

Cloud Storage



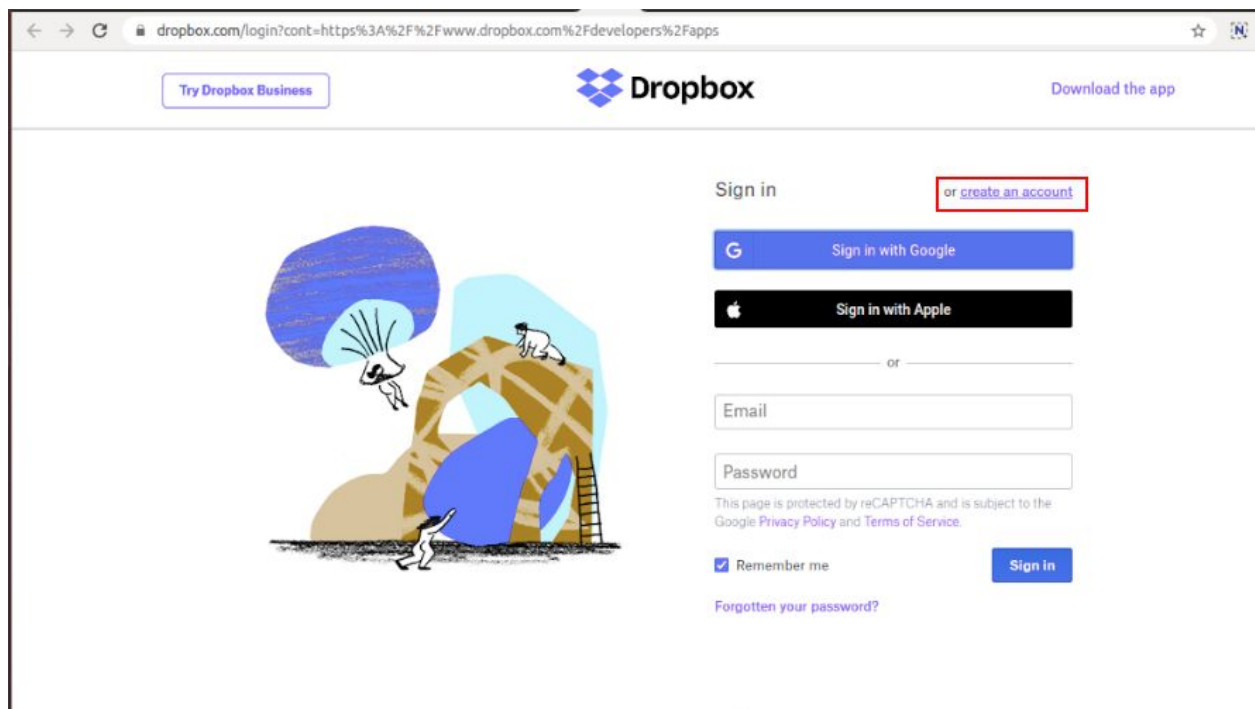
What we did:

