**🎥 ByteSphere A Cloud File Storage Web App – Project Explanation Script**

**🔹 Introduction**

Hi everyone, Myself Mayur Kamble today I’ll be presenting my cloud file storage web app. This project was assigned to me as part of my internship and helped me explore multiple aspects of full-stack web development.

**🔹 Technologies Used**

**Frontend:**

* I used **Next.js** for the frontend, as it supports both client and server components, making it highly efficient.
* **Tailwind CSS** and **shadcn** were used for styling and UI components to create a responsive and modern interface.

**Backend & Auth:**

* I used **Appwrite** for handling authentication, file storage, database, and sessions.
* The Appwrite SDK was used to interact with the backend – no REST or GraphQL setup required.

**🔹 App Structure**

* **Server & Client Components** are used together inside the same folders.
* Sessions are maintained using **cookies**, automatically handled by Appwrite.
* The app includes two main **collections** in the Appwrite database:
  + users
  + files
* Files are uploaded using **React Dropzone**, and each file is linked to the uploading user using their userId.

**🔹 Key Features**

* **Multiple file uploads** supported, with a size limit of **100 MB** per file.
* **File organization** by type – PDFs go to /documents, images to /images, etc.
* **File sharing** works by entering a valid registered user’s email.
* Users can:
  + **Upload**
  + **Download**
  + **Delete** files
* Features like **search, filter, and sorting** are built-in.
* The UI is fully **mobile responsive**.
* Authentication flow is done through **OTP login and signup**.
* The app was deployed on **Vercel**.

**🔹 User Flow**

1. The user signs up with their name and email.
2. An OTP is sent to their email.
3. After verification, they are redirected to the dashboard.
4. The dashboard includes an **upload button**.
5. After selecting a file, a toast notification appears confirming the upload.
6. Files appear under their respective category routes.

**🔹 Challenges & Learnings**

* The toughest part was the **file upload feature**, but I resolved it through documentation and video tutorials.
* I tested the app thoroughly in my **local environment** before deploying.
* This project helped me learn **Next.js**, **Appwrite**, and how to handle files in a real-world app.

**🔹 Future Plans**

* I plan to improve and expand this app further, though specific features are yet to be decided.
* There are currently no **CI/CD** pipelines or **admin roles**, and file access permissions are something I’d like to improve in future updates.

**🔹 Final Thoughts**

This is the first major app I’ve built that’s fully functional, and I’m very proud of it. While I haven’t decided whether to make it **open-source or commercial**, it’s been a huge learning experience.