Department of Electrical and Computer Engineering

Project Plan

Course: CSE299 - Junior Design
Faculty: Dr. Nabeel Mohammed

Group Members:
Shamim Ferdous - 2013080642
Salman Yousuf - 2012927642

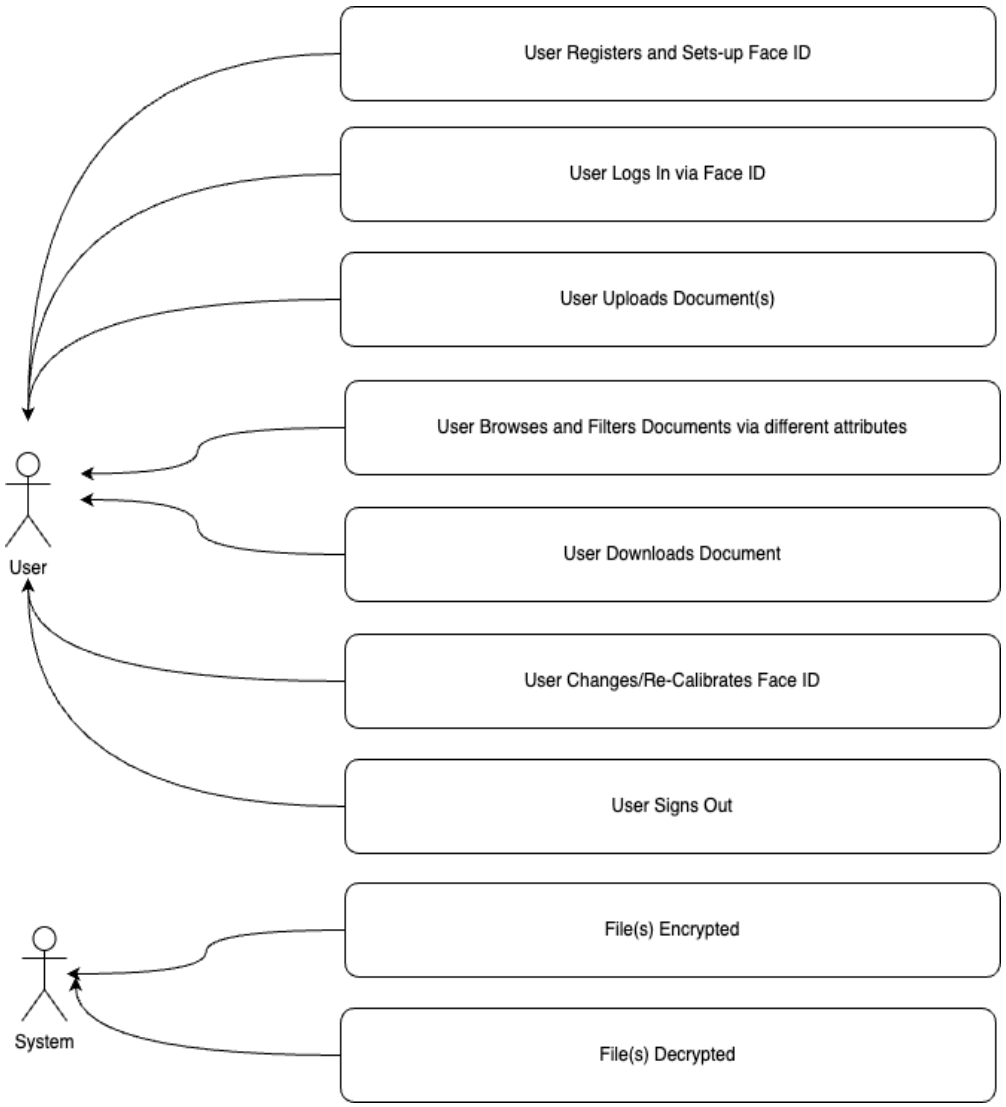
Project Description:

The project is a cloud-based storage service that lets users store files online and browse them. Users can download the files anytime from the cloud storage as well. For maximum privacy, all files are automatically encrypted and decrypted respectively during the upload and download operation. While registering, they are required to set up a face id that is required to sign in and download files.

