

DRAW! Web application

CS50X final project
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Project description

- Web application for drawing on a canvas
- Library implemented as a server database for saving drawings info
- Back-end programmed using the Flask framework
- Front-end with Bootstrap framework
- Database implemented with SQLite and connected to server using SQLAlchemy framework
- User login and register feature to keep track of personal drawings
- Application hosted on heroku: <https://draw-webapp.herokuapp.com/>

Programing languages

Languages

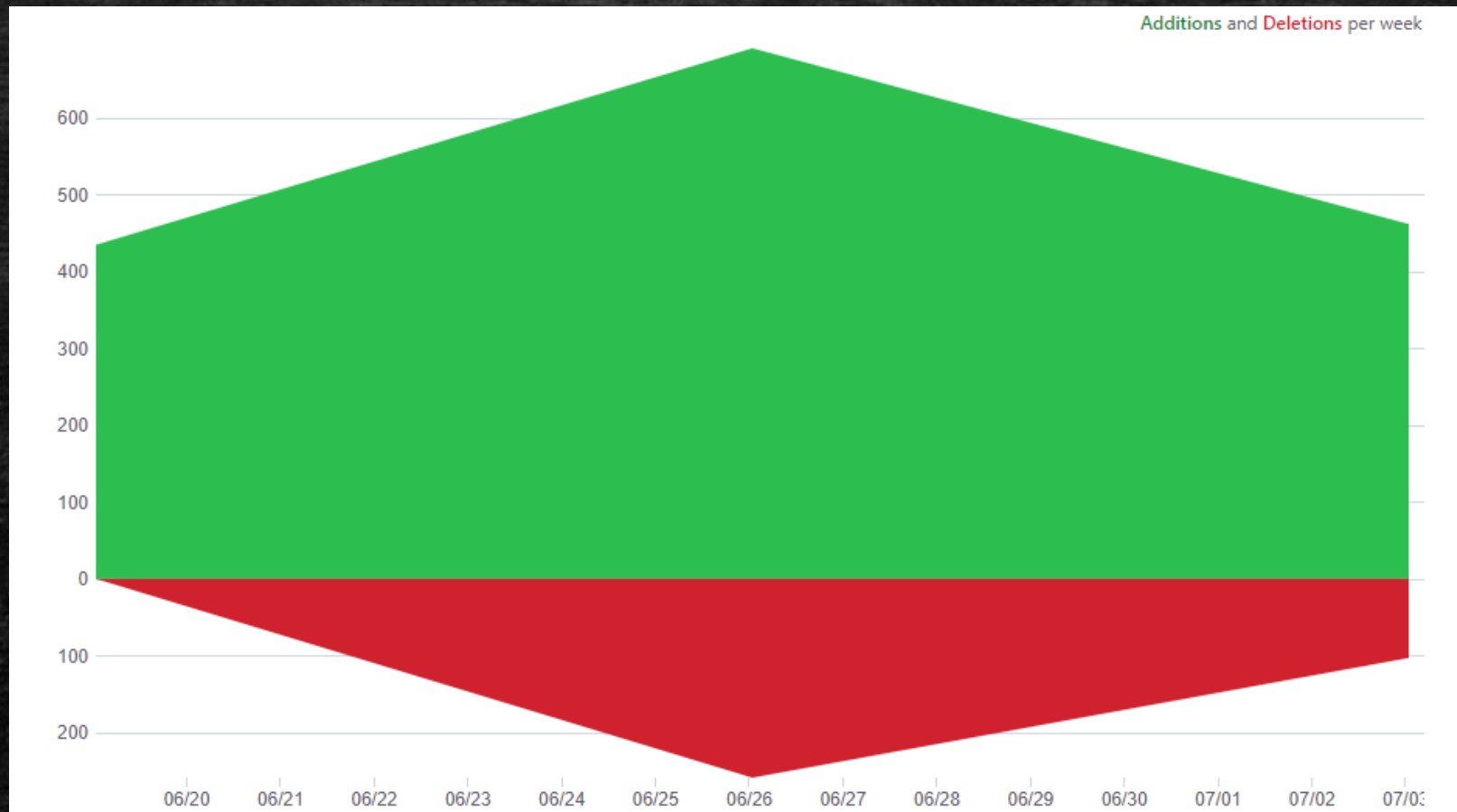


- HTML 51.0%
- Python 33.4%
- JavaScript 14.1%
- CSS 1.4%
- Procfile 0.1%

Project challenges

- Making the database functional
 - Solved by consulting thoroughly the online documentation of SQLAlchemy: <https://docs.sqlalchemy.org/en/14/index.html>
- Save the canvas from the client side to the server
 - Solved by converting canvas to blob then posting form data with a XMLHttpRequest
- Migrating from local server to online host with heroku
 - Solved by consulting thoroughly Heroku's online documentation
- Of course in addition to documentation online forums such as "Stack Overflow "were extensively used to solve challenges

Quantity of work



Files structure

```
draw_webapp[main]23:39$ tree -c
```

```
├── LICENSE
├── helpers.py
├── templates
│   ├── apology.html
│   ├── login.html
│   ├── register.html
│   ├── library.html
│   ├── layout.html
│   ├── index.html
│   └── draw.html
├── static
│   ├── favicon.ico
│   ├── styles.css
│   ├── draw.js
│   └── images
│       └── 20220703-002752.jpeg
├── __pycache__
│   ├── helpers.cpython-310.pyc
│   └── app.cpython-310.pyc
└── draw.db
```

```
├── flask_session
│   ├── 965cb498e23282eb74a2866f8247c740
│   ├── aa94057c48fb317f4695b90736fa36ed
│   ├── b9e6ae55b5129483d34ea82be62ef79f
│   ├── 4ee2299ddd78671f41f62646b7ff0d8f
│   ├── dc40a4082fad6e6eed4016648459696b
│   ├── 5bcd56d3fe4430be8fcced03b74f964b
│   ├── eeef8f8375f692791665e79a2a8f3c0f
│   ├── 2a64a7bd94112247fc35be57c63c13f6
│   ├── 2029240f6d1128be89ddc32729463129
│   └── d93fb88bc95266054291b84eb89922fa
├── Procfile
├── requirements.txt
├── Pipfile
├── Pipfile.lock
├── app.py
├── images
│   ├── logo.png
│   └── name.PNG
└── README.md
```


- Notable files
 - app.py
 - draw.db
 - html templates
 - Draw.js

Demo

DRAW ! [Draw](#) [Library](#)

Log Out

Your drawings:

N°	Thumbnail	Date&Time
18		20220703-002752

An [OpenSource](#) web application developed by [Hamza Tijani](#)