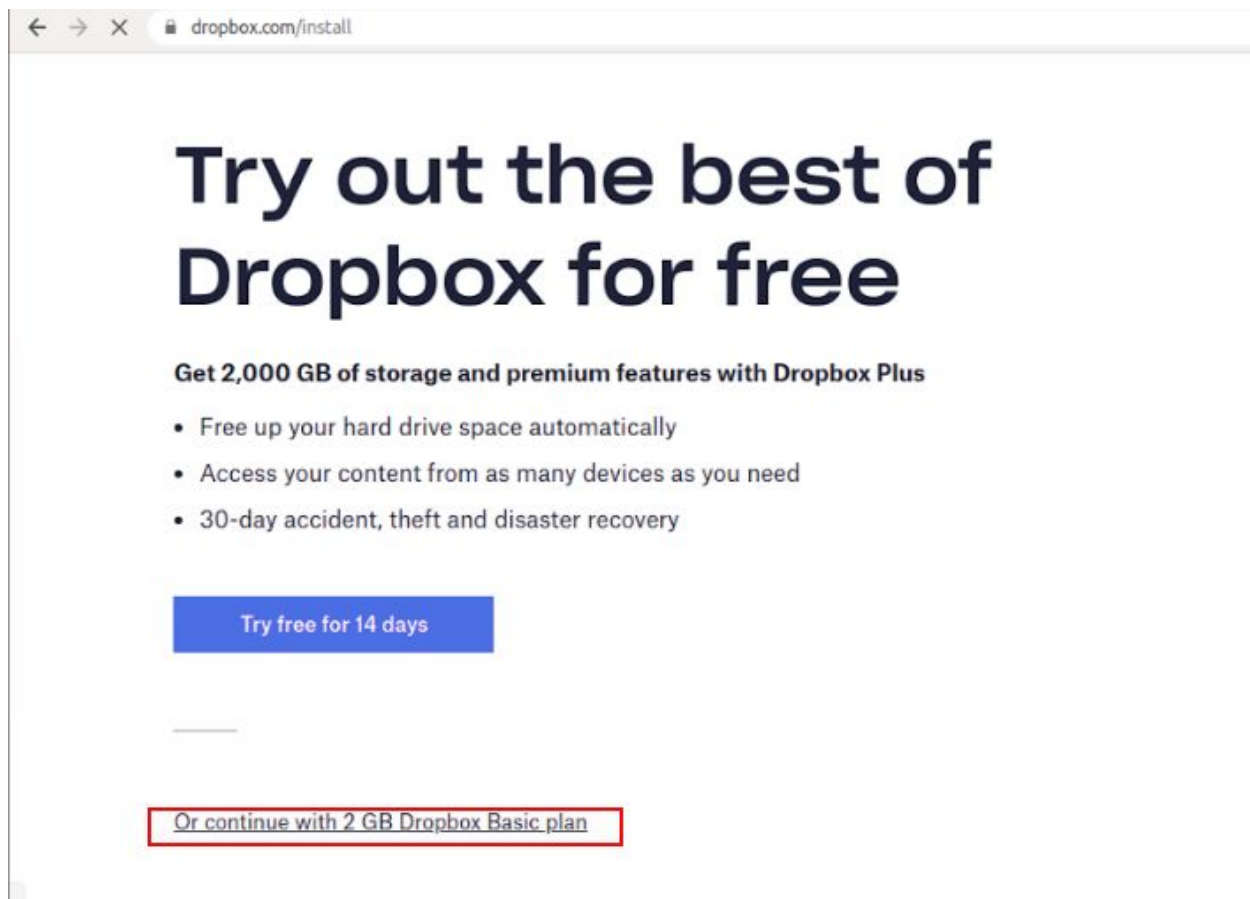
In last class we learned about python package manager and howdoi python package

In this class we learned about dropbox cloud storage.

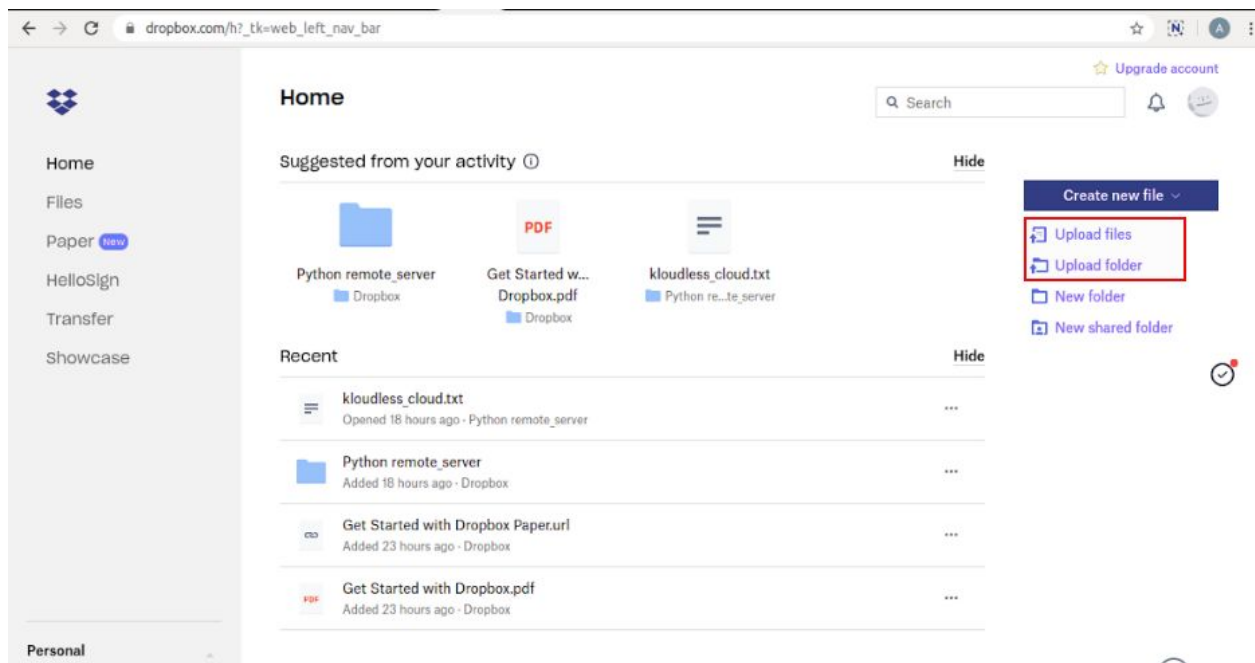
How we did it:

We installed dropbox on our system and created an account on it.





