

Cloud Storage

CSCI 484 - Computer Networks

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Introduction

My project

Cloud Storage Solution

- Store and retrieve files on/from a server
- Manage them through a userfriendly web interface

Requirements

An unauthenticated user must be able to

- Register a new account
- Login to his existing account

An authenticated user must be able to

- Upload files
- Create folders
- View his images/videos/musics/pdf directly from the app
- Download his files

A user, connected or not must not be able to access files belonging to other users

Development

Technologies used

Backend

- NodeJS - Run JavaScript Server side
- Express - Backend web Framework
- Passport - Authentication middleware

Frontend

React - JavaScript library to build UI based on components

Passport.js

Authentication middleware for NodeJS

Support username/password, Facebook, Twitter, Google oauth, ...

Development

Access files

fs module

Built in NodeJS module

Access and modify files and directories in the server's file system

Handle different data types

- Video/Audio: Stream the data
- PDF: Send as base64 (Not optimal for bigger files)
- Others: Send as binary

Conclusion

Objectives fulfilled?

Requirements correctly integrated in final product

How to improve the app?

- Ability to download folders or multiple files as zip
- Ability to drag and drop files in subfolders
- Administrator mode to manage user access

The End

Thank you for your attention!
Do you have any question?