End of Year Project Cloud-Based Drive Application with Face Movement authentication

Sami MASMOUDI Mohamed Aziz KETATA Description :

The Cloud-Based Drive Application is a comprehensive and user-centric project aimed at providing a secure and intuitive cloud storage solution.

Users can seamlessly manage their files, including uploading, organizing, viewing, downloading, and deleting, through a user-friendly interface. Security is prioritized through multi-factor authentication, combining traditional username/password validation with facial movement for robust identity verification. Users have the flexibility to customize account settings, managing passwords, personal information, and security preferences.

To create a more user-friednly authentication and verification interface, we will use OpenCV to register and verify user facial details. This will allow for an extra layer of protection and only allow data manipulation with the physical presence of the user. The captured facial landmarks during authentication movements are compared with the reference landmarks recorded during sign up.

The comparison can be done using methods involving machine learning.

Administrators: overseeing all user accounts and taking necessary actions, such as deactivation or deletion, when required. The system offers administrators a global view of all stored files, facilitating efficient management and the ability to restore deleted files.

Configuration options empower administrators to optimize system settings and managing security parameters.