

Cloud Computing Project (CCP)

CCP is an open source and libre project focused on keeping the backup of any folder to your drive.

CCP can upload any folder present on your computer to the associated google drive. When changes happen to the files of that folder then those updated files are automatically uploaded to your drive.

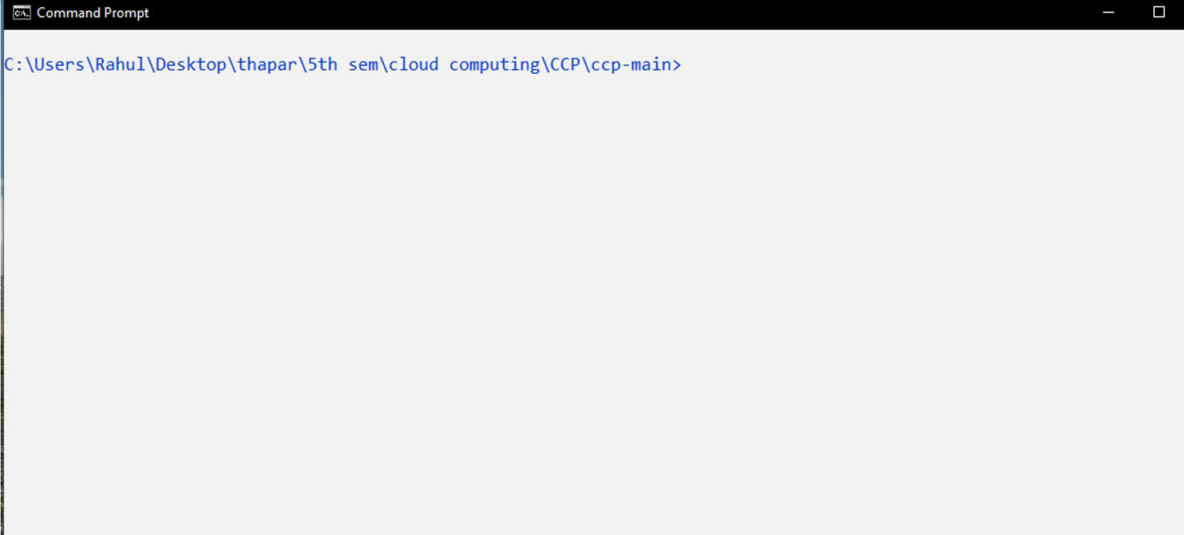
The information regarding upload of files is kept in a file with filename and uploading time in "log.txt".

How to use

User need to have python installed on his/her computer.

Step 1. Open Command Prompt.

Step 2. Go to the CCP folder



```
Command Prompt
C:\Users\Rahul\Desktop\thapar\5th sem\cloud computing\CCP\ccp-main>
```

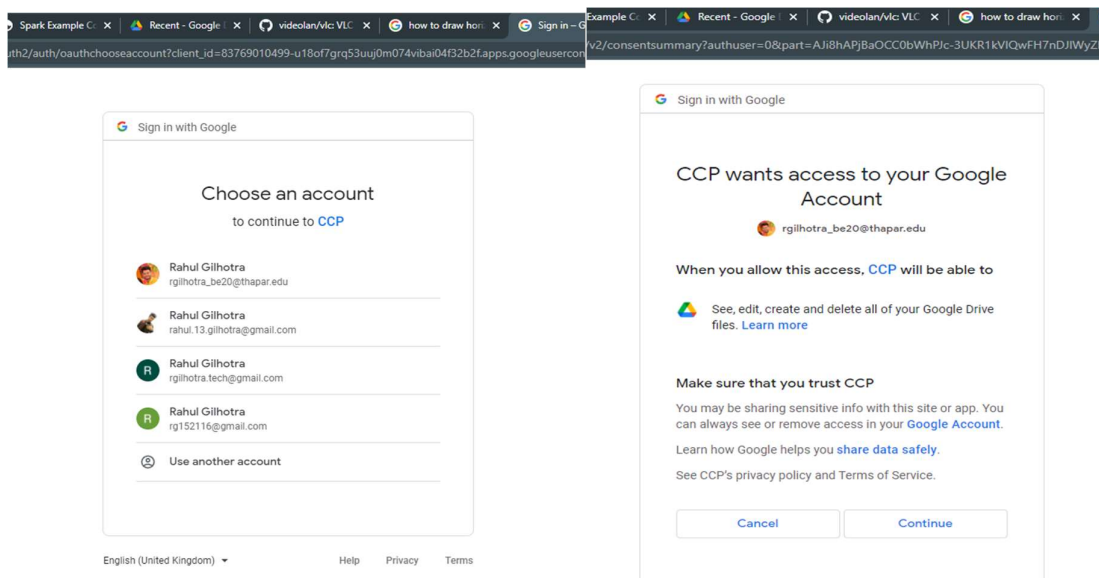
Step3. Run the following command:

