



# Go-Share: A Cloud Based Storage Platform

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## ABSTRACT

As part of this paper, we describe the Go-Share Cloud Storage Platform, which is made by using front-end web technologies like Html, CSS, and React.js for the User Interface, and firebase for the backend and database, allowing users to store their files and folders in the backend.

Go-Share can be used both officially and unofficially, as cloud storage is becoming more popular nowadays. Anywhere in the world, users can upload, download, share, and view their files at any time. Schools and offices can utilize Go-Share for distributing files to thousands of people at once. The only thing that Go-Share needs is a user's email address for authentication for data security on the web. The application also consists of a To-do feature that allows users to enter upcoming events and tasks they need to complete.

**KEYWORDS:** React, Cloud Storage, Firebase, Cloud, JavaScript, Backend

## 1. INTRODUCTION

With COVID 19 sweeping the globe, people across the globe were compelled to stay at home, and people were unable to go out to work, students were unable to go to school, and everyone was forced to go online to carry out their work. Due to everyone being at home, files and folders were unable to be exchanged physically, and computer files instead were shared via pen drives, regardless of whether they were students or office workers.

Go-Share has been upgraded to a cloud-based storage service that can be used to upload, download, share, and view files anytime from anywhere. In addition, it synchronizes data so that duplicate files do not get stored in the cloud. Schools can share assignments, notes, lab files, etc. easily with a large number of students with just a link, and students can also easily upload their assignments and send them to their

teachers, which makes the work so convenient. The ability to share images and videos with friends reduces the problem of children having to copy the content to a secondary device and giving it to their Friends, increasing the risk of computer viruses and misplacing the device, such as a Pen drive. The Go-Share Cloud storage is useful for individuals of every age group since they can empty the space on their mobile phones or PCs and store them in the cloud storage, thus increasing their disk space and thereby improving their security.

## II. FEATURES

Some features of Go-Share are listed as:

**Cloud storage** - users can upload files and folders to the cloud by giving each of them a unique name for the main folder in which they intend to store their data.

**Retrieve/Download** - Users can download files and

folders to their computers and other devices anywhere in the world

**Sharing** - The sharing feature lets users send files and folders to several recipients at the same time using a single link that can be accessed by anyone.

**View Media** - It is not necessary to download any files, images, videos, or documents, as they can be viewed on the website only.

**Search** - The search feature makes it possible to locate previously stored folders.

### III. TECHNOLOGY USED

- **React.JS:** React is a declarative, efficient, and flexible JavaScript library for building user interfaces. It's 'V' in MVC. React.JS is an open-source, component-based front-end library responsible only for the view layer of the application. The declarative view makes your code more predictable and easier to debug.
- **Node.JS:** Node.JS is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.
- **Firebase:** Firebase is a Cloud-hosted, MySQL database that uses a document-model. It can be horizontally scaled while letting you store and synchronize data in real-time among users. This is great for applications that are used across multiple devices such as mobile applications. Firebase is optimized for offline use with strong user-based security that allows for server less based apps as well.

### IV. IMPLEMENTATION

Throughout the project, two major components have been implemented; one is the front end or user interface, and the other is the backend or cloud storage:

- **Frontend** - The project is bootstrapped with Create React App, which takes us to the react website to which we can make changes and it installs node modules and package.json files so that we can edit the website with ease. The node JS project can be run on the local host: 3000 server by using the npm start command. All changes made to the code are immediately reflected by the server and updated as a result.

- **Backend** - The backend of the application is implemented through the import of firebase and the installation of required packages on the pc. The cloud storage is implemented by creating a new project on

firebase through which the application is started. Firebase provides a data URL that can also be used to view the data on the Go-Share site. Additionally, it supports user authentication, which is used on the login page to store the user id and password.

### V. FUTURE SCOPE

- You can create Personal Groups containing various users, and upload files directly to the group.
- Data can be stored in more than one database for easier retrieval and storage at the backend.
- Cloud computing is strongly associated with concepts like the internet of things. It becomes easier for IoT to ensure performance, security, and functionality when data gets stored in the cloud since computing is strongly related to concepts such as the internet of things.
- The best cloud services can be categorized into three types, which are infrastructure as a service, platform as a service, and software as a service; as a result, more schools and colleges will be able to utilize the benefits of cloud computing in the future.
- Cloud storage can be made safer by improving user authentication so that cyber-attacks are prevented and people can trust the service

### CONCLUSION

In conclusion, our project has the capability of storing files and folders that are kept safe and synchronised in real-time in the cloud, and the best part of this is that it can be accessed from any device. Cloud storage with a small amount of space is quite adequate for storing documents. This will benefit both students and teachers quite a bit. Cloud storage costs more, but people buy secondary storage devices for their files and folders, so it's fair. Further optimizations can be done on the website and tonnes of features can be added. The matter which arises is privacy, which can be settled in the coming future so that many people can engage with Go-Share.

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