Project Description

The goal of the project is to implement a simplified Dropbox like Product, where users can upload and download files through a Web Application.

Constraints

- The Backend is supported via RESTful APIs.
- Use persistent storage for data and metadata.
- Consume the APIs via a Web-Application built using Frontend frameworks such as React.

Features

Backend should support following APIs.

- Upload file.
- Get list of all files
- Download file.

Frontend should consume above APIs and provide a user experience.

- User Home page where all the User files are listed.
    - Can add restrictions on types of files that will be supported for uploads.
- A button / experience using which User can upload new file.
- Click on a file to view the file contents in a new page.
    - Can restrict to well-known file formats – txt, jpg, png, json etc.

Technologies

Backend

- Choose any language and framework that you are comfortable with (Java - Springboot, Python – Django / Fast API, NodeJS – Express)
- Use database such as SQLLite, Mysql, Postgres or MongoDB.
- You may use local file system for storing files. Optionally you can upload files to Cloud – AWS S3 buckets or Azure Storage accounts' blob containers.

Frontend

- Use frontend framework / libraries such as React / NextJS / AngularJS / vue.js etc.
- Use any CSS helper libraries such as Material UI / Tailwind / Chakra / Fluent UI etc.
- State management – Redux / Zustand / React context / Jotai etc.

Important Notes

- Complete the project in 2.5 hours (150 minutes).
- Make sure the APIs are fully functional.
- All DBMS have dockers available. So, prefer using them. Else can be fallback to Memory DB as well.