

Software Security Assignment 2

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Step 1-You need to start xampp (Apache andMySQL)



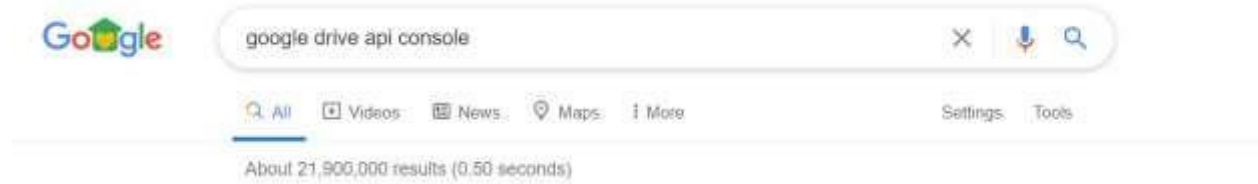
Step 2- View through the browser.

Index of /

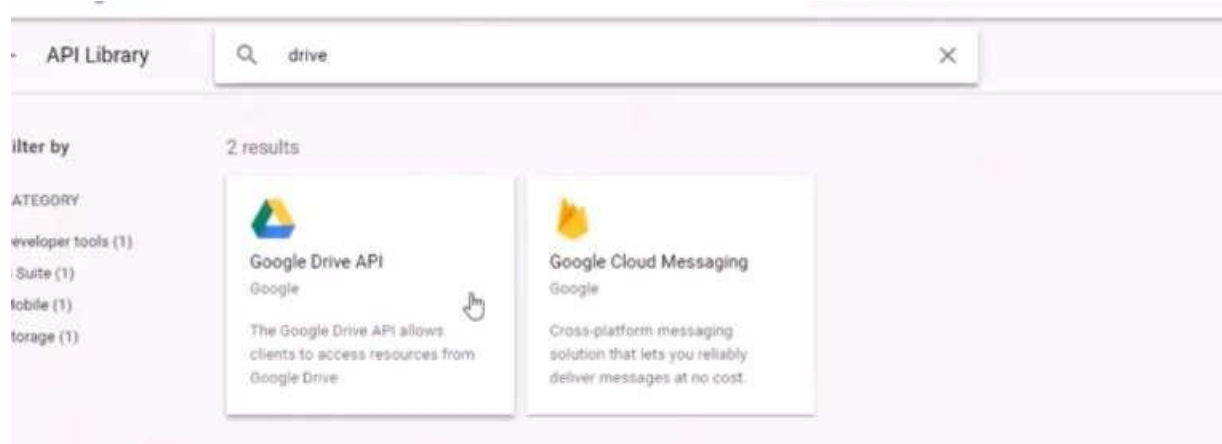
Name	Last modified	Size	Description
boom/	2017-11-22 12:38	-	
c2Education/	2017-11-21 12:58	-	
googledrive/	2017-11-24 16:15	-	
pos/	2017-11-13 09:44	-	
pos1/	2017-11-21 12:53	-	