➔ **python main.py <location of the folder>**



```
Command Prompt
C:\Users\Rahul\Desktop\thapar\5th sem\cloud computing\CCP\ccp-main>python main.py C:\Users\Rahul\Desktop\folder1
```

You will be directed to the google drive, choose the account you want to associate.



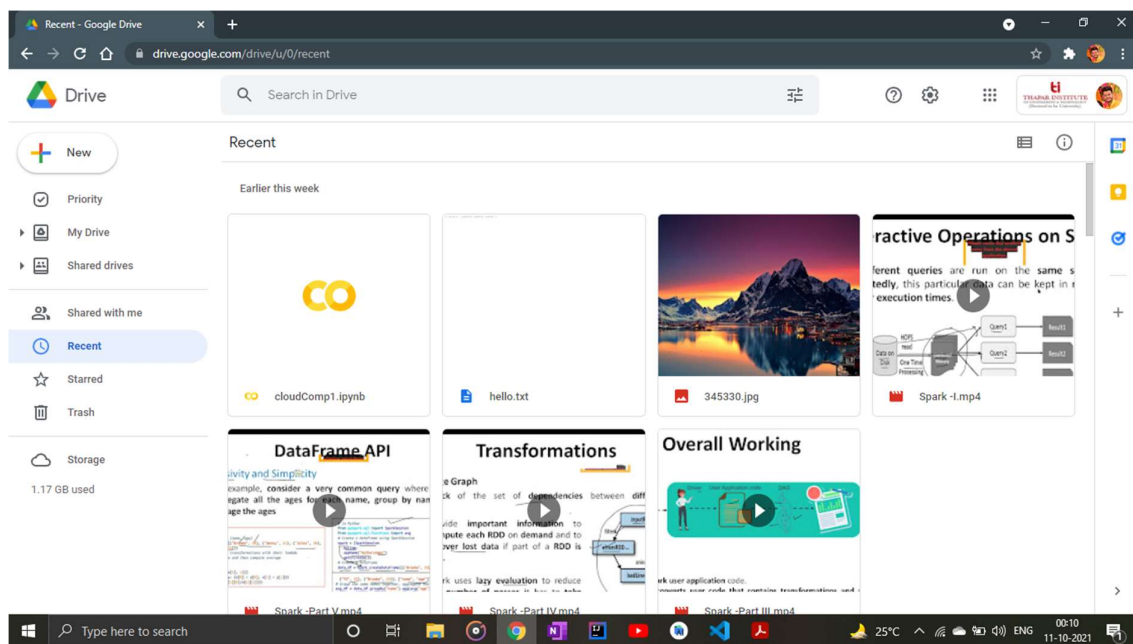
The user's task is done here. The specified folder will be uploaded to the google drive.

Whenever the files are changed of this folder those files would be uploaded in the drive

User can get file uploading information in log.txt file present in the CCP folder.

```
log - Notepad
File Edit Format View Help
345330.jpg      ecb92d18c7855c986a5571c1b6f7cad2      Sun Oct 10 19:00:20 2021
hello.txt      9fd6e6a83410159cd093b4165899a43      Sun Oct 10 19:00:23 2021
```

OUTPUT:



How does CCP work?

Firstly, CCP hashes all the files present in the specified folder.

After that, those files are hashed by MD5 (Message Digest Algorithm 5) hashing algorithm.

Now if the hash code generated by the file doesn't match the old hash code (when the file is edited) or old hash code is not present. (File is not uploaded yet).

else if the hash code generated by the file matches the old hash then that file isn't uploaded. (Means that the file is already uploaded and hasn't been edited yet)