National College of Ireland

Configuration Manual

MSc Research Project
MSc Cybersecurity

Shashank Nagaraj
Student ID: X21202834

School of Computing
National College of Ireland

Supervisor: Michael Prior

National College of Ireland

MSc Project Submission Sheet

School of Computing

Student Name:	Shashank Nagaraj		
Student ID:	x21202834		
Programme:	MSc Cybersecurity	**Year:**	2023
Module:	MSc Research Project		
Lecturer:	Michael Prior		
Submission Due Date:	14/08/2023		
Project Title:	Enhancing the security of cloud data through the use of biometrics and encryption technology		
Word Count: 600	**Page Count:** 5		

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.
ALL internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

Signature: Shashank Nagaraj

Date: 14/02/2023

PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST

Attach a completed copy of this sheet to each project (including multiple copies)	□
Attach a Moodle submission receipt of the online project submission, to each project (including multiple copies).	□
You must ensure that you retain a HARD COPY of the project, both for your own reference and in case a project is lost or mislaid. It is not sufficient to keep a copy on computer.	□

Assignments that are submitted to the Programme Coordinator Office must be placed into the assignment box located outside the office.

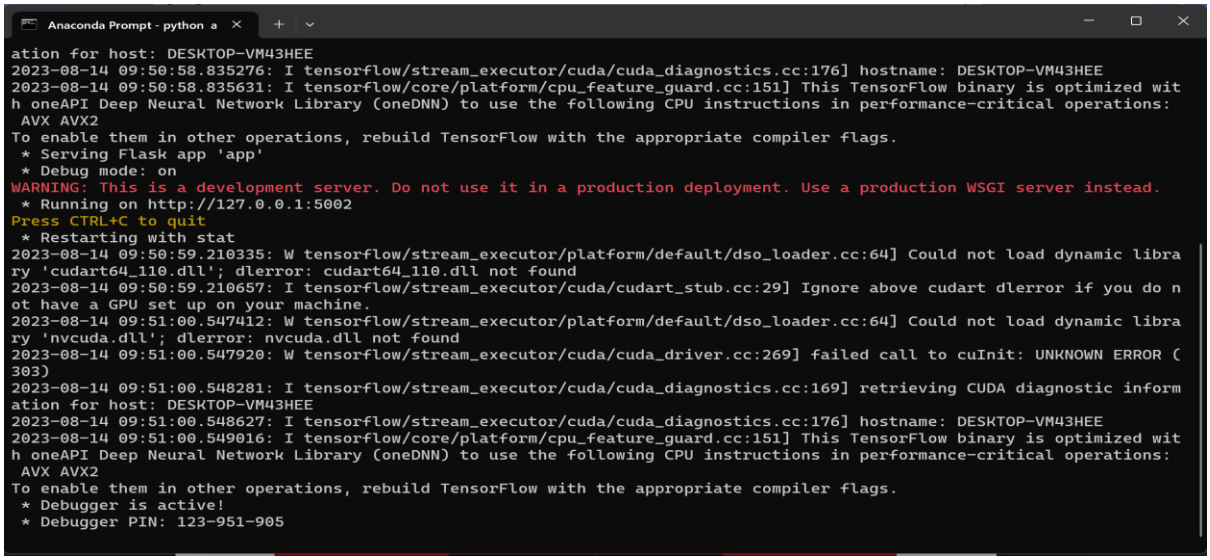
Office Use Only	
Signature:	
Date:	
Penalty Applied (if applicable):	

