

Issues

Linking .py scripts to HTML files.

Currently we are researching and trying to solve this issue as it will be a big step for our group project. Once we get this issue working then we will be able to link our camera.py file with our Login and Register HTML files, which will allow us to take photos and store them in a database.

Some current solutions which we have tried and are still currently testing as follows :

1. Using JavaScript to source the directory of the .py file with AJAX.
We have created a HTML button which onClick() should run the script.js file and link to our camera.py file.

```
1  function goPython(){
2      $.ajax({
3          url: "../python_files/camera.py",
4          context: document.body
5      }).done(function() {
6          alert('finished python script');
7      });
8  }
9
```

Research Cloud Deployment / Cloud Database

For our Database we have decided to use Flask-SQLAlchemy. Flask provides us with a lot of documentation on how to use the Database system and requires a pip install.

- Pip install flask-sqlalchemy

Using this Database we are able to create and add users to a table containing a username and image. The username added to the database is unique.

```
>>> User.query.all()
[User('Aaron', 'default.jpg'), User('Arnas', 'default.jpg'), User('Thomas', 'default.jpg')]
>>> User.query.first()
User('Aaron', 'default.jpg')
>>> User.query.filter_by(username='Aaron').all()
[User('Aaron', 'default.jpg')]
>>>
```

The next step is to get our database connected to our front end and have it reacting and pushing the entered username and photo taken.

We have successfully linked our Database with our front end so now users can create an account and save their Username and a Default.jpg .

Each Username is unique so the same name cannot be added twice to the database making it more accurate and secure to who it detects.

Below is an attempt at creating the same username twice :

sqlalchemy.exc.IntegrityError

```
sqlalchemy.exc.IntegrityError: (sqlite3.IntegrityError) UNIQUE constraint failed: user.username
[SQL: INSERT INTO user (username, image) VALUES (?, ?)]
[parameters: ('aaron', 'default.jpg')]
(Background on this error at: http://sqlalche.me/e/gkpj)
```

Deploy .py files through a Server