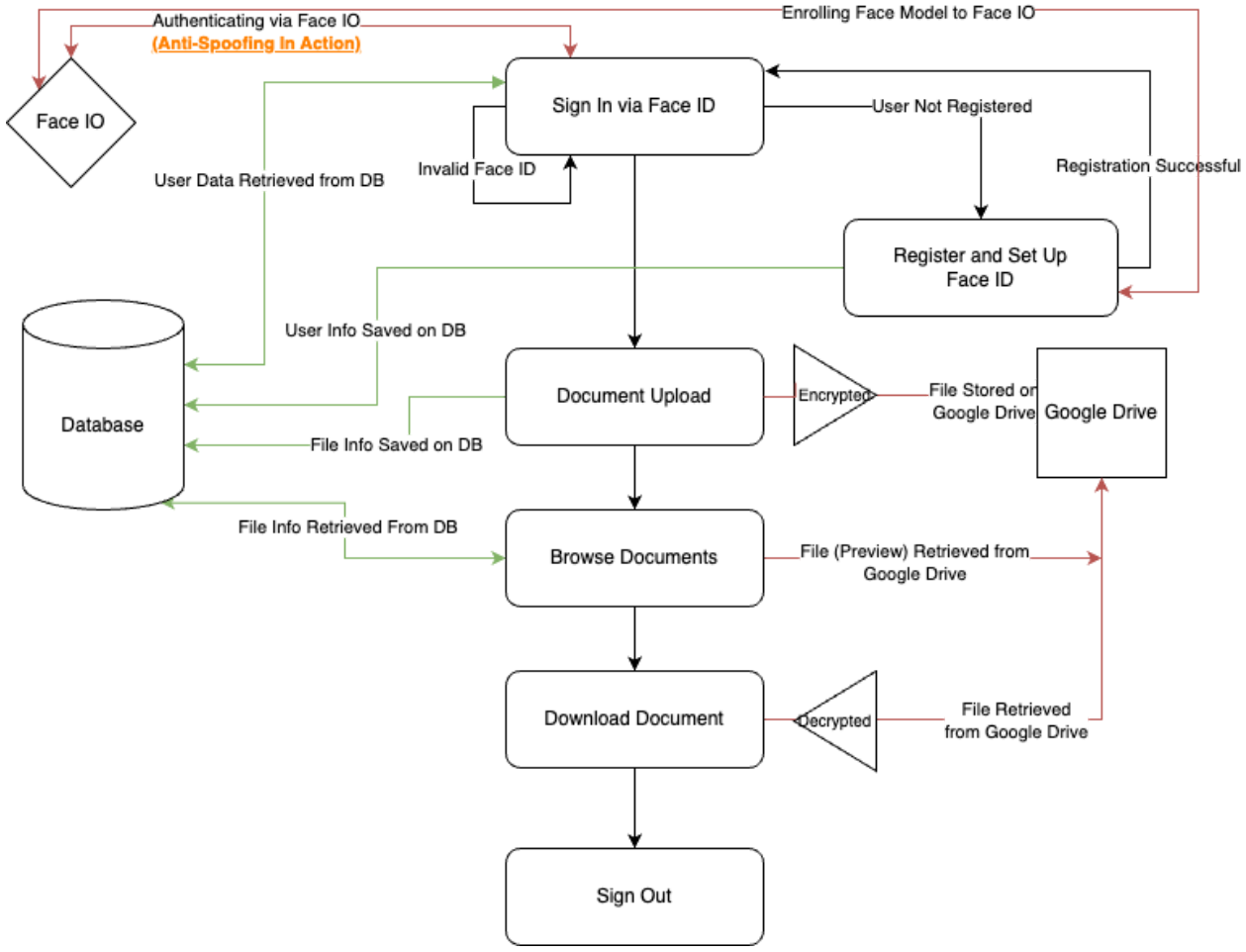
The project will have a facial authentication mechanism that is cross-browser compatible. It's **virtually impossible to spoof design** also comes with **AES-encrypted facial indexes** for maximum privacy and data protection.

The application will use Python in the backend with PostgreSQL as the database layer. In the frontend, ReactJS will be used along with SASS for CSS pre-processing.
For storage, the application will use Google Drive SDK. For the facial authentication layer, FACEIO will be integrated.

Use Case Diagram:



Process Flow Diagram:



Implementation plan for the next 5 weeks:

Week 1:

- Initiate Frontend Repository
- Complete App Layout Component
- Complete Register View
- Integrate Face IO client-side SDK
- Complete Sign-In View

Week 2:

- Complete Landing/Home View
- Complete File Upload Component

- Complete Filtering Component

Week 3:

- Initiate Backend Repository
- Complete Auth module with Face IO server-side integration
- Complete File Module
- Integrate Google Drive

Week 4:

- Complete Backend Testing
- Integrate auth endpoints in frontend
- Integrate upload file endpoint in frontend
- Integrate browse and file download endpoints in frontend

Week 5:

- Make the frontend responsive
- Fix any UI/Backend-related issues
- Do end-to-end testing
- Deploy