We checked if pip is installed on our system correctly by running command `pip3 --version`



Using the pip3 package manager we installed dropbox to our system

```
Welcome to fish, the friendly interactive shell
~> pip3 install dropbox
```

Using howdoi we saw python code to upload the file on th dropbox

```
~> howdoi upload files to dropbox using python
#!/usr/bin/env python
# -*- coding: utf-8 -*-
import dropbox

class TransferData:
    def __init__(self, access_token):
        self.access_token = access_token

    def upload_file(self, file_from, file_to):
        """upload a file to Dropbox using API v2
        """
        dbx = dropbox.Dropbox(self.access_token)

        with open(file_from, 'rb') as f:
            dbx.files_upload(f.read(), file_to)

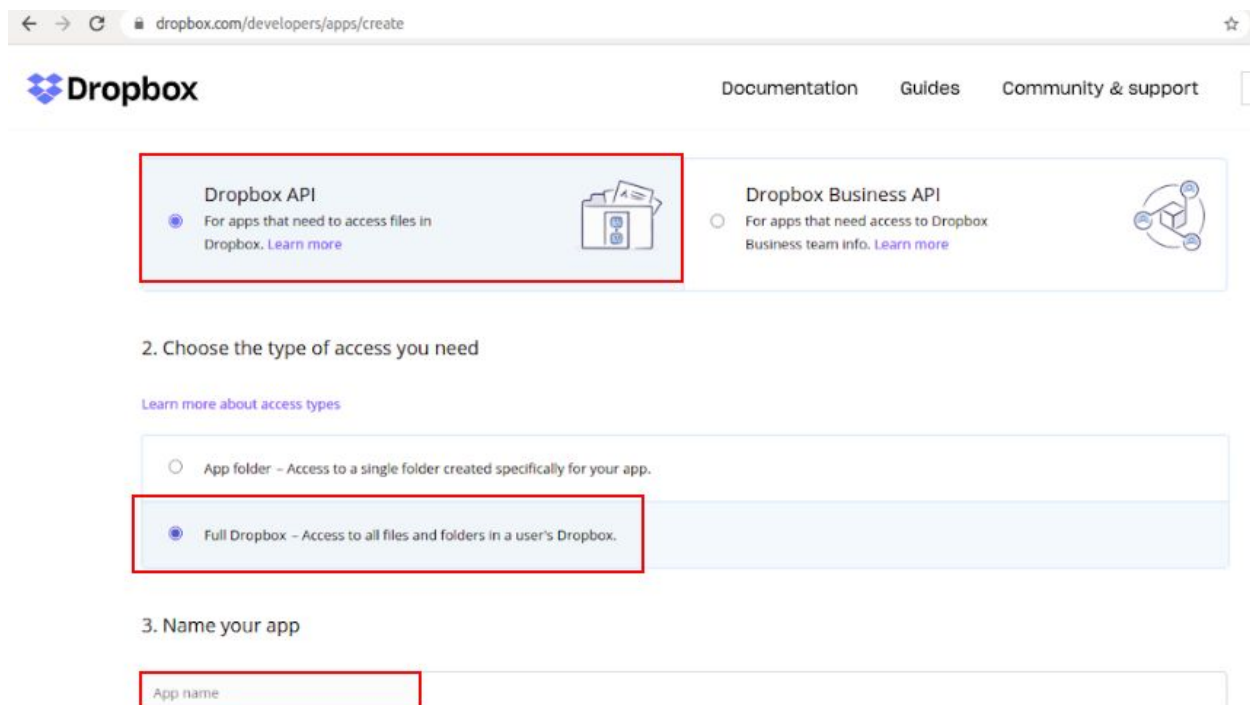
def main():
    access_token = '*****'
    transferData = TransferData(access_token)

    file_from = 'test.txt'
    file_to = '/test_dropbox/test.txt' # The full path to upload the file to, including the file name

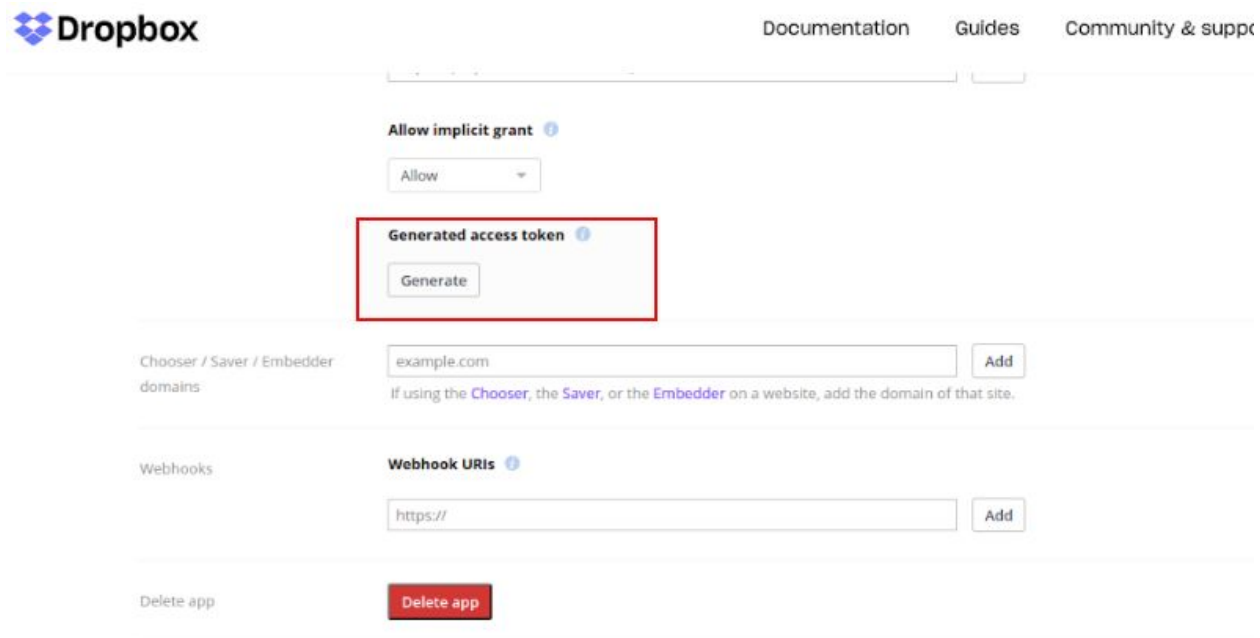
    # API v2
    transferData.upload_file(file_from, file_to)

if __name__ == '__main__':
    main()
~>
```

