

Overview:

You are tasked with building a secure file sharing application using HTML, JavaScript, PHP, Mysql and a REST API. This application should allow users to upload, share, and manage files securely. The application should have the following features:

1. User registration and login.
2. File uploading and storage.
3. Access control: Users can specify who can view or download their files, and they can also view files uploaded by others that they have access to based on their roles or permissions.
4. Secure authentication and authorization.
5. User profile management.

Requirements:**Front-end (HTML, JavaScript):**

1. Create an HTML interface for user registration, login, file management and user profile management.
2. Use JavaScript to implement a file upload interface with progress indicators.
3. Implement access control settings to allow users to specify who can access their files and view files that are accessible to them based on their roles or permissions.
4. Display a list of uploaded files (with info like file name and the user who uploaded it), including those uploaded by other users but accessible to the current user based on their roles.

Back-end (PHP):

1. Develop a PHP server to handle user registration, authentication, and authorization.
2. Create a RESTful API for uploading, managing, and sharing files.
3. Implement secure file storage and access control to prevent unauthorized access.
4. Store user profiles, file metadata, and access permissions in a database.
5. Ensure proper data validation.

Hints:

- Implement role-based access control to manage user permissions effectively.
- Securely store user passwords using modern hashing techniques.
- Utilize encryption and/or authentication mechanisms to protect file uploads and file view/downloads.

Evaluation:

Candidates should submit both the front-end (HTML, CSS, JS) and back-end (PHP) code for review. Additionally, please include a **README.md** file with the following content:

- **Overview:** Provide an overview of the application's purpose and key features.

- **Setup Instructions:** Include step-by-step instructions for setting up and running the application locally. Mention any dependencies or system requirements.
- **Additional Information:** Include any additional information or explanations that you think would be relevant and helpful for someone reviewing your code.

This **README.md** is an important component of your submission and will help us better understand your work. Please ensure that it is clear and informative.