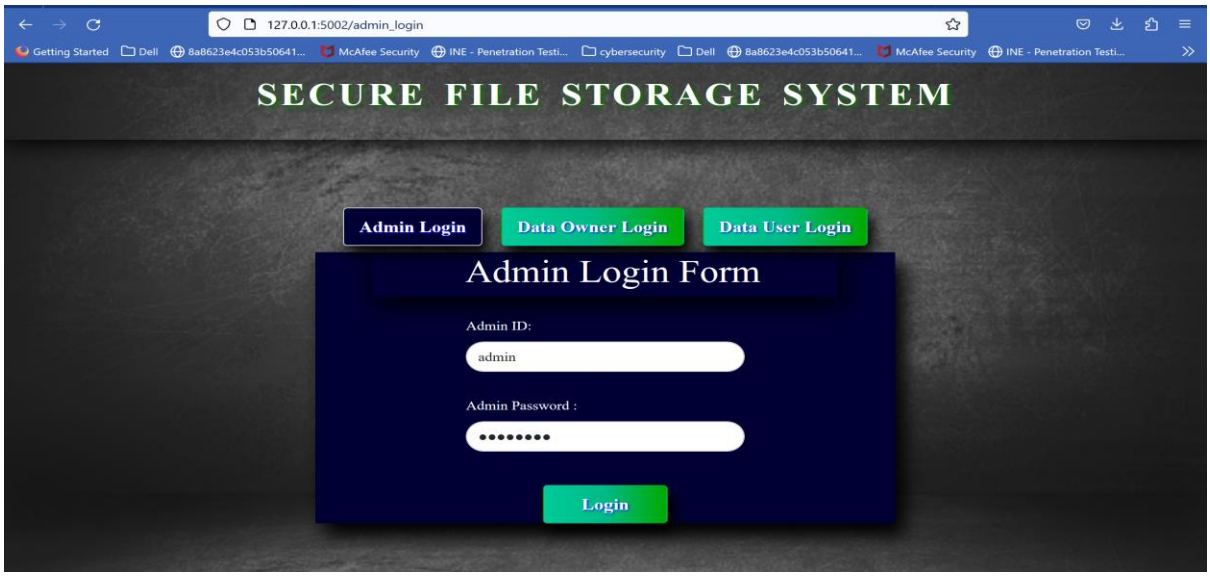
Configuration Manual

Shashank Nagaraj
Student ID: x21202834

1 Running the web application

To begin we start the server on Anaconda Prompt and open the given URL http://127.0.0.1:5002 which redirects to the home page.

