

Ex No: 8	Storage as a Service
Date:	

Aim:

To implement storage as a service using python

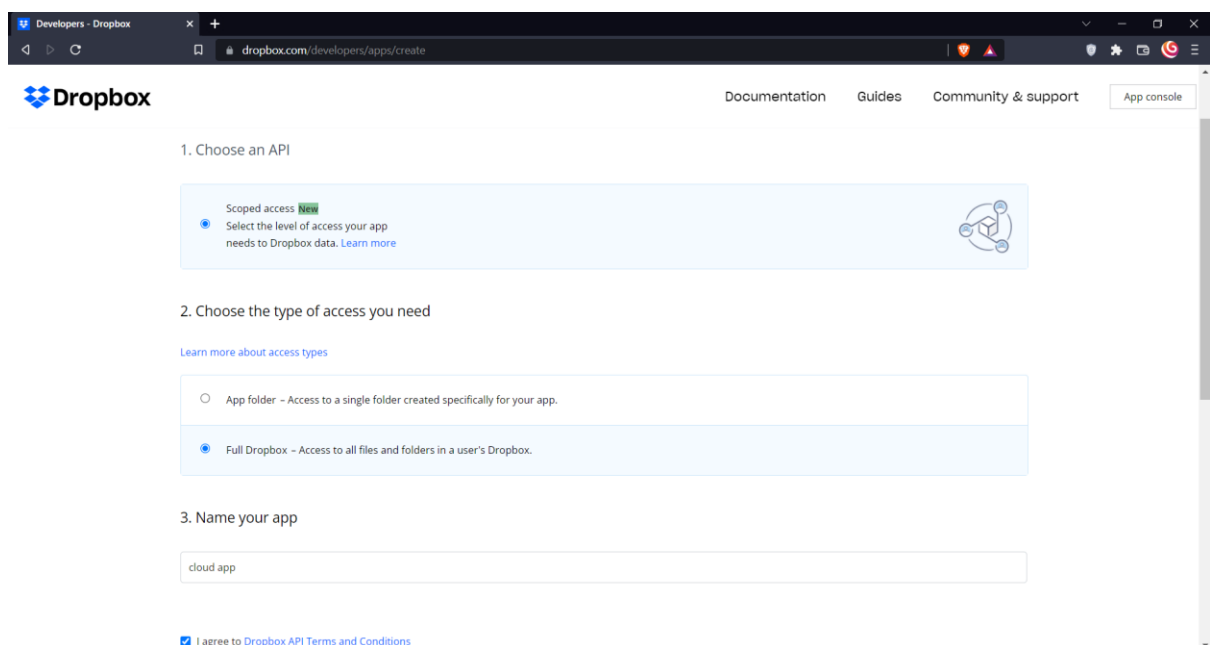
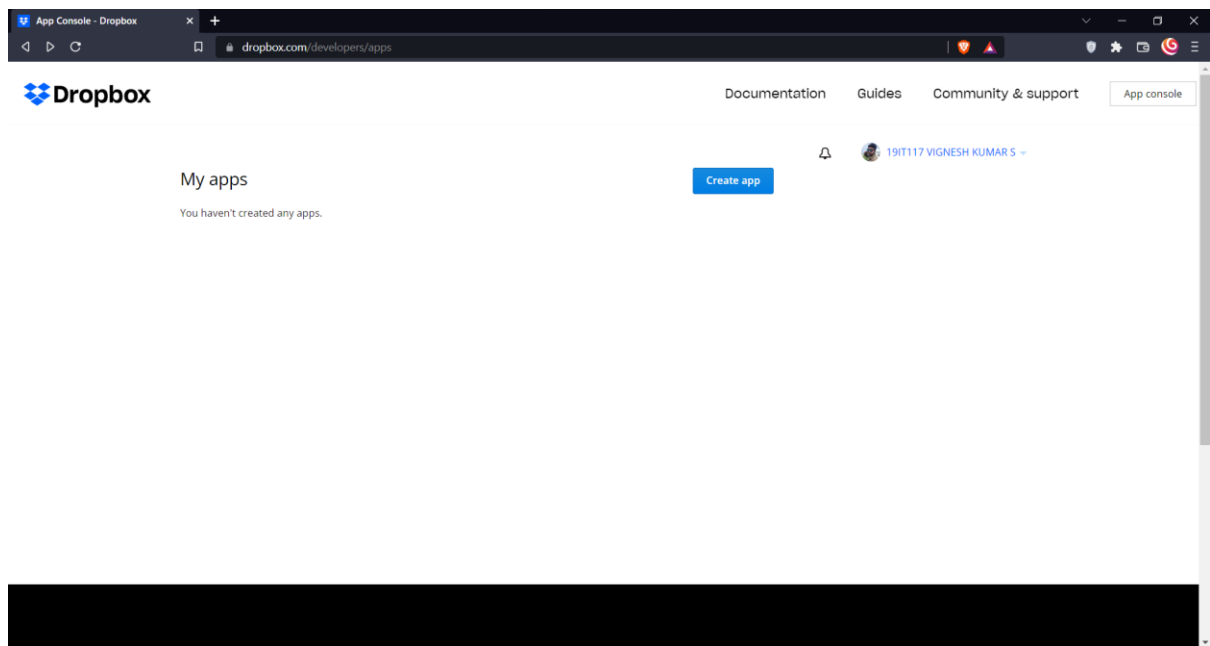
Procedure:

