**User Guide for the Decentralized Document Management System (DDMS)**

This section provides a step-by-step guide on how to operate the Decentralized Document Management System (DDMS) for logging in, uploading documents, and interacting with the system.

**1. Logging into the System**

**Step 1: Access the Login Page**

* Open your web browser and navigate to the DDMS login page.

**Step 2: Authenticate via CATS System**

* Enter your university credentials (username and password) to authenticate via the CATS system.
  + The system will verify your credentials with the university’s authentication service.

**Step 3: Dashboard Redirection**

* After successful authentication, you will be redirected to your personal Dashboard where you can manage documents and other settings.

**2. Uploading Documents**

**Step 1: Navigate to the Document Upload Section**

* On the Dashboard, locate and click the **Upload** button to begin adding a new document.

**Step 2: Select the Document to Upload**

* A file dialog will appear. Select the document you want to upload from your local machine.
  + Supported file types: PDF, DOCX, TXT, etc.

**Step 3: Check for Existing Document**

* Before proceeding with the upload, the system will automatically check if the document already exists in the system.
  + If the document already exists (based on its unique hash or identifier), an alert will notify you that the document is already uploaded and cannot be uploaded again.

**Step 4: Upload the Document**

* If the document does not already exist, click the **Upload** button to begin uploading the document.
  + The document will be stored securely on the IPFS (InterPlanetary File System) network, ensuring decentralized storage.

**3. Downloading Documents**

**Step 1: Locate the Document**

* On your Dashboard, browse through the list of available documents. You can filter documents by categories like author or title to make it easier to find what you need.

**Step 2: Initiate the Download**

* Once you find the document you wish to download, click the **Download** button next to the document name.

**Step 3: Document Retrieval**

* The document will be retrieved from the IPFS network and downloaded to your local machine.

**4. Final Notes**

* **Authentication**: Authentication is securely handled via the CATS system using your university credentials.
* **Decentralized Storage**: All documents are stored securely on the IPFS network, ensuring decentralized and persistent storage.
* **Duplicate Document Prevention**: The system ensures that documents already existing in the system cannot be uploaded again, maintaining data integrity and preventing duplicates.

By following these steps, you can easily log into the DDMS, upload and manage documents, and interact with the decentralized storage system, ensuring both security and transparency.