Apache/2.4.17 (Win32) OpenSSL/1.0.2d PHP/5.6.21 Server at localhost Port 80

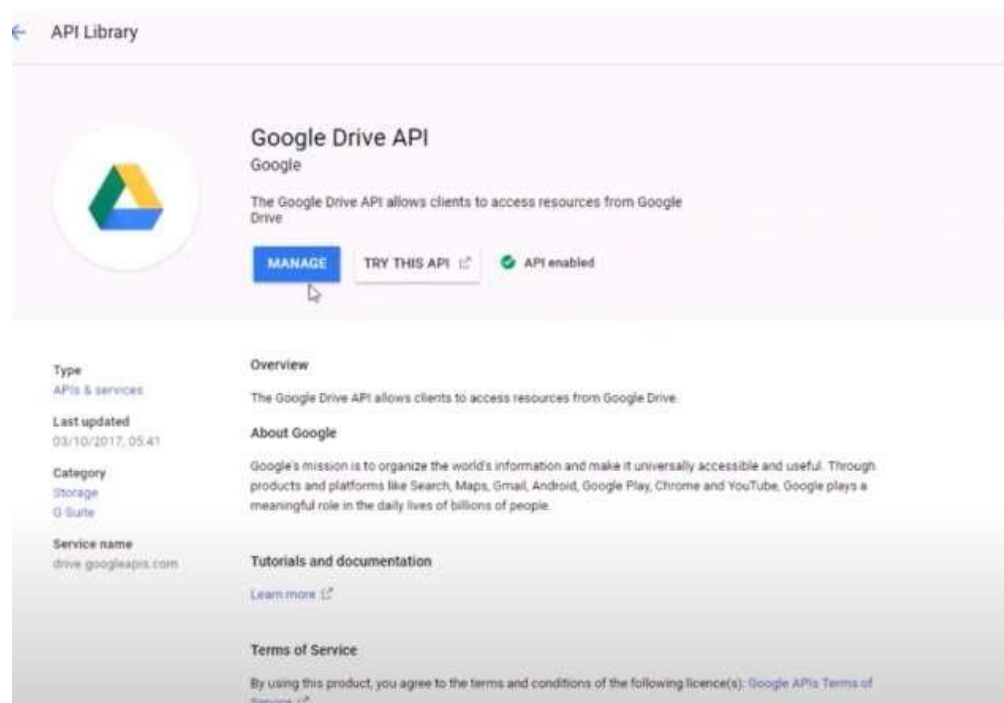
Step 3-As we are using Google Drive API Console search it in the browser. we are trying to upload a file to the google drive.



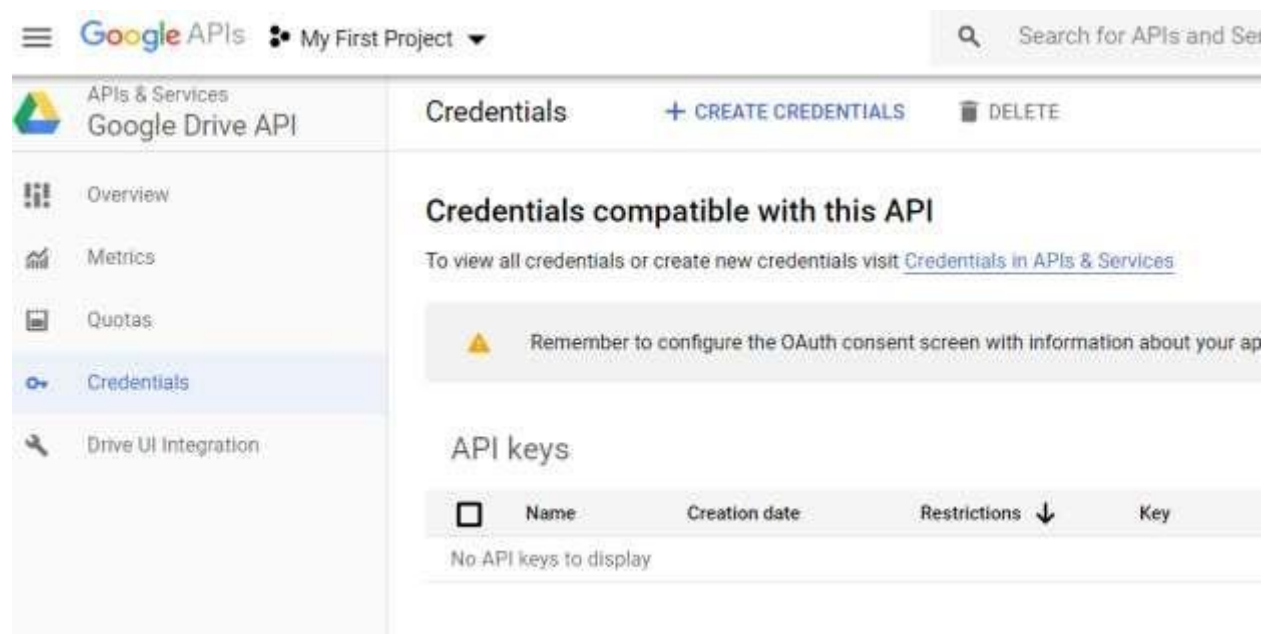
Step 4-Search the Drive from Google API'S



Step 5-After finding it we have to enable the Google Drive API.