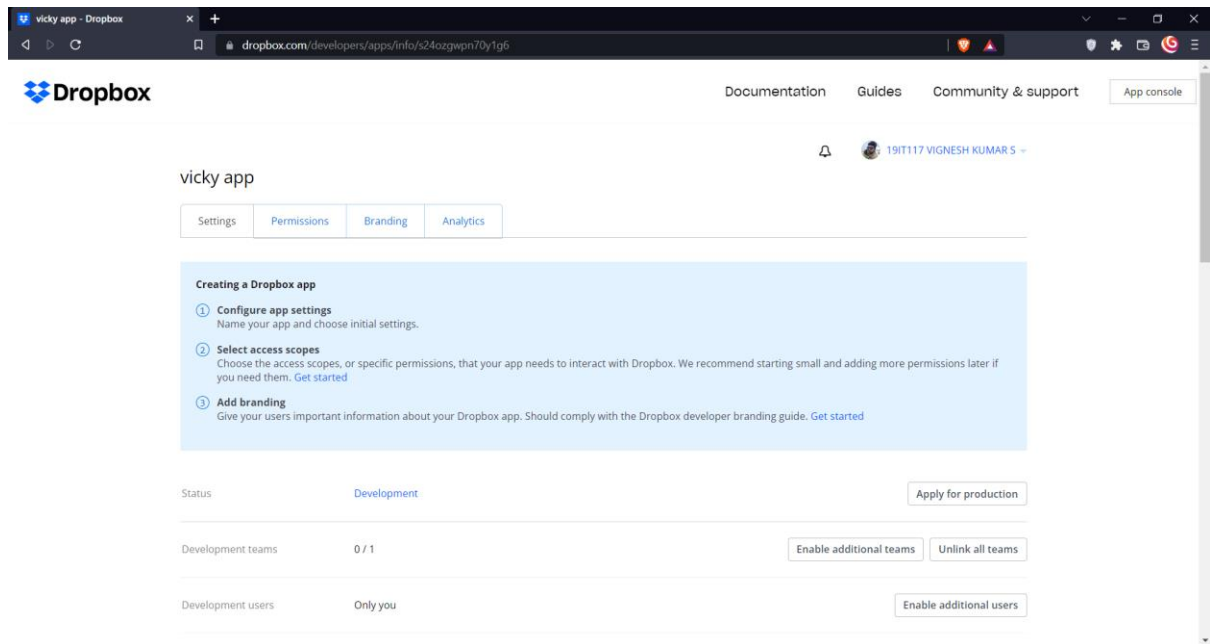
- Create an account and create new application in your account
- Specify the type of access in the next window and Generate the ACCESS TOKEN for that particular application it will use for future programming phase
- Change the permission settings
- Also note down the Application key and Application Secret Key as well:
- Give "NoExpiration" in Access token expiration and Generate a token access
- Uploading the files in drop box using python

Code:

```
import dropbox
dropbox_access_token=
"sl.BJK6yM2zUCkRhVEyKAacOillIjWjxke6N17sAHzgBHkSqIga7EN5qt98HiWtlfhZCwb0HbTo1
5Aj5I-UfL1fBJ-2WrgzSiiRoJ6DsAOwaduAFGBnGDJwjnRRgKG3WyvvBsQ_hJybZwv"
dropbox_path= "/sample.txt"
computer_path=r"E:\dropbox code\sample.txt"
client = dropbox.Dropbox(dropbox_access_token)
print("[SUCCESS] dropbox account linked")
client.files_upload(open(computer_path, "rb").read(), dropbox_path)
print("[UPLOADED] {}".format(computer_path))
metadata, f = client.files_download('/sample.txt')
out = open("sample_download.txt", 'wb')
out.write(f.content)
out.close()
print("[SUCCESS] downloaded")
```

