



Dropbox Search Tool

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Project Background

A tool that will help our client, The Design Gym, search through their digital content

The content is roughly 5,000-10,000 files stored in the company's Dropbox with a very unorganized structure

Looking for a one stop shop integration with slack

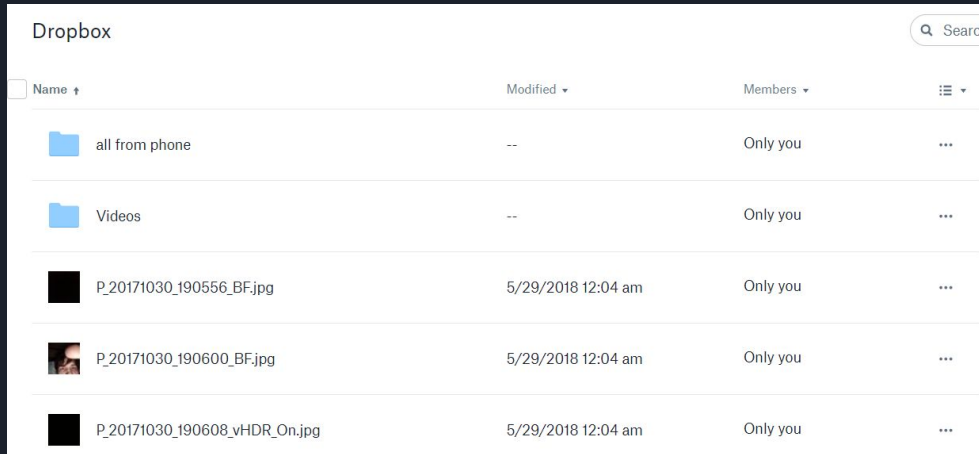
This will bring their efficiency up as they will not waste time scouring through the Dropbox

Allows the user to “chat” with the Slack bot and enter a search query entailing what they are looking for

Dropbox and it's structure

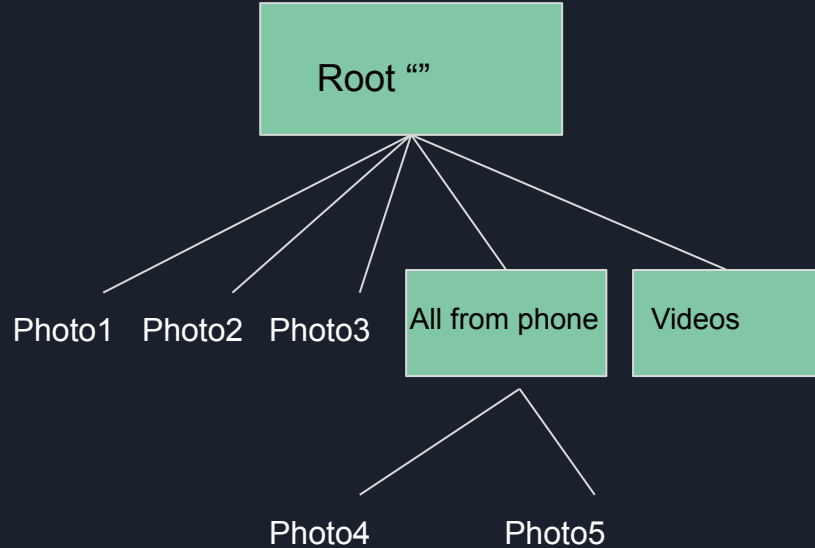
Dropbox:

<https://www.dropbox.com/home>



The screenshot shows the Dropbox web interface. At the top, there's a search bar and a 'Dropbox' label. Below it, a table lists files and folders. The table has columns for 'Name', 'Modified', 'Members', and a menu icon. The first two rows are folders: 'all from phone' and 'Videos'. The next three rows are image files with names starting with 'P_20171030_'. Each row shows the file name, its modification date (5/29/2018 12:04 am), and the member 'Only you'.

Name	Modified	Members	
all from phone	--	Only you	...
Videos	--	Only you	...
P_20171030_190556_BF.jpg	5/29/2018 12:04 am	Only you	...
P_20171030_190600_BF.jpg	5/29/2018 12:04 am	Only you	...
P_20171030_190608_vHDR_On.jpg	5/29/2018 12:04 am	Only you	...





How to Search for files?

<https://www.dropbox.com/help/files-folders/search>

We can search by:

- Keywords or Filename (required)
- Year
- Company

Examples:

- -fn Leadership Skills -y 2018 -c Apple
- -fn Money Management -c IBM -y 2016 2017
2018
- -fn Employment Options -y 2013 -c Microsoft
Cisco

Demonstration of Iteration 1

Meeting Details

Allison was assigned the role of minute recorder

We received a lot of great feedback from our clients during our meeting.

Liked how you can search for files without the year or company as some of their files don't have those attributes

Enjoyed the efficiency and simplicity. Added that sometimes less is better.

More features could raise the barrier to entry

Meeting Details

Some questions that were brought up by the client were about the ordering of the returned list of files

How will it prioritize the files?

Will it bring the files with the keyword in the title up first or will it bring the files that have the key word written in the body most frequently up first?

We decided that potentially assigning a certain priority to the file title but taking into account if a file contains the keyword a significant amount it could be reordered.

Overall the meeting went well, our communication last semester was not as frequent so they were happy to hear about all the progress we have made.

The Team

Work Breakdown

Devon worked on the Slack bot functionality over winter break.

Everyone was caught up with the environment and code, and look over refactoring what was on Github.

Allison worked on the message parser feature.

Ryan worked on converting the code into an object oriented design, as well as the search feature functionality.

Communication with our client has proven a little difficult as they are very busy.

Future Iterations

- Implement full text search so that files can be searched for keywords in their content and not just their titles. Supported file types will include PDF, Word, Excel, and Powerpoint.
- Change how we weight searches so that complete word matches are more strongly weighted than partial word matches. Also weighting filename and content matches.
- Working with our client to simplify the interface to make the program as accessible as possible while still being powerful enough to do its job.
- Sending first time users a message instructing them on how to use the bot the first time they connect, and a help function.
- Adding more optional search parameters, such as date-added, version number, and file type, and allowing the user to search without “-fn” parameter
- Allowing the system to receive multiple search queries at the same time and return all of them to the correct user.