# **NETFLASK**

This is a Python Flask web app that provides basic network troubleshooting and information gathering functionality, including ping test, DNS and IP lookup, traceroute, port scanner, and web scraping.

#### **Modules:**

- Ping Test: Tests the reachability of a host by sending ICMP packets.
- DNS and IP Lookup: Retrieves DNS information and performs a reverse lookup for a given IP address.
- Traceroute: Traces the path that packets take from the server to a specified host.
- Port Scanner: Scans for open ports on a specified host.

#### **Installation**

- 1. Clone this repository to your local machine.
- 2. Create a virtual environment: python -m venv env.
- 3. Activate the virtual environment: **source env/bin/activate** (on Linux/Mac) or **.\env\Scripts\activate** (on Windows).
- 4. Install the required dependencies: pip install -r requirements.txt.
- 5. Start the Flask development server: python app.py.
- 6. Open your web browser and navigate to <a href="http://localhost:5000">http://localhost:5000</a>.

## Usage

The home page of the web app provides links to each of the modules. Simply click on the desired module and follow the on-screen instructions to enter the necessary input.

### Login

The default login credentials are <u>nargis:1234</u>. Please change the password after logging in for the first time.

## **Dependencies**

This project requires the following dependencies:

- Flask==2.1.2
- Jinja2==3.0.2
- MarkupSafe==2.0.1
- Werkzeug==2.0.2
- argparse==1.4.0
- dnspython==2.1.0
- itsdangerous==2.0.1
- nmap==0.6.7
- requests==2.26.0
- six = 1.16.0
- urllib3==1.26.7

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