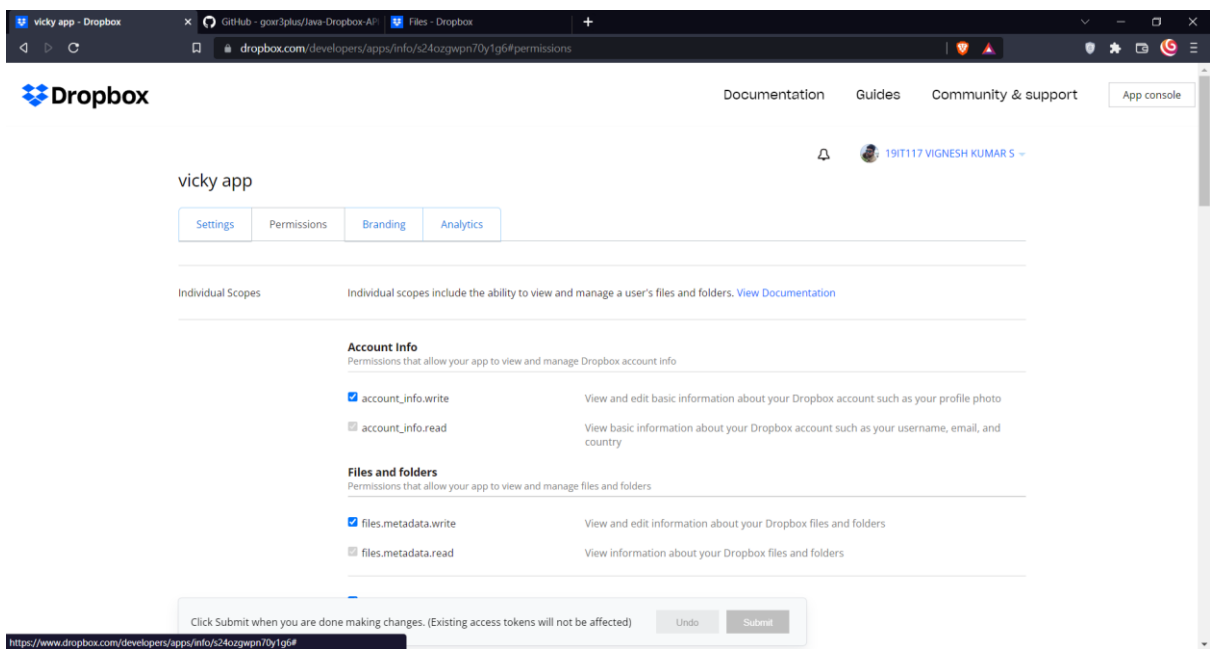
Screenshots:**Creating an application**





The screenshot shows the Dropbox Developer App console for an application named 'vicky app'. The user is 19IT117 VIGNESH KUMAR S. The 'Settings' tab is selected, showing options for 'Permissions', 'Branding', and 'Analytics'. A blue box titled 'Creating a Dropbox app' lists three steps: 1. Configure app settings (Name your app and choose initial settings), 2. Select access scopes (Choose the access scopes, or specific permissions, that your app needs to interact with Dropbox. We recommend starting small and adding more permissions later if you need them. [Get started](#)), and 3. Add branding (Give your users important information about your Dropbox app. Should comply with the Dropbox developer branding guide. [Get started](#)). Below this, the 'Status' is set to 'Development' with an 'Apply for production' button. 'Development teams' are 0 / 1, with buttons for 'Enable additional teams' and 'Unlink all teams'. 'Development users' are 'Only you', with an 'Enable additional users' button.

Setting permission and Generating access token



The screenshot shows the Dropbox Developer App console for 'vicky app' with the 'Permissions' tab selected. It displays 'Individual Scopes' with a link to 'View Documentation'. Under 'Account Info', there are two permissions: 'account_info.write' (checked) and 'account_info.read' (unchecked). Under 'Files and folders', there are two permissions: 'files.metadata.write' (checked) and 'files.metadata.read' (unchecked). At the bottom, a message says 'Click Submit when you are done making changes. (Existing access tokens will not be affected)' with 'Undo' and 'Submit' buttons. The URL bar shows the path to the permissions page.

The screenshot shows the Dropbox Developer Console for an application named 'vendhan P J - Dropbox'. The 'OAuth 2' tab is selected, displaying the following configuration:

- Redirect URIs:** A text input field contains 'https:// (http allowed for localhost)', followed by an 'Add' button.
- Allow public clients (Implicit Grant & PKCE):** A dropdown menu is set to 'Allow'.
- Generated access token:** A long alphanumeric token is displayed, with a note: 'This access token can be used to access your account (vendhan@student.tce.edu) via the API. Don't share your access token with anyone.'
- Chooser / Saver / Embedder domains:** A text input field contains 'example.com', followed by an 'Add' button. A note below states: 'If using the Chooser, the Saver, or the Embedder on a website, add the domain of that site.'
- Webhook URIs:** A text input field contains 'https://', followed by an 'Add' button.

At the bottom, there is a cookie consent banner with 'Decline' and 'Accept All' buttons.