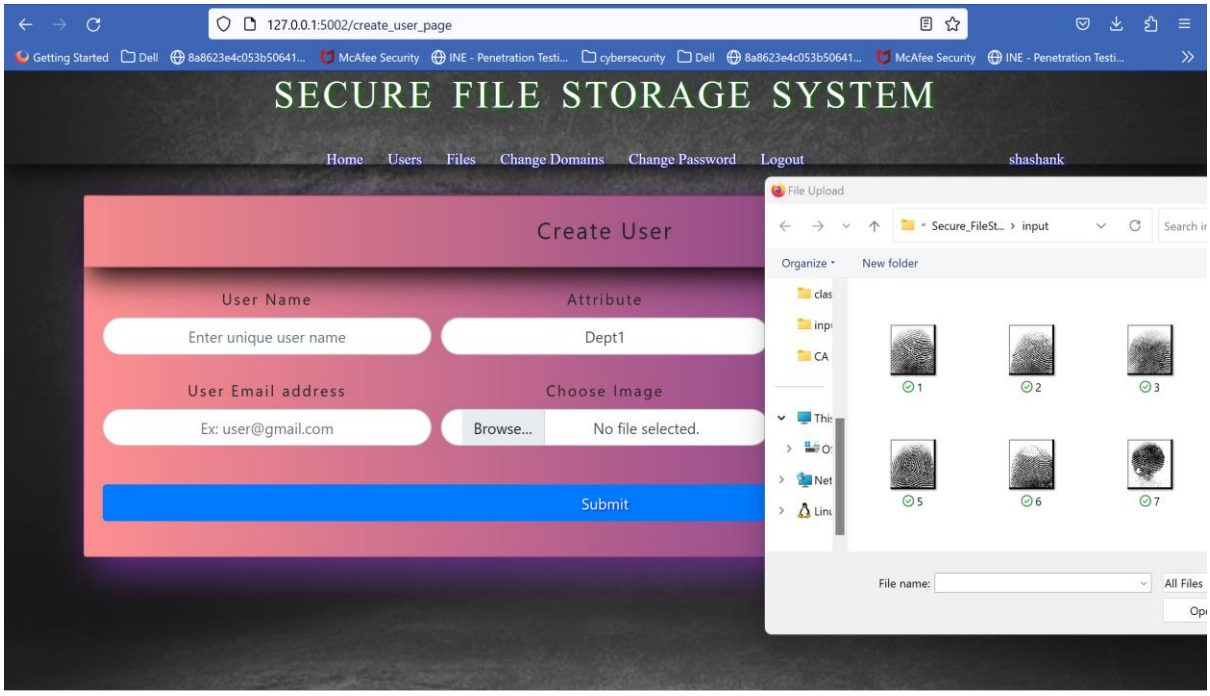




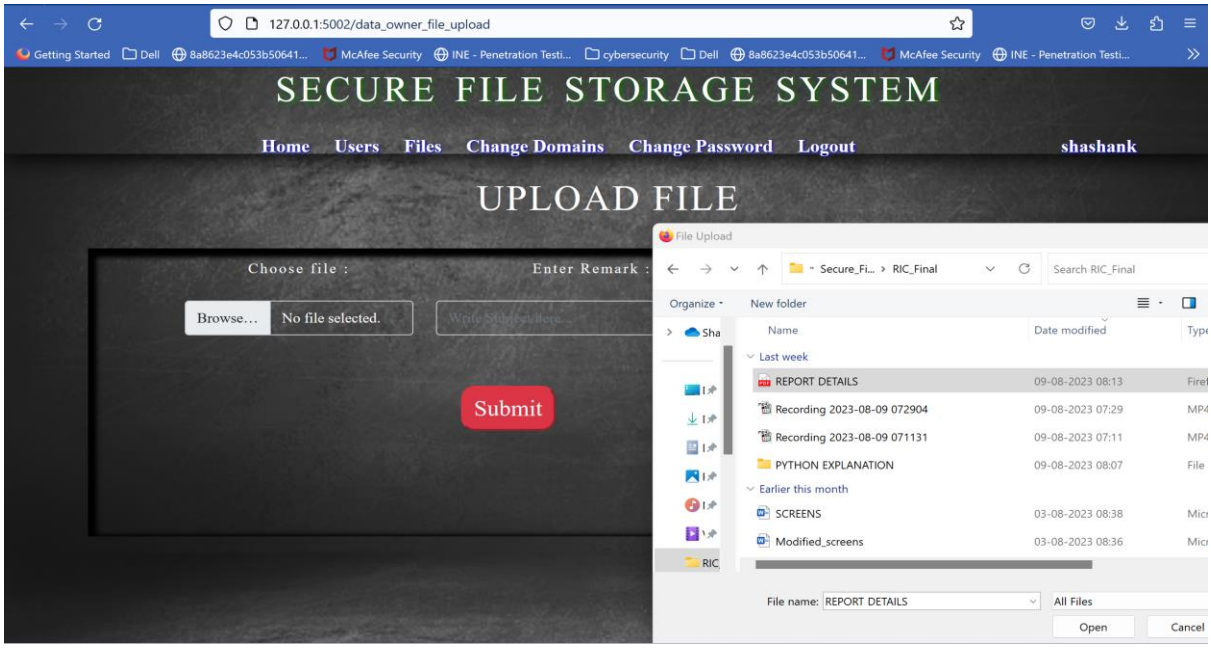
The above figure shows the home page/ login pages for Admin, Data Owner and Data User Login.

The Admin can create Data Owners, view all the data Users created by the Data owner and view the file details uploaded by the Data owner for different Domains for different users to access.

Once the Data Owners are created, they can login to their profile to add users and upload files to the cloud storage for the users to access.

