1. Dependencies

SQLite – database

Docker

Bash

Python

Git

Libraries:

argon2-cffi==21.3.0  
argon2-cffi-bindings==21.2.0  
asgiref==3.5.2  
certifi==2022.6.15  
cffi==1.15.0  
charset-normalizer==2.0.12  
click==8.1.3  
colorama==0.4.5  
cryptography==37.0.2  
defusedxml==0.7.1  
dj-database-url==0.5.0  
Django==4.0.4  
django-allauth==0.51.0  
django-crispy-forms==1.14.0  
django-heroku==0.3.1  
flake8==3.9.0  
Flask==2.1.2  
gunicorn==20.1.0  
idna==3.3  
importlib-metadata==4.11.4  
itsdangerous==2.1.2  
Jinja2==3.1.2  
MarkupSafe==2.1.1  
mccabe==0.6.1  
oauthlib==3.2.0  
php-wsgi==0.0.12  
Pillow==8.0.0  
psycopg2==2.9.3  
pycodestyle==2.7.0  
pycparser==2.21  
pyflakes==2.3.1  
PyJWT==2.4.0  
python3-openid==3.2.0  
pytz==2020.1  
PyYAML==5.1  
requests==2.28.0  
requests-oauthlib==1.3.1  
sqlparse==0.3.1  
urllib3==1.26.9  
Werkzeug==2.1.2  
whitenoise==6.2.0  
zipp==3.8.0

1. Entry points

**Login and registration**

/ - home, params: user, is\_authenticated

/register – register, params: username, password

/login – login from \_\_init\_\_ at Django.contrib.auth, params: username, password

**XSS**

/xss – xss, params: user, is\_authenticated

/xssL – xss\_lab, params: user, is\_authenticated; company name,

/xssL1 – xss\_lab, params: user, is\_authenticated; company name,

**SQL**

/sql – sql, params: user, is\_authenticated

/sql\_lab – sql\_lab, params: user, password, is\_authenticated

/sql\_lab1 – sql\_lab, params: user, password, is\_authenticated

1. Exit points

Third party authentication:

/accounts/google/login

**Login and registration**

/ - home, returns home.html or redirects to login view

/register – saving new user, redirect to login view OR render register.html

/login – login.html

**XSS**

/xss – xss.html or redirects to login view

/xssL – xss\_lab.html or redirects to login view

**SQL**

/sql – sql.html or redirects to login view

/sql\_lab – sql\_lab.html or redirects to login view

1. Resources

User credentials – login and password

DB-transactions

DFD