We went through the code and understood how it is working
Then we created a app on dropbox and got access_token.



The screenshot shows the Dropbox developer portal at dropbox.com/developers/apps/create. The page has a navigation bar with the Dropbox logo, "Documentation", "Guides", and "Community & support". Below the navigation bar, there are two main options for creating an app: "Dropbox API" (selected with a radio button) and "Dropbox Business API". The "Dropbox API" option is highlighted with a red box. Below these options, there is a section titled "2. Choose the type of access you need" with a link "Learn more about access types". There are two radio button options: "App folder - Access to a single folder created specifically for your app." and "Full Dropbox - Access to all files and folders in a user's Dropbox." The "Full Dropbox" option is selected and highlighted with a red box. Below this, there is a section titled "3. Name your app" with a text input field labeled "App name" that is also highlighted with a red box.



The screenshot shows the Dropbox App Console interface. At the top, there's a navigation bar with the Dropbox logo and links for Documentation, Guides, and Community & support. Below this, there's a section for 'Allow implicit grant' with a dropdown menu set to 'Allow'. A red box highlights the 'Generated access token' section, which contains a 'Generate' button. Below that, there's a section for 'Chooser / Saver / Embedder domains' with a text input field containing 'example.com' and an 'Add' button. A note below this section says 'If using the Chooser, the Saver, or the Embedder on a website, add the domain of that site.' Further down, there's a 'Webhooks' section with a 'Webhook URIs' label and a text input field containing 'https://', with an 'Add' button. At the bottom, there's a 'Delete app' button.

Then we modified the code to take file path and dropbox path as input from the user.

```
cloudStorage.py
1 import dropbox
2
3 class TransferData:
4     def __init__(self, access_token):
5         self.access_token = access_token
6
7     def upload_file(self, file_from, file_to):
8         dbx = dropbox.Dropbox(self.access_token)
9
10
11         f = open(file_from, 'rb')
12         dbx.files_upload(f.read(), file_to)
13
```

Defined the main function which has the access token and also takes path inputs.

```
cloudStorage.py
1 import dropbox
2
3 class TransferData:
4     def __init__(self, access_token):
5         self.access_token = access_token
6
7     def upload_file(self, file_from, file_to):
8         dbx = dropbox.Dropbox(self.access_token)
9
10
11         f = open(file_from, 'rb')
12         dbx.files_upload(f.read(), file_to)
13
14 def main():
15     access_token = 'sl.AbKQY7cwlR949HZB7JxLOMrnYKuY39PSkiEnMjmzKLJ8mukldzSQjT8oLVfn_A-kB4yn600erRI'
16     transferData = TransferData(access_token)
17
18     file_from = input("Enter the file path to transfer : -")
19     file_to = input("enter the full path to upload to dropbox:- ") # This is the full path to up
20
21     # API v2
22     transferData.upload_file(file_from, file_to)
23     print("file has been moved !!!")
24
25
```

What's next?

In the next class, we will learn to take images from webcam and upload it to dropbox