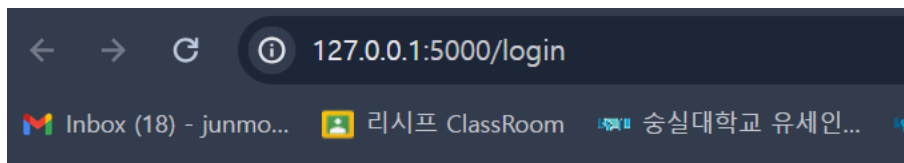


Guess The Number Game

Turning the server on

```
(.venv) PS C:\Users\paran\PycharmProjects\NetworkProgramming\Network_Programming_Hw\4> python app.py
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Restarting with stat
* Debugger is active!
* Debugger PIN: 910-928-071
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Clicking on the blue website (<http://127.0.0.1:5000/>) takes us to <http://127.0.0.1:5000/login>



Login

Username:

Password:

Login

The users are hardcoded in app.py

Can't proceed without the correct username and password

Login

Username:

Password:

Login

! 이 입력란을 작성하세요.

Login

- Invalid credentials

Username:

Password:

Login

Logging into the game with correct username and password

Guess the Number Game

Score: 0

- You have a total of 5 attempts. Guess a number between 1 to 10:

Attempts: 0

Enter your guess:

Submit

Logout

Incorrect Guess

Guess the Number Game

Score: 0

- Hint: You guessed too high!

Attempts: 1

Enter your guess:

Submit

Logout

Guess the Number Game

Score: 0

- Your input needs to be a number between 0 and 10!

Attempts: 1

Enter your guess:

Submit

Logout

Guess the Number Game

Score: 0

- Your input needs to be a number between 0 and 10!

Attempts: 1

Enter your guess:

Submit

Logout

Correct Guess -> Attempts are Reset

Guess the Number Game

Score: 1

- Congratulations, you did it.
- You have a total of 5 attempts. Guess a number between 1 to 10:

Attempts: 0

Enter your guess:

Logout -> Back to login page

Login

Username:

Password:

Re-login with user1 -> Score is in touch with user1's game info from DB

Guess the Number Game

Score: 1

- You have a total of 5 attempts. Guess a number between 1 to 10:

Attempts: 0

Enter your guess:

server updates log with interactions

```
(.venv) PS C:\Users\paran\PycharmProjects\NetworkProgramming\Network_Programming_Hw\4> python app.py
* Serving Flask app 'app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Restarting with stat
* Debugger is active!
* Debugger PIN: 910-928-071
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [01/Jun/2024 23:53:05] "GET / HTTP/1.1" 302 -
127.0.0.1 - - [01/Jun/2024 23:53:05] "GET /login HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:53:18] "POST /login HTTP/1.1" 302 -
127.0.0.1 - - [01/Jun/2024 23:53:18] "GET /game HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:53:37] "POST /game HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:54:05] "POST /game HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:54:21] "POST /game HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:54:44] "POST /game HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:54:49] "POST /game HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:55:49] "POST /logout HTTP/1.1" 302 -
127.0.0.1 - - [01/Jun/2024 23:55:49] "GET /login HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:55:54] "POST /login HTTP/1.1" 200 -
127.0.0.1 - - [01/Jun/2024 23:55:57] "POST /login HTTP/1.1" 302 -
127.0.0.1 - - [01/Jun/2024 23:55:57] "GET /game HTTP/1.1" 200 -
```

Wiki Scraper

Invalid Request and Valid Request

```
(.venv) PS C:\Users\paran\PycharmProjects\NetworkProgramming\Network_Programming_Hw\4> python scraper.py

Wikipedia URL: Hello World
Invalid Wikipedia URL. Please try again.
Wikipedia URL: https://en.wikipedia.org/wiki/Artificial\_intelligence
Title: Artificial intelligence
Description: Artificial intelligence (AI), in its broadest sense, is intelligence exhibited by machines, particularly computer systems. It is a field of research in computer science that develops and studies methods and software that enable machines to perceive their environment and uses learning and intelligence to take actions that maximize their chances of achieving defined goals.[1] Such machines may be called AIs.

(.venv) PS C:\Users\paran\PycharmProjects\NetworkProgramming\Network_Programming_Hw\4> █
```

app.py

- `index()`: Redirects to the login page.
- `login()`: Handles user login by validating credentials and initializing the game.
- `logout()`: Logs out the user by clearing the session.
- `game()`: Handles the game logic, including processing guesses and updating the user's score.

game_db.py

- `init_db()`: Initializes the SQLite database with tables for users and games.
- `get_db_connection()`: Returns a connection to the SQLite database with row factory set to `sqlite3.Row`.

scraper.py

- `get_wikipedia_url()`: Prompts the user to input a Wikipedia URL and validates it.
- `validate_wikipedia_url(url)`: Validates the input URL to ensure it is a valid Wikipedia link.
- `scrape_wikipedia_page(url)`: Scrapes the title and first paragraph from the given Wikipedia page URL.
- `save_to_csv(data)`: Saves the scraped data to a CSV file.