- Small pieces of data authored by an HTTP server and stored on the client's machine
  - Well, that was the original intent, but also editable from JS
    - This was used as a hacky way to implement client side storage before HTML
    - Do we want clients to be able to edit cookies authored by our site?
Flask sessions

- Allows access to cookie data in such a way that if the cookie is changed by the user, Flask will see this disregard the session data
  - Does this by establishing a secret key in the Flask app
    - Only someone who knows the secret can modify the session data
    - Note: anyone can read the data, sessions just protect from unauthorized modification
Model-View-Controller (High level)
MVC (Model-View-Controller)

- **Controller**
  - The decorated code you've seen up until this point

- **Model**
  - Handles interaction with stored data
  - We'll use an abstraction off of SQLite as our model

- **View**
  - Represents what is displayed to the user
  - We'll use templates of HTML files that are populated with data from our model
MVC use within Flask