Installing dropbox package

```

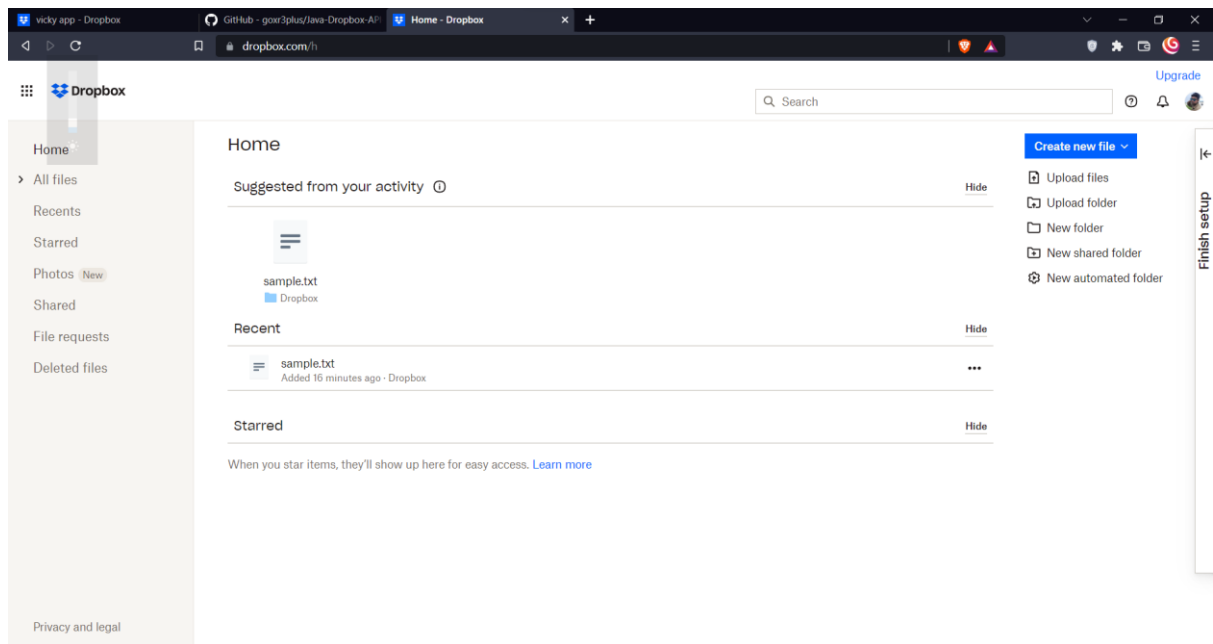
PROBLEMS  OUTPUT  TERMINAL  COMMENTS
> TERMINAL
Microsoft Windows [Version 10.0.22000.675]
(c) Microsoft Corporation. All rights reserved.

E:\dropbox code>pip install dropbox
Collecting dropbox
  Downloading dropbox-11.31.0-py3-none-any.whl (585 kB)
    586.0/586.0 kB 83.0 kB/s eta 0:00:00
Collecting stone>=2.*
  Downloading stone-3.3.1-py3-none-any.whl (162 kB)
    162.3/162.3 kB 55.3 kB/s eta 0:00:00
Requirement already satisfied: six>=1.12.0 in c:\users\prinz\appdata\local\programs\python\python310\lib\site-packages (from dropbox) (1.16.0)
Collecting requests>=2.16.2
  Downloading requests-2.27.1-py2.py3-none-any.whl (63 kB)
    63.1/63.1 kB 65.1 kB/s eta 0:00:00
Collecting certifi>=2017.4.17
  Downloading certifi-2022.5.18.1-py3-none-any.whl (155 kB)
    155.2/155.2 kB 77.3 kB/s eta 0:00:00
Collecting idna<4,>=2.5
  Downloading idna-3.3-py3-none-any.whl (61 kB)
    61.2/61.2 kB 29.9 kB/s eta 0:00:00
Collecting urllib3<1.27,>=1.21.1
  Downloading urllib3-1.26.9-py2.py3-none-any.whl (138 kB)
    139.0/139.0 kB 56.1 kB/s eta 0:00:00
Collecting charset-normalizer~=2.0.0
  Downloading charset-normalizer-2.0.12-py3-none-any.whl (39 kB)
Collecting ply>=3.4
  Downloading ply-3.11-py2.py3-none-any.whl (49 kB)
    49.6/49.6 kB 78.7 kB/s eta 0:00:00
Installing collected packages: ply, urllib3, stone, idna, charset-normalizer, certifi, requests, dropbox
Successfully installed certifi-2022.5.18.1 charset-normalizer-2.0.12 dropbox-11.31.0 idna-3.3 ply-3.11 requests-2.27.1 stone-3.3.1 urllib3-1.26.9

```

Running an application

File successfully uploaded



Result:

Hence the experiment was completed and the result is verified.