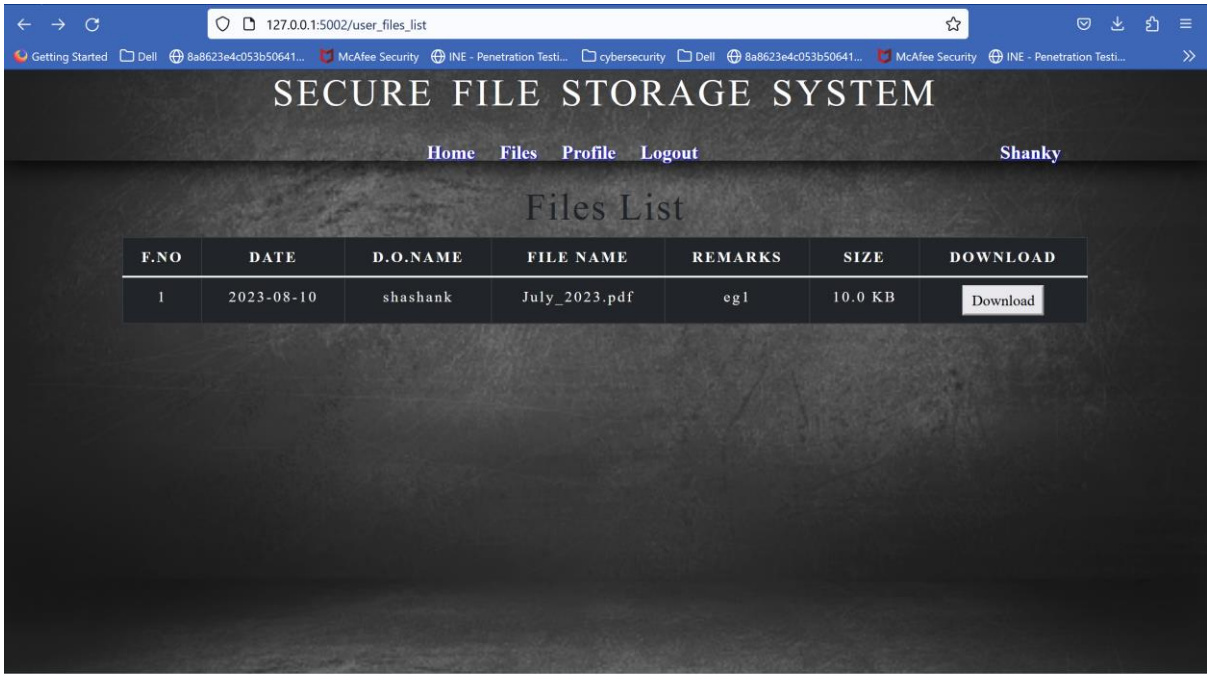


The figure shows the creation of data users by the data owner giving the appropriate fingerprint image to store in the cloud storage as an encrypted file for the usser to login



The Data owner uploads files to the cloud for the Users to access

User login using the appropriate user email and fingerprint to login. The finger print is verified by the trained model, if the fingerprint is similar the accec would be given.



The user can download the files uploaded by the data owner for the domain user can access. Different users could have different domain access.

2 Hardware Requirements

- System Processor: core i5
- ROM: 250 GB and
- RAM: 4 GB and
  Any desktop / Laptop system with above configuration or higher level.

3 Software Requirements

- Operating system: Windows 8 /10/11 64Bit
- Coding Language: Python
- Framework: Flask
- Language: HTML, CSS, JS
- Tools: Anaconda and MySQL workbench
- Storage: Drive HQ and MySQL
- IDE: Jupyter Notebook and visual code

4 References

Anaconda. (2023, july 26). Retrieved from Anaconda: https://www.anaconda.com/
DriveHQ. (2023, june 28). Retrieved from DriveHQ: https://www.drivehq.com/
flask. (2023, july 28). Retrieved from Flask: https://flask.palletsprojects.com/en/2.3.x/
juypter notebook. (2023). Retrieved from juypter: https://jupyter.org/
mysql. (2023, july 26). Retrieved from mysql: https://www.mysql.com/products/workbench/
python. (2023, july 24). Retrieved from python: https://www.python.org/