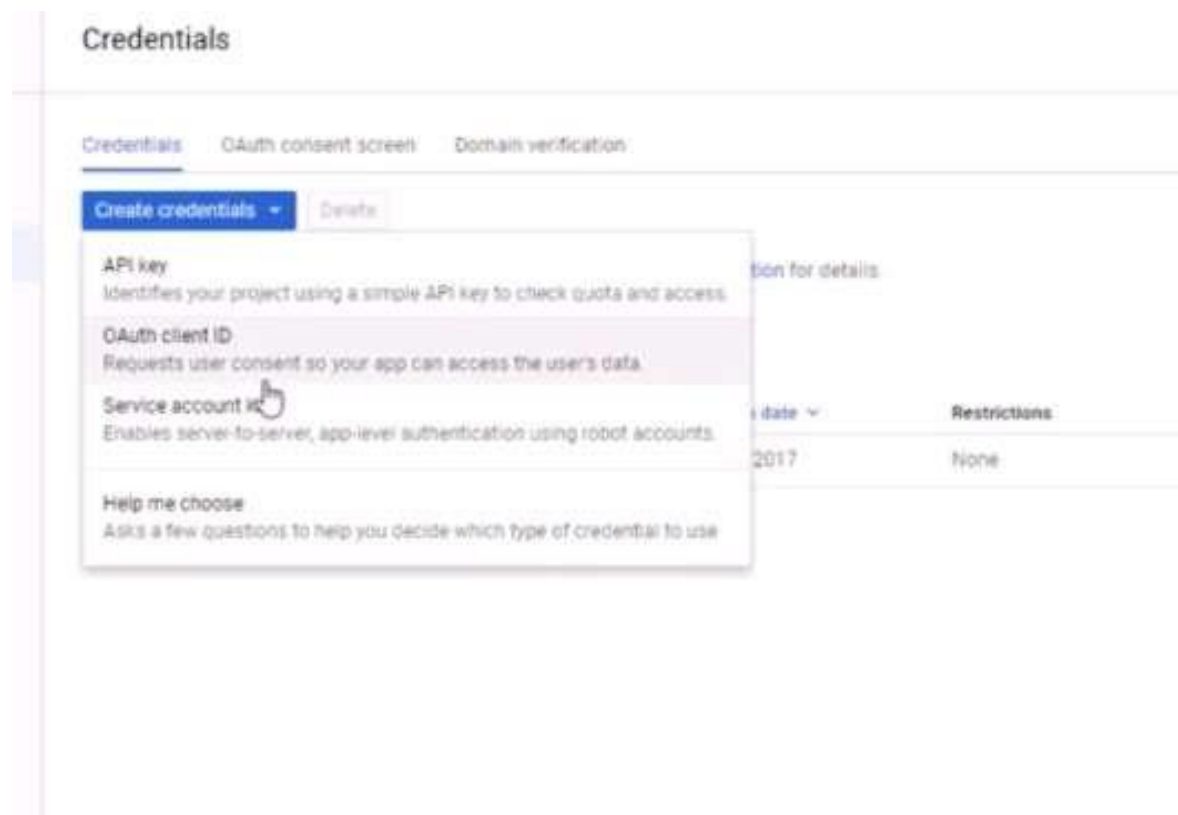


Step 6-Then you have to create credentials



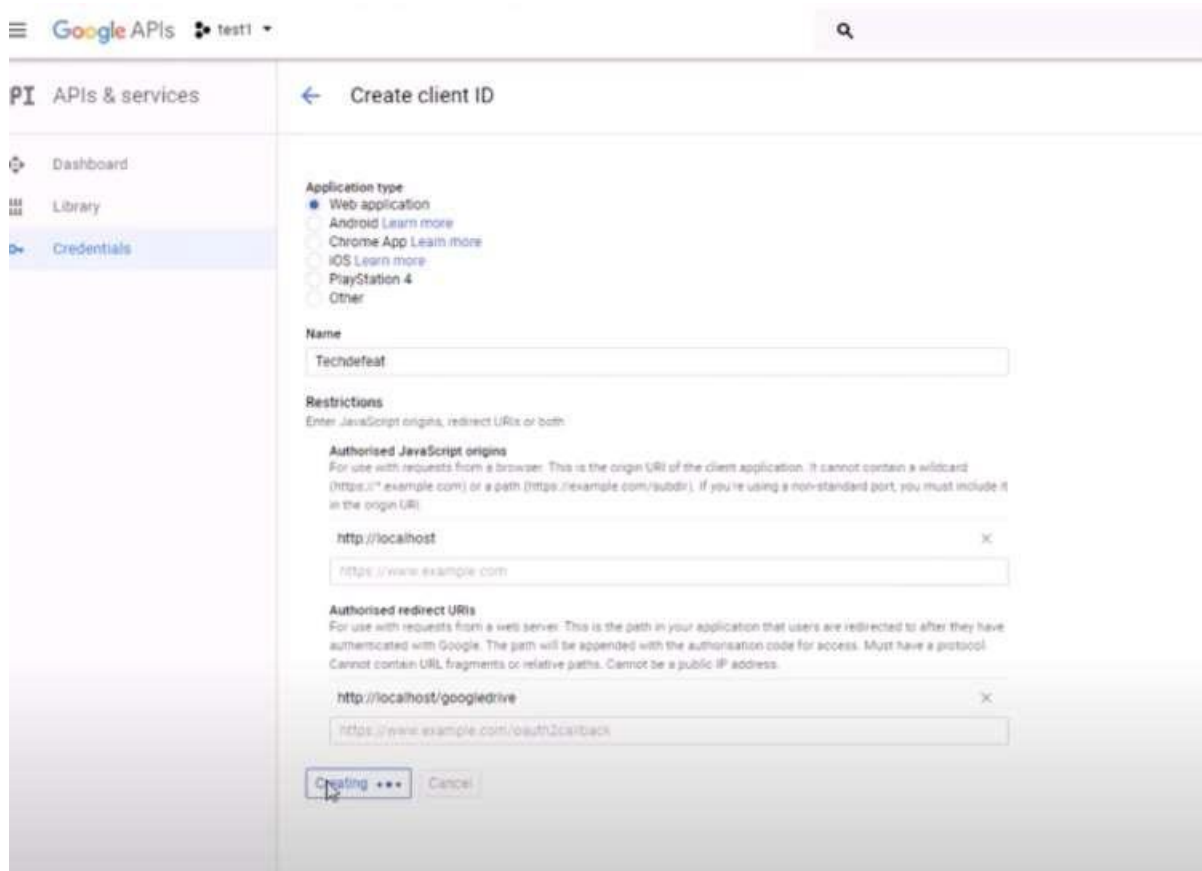
The screenshot shows the Google APIs console for a project named "My First Project". The left sidebar lists navigation options: Overview, Metrics, Quotas, Credentials (selected), and Drive UI Integration. The main content area is titled "Credentials" and includes a "+ CREATE CREDENTIALS" button and a "DELETE" button. Below this, it says "Credentials compatible with this API" and provides a link to "Credentials in APIs & Services". A warning message states: "Remember to configure the OAuth consent screen with information about your app". Under the "API keys" section, there is a table with columns: Name, Creation date, Restrictions, and Key. The table is currently empty, displaying "No API keys to display".

Step 7-Under create credentials you have to select OAuth Client



This screenshot shows the "Create credentials" dropdown menu. The menu options are: "API key" (described as "Identifies your project using a simple API key to check quotas and access."), "OAuth client ID" (described as "Requests user consent so your app can access the user's data."), "Service account key" (described as "Enables server-to-server, app-level authentication using robot accounts."), and "Help me choose" (described as "Asks a few questions to help you decide which type of credential to use"). The "OAuth client ID" option is highlighted with a mouse cursor. In the background, a table with columns "Creation date" and "Restrictions" is partially visible, showing a date of "2017" and a restriction of "None".

Step 8-As this is a web application You have to select Application type and give it a name, then the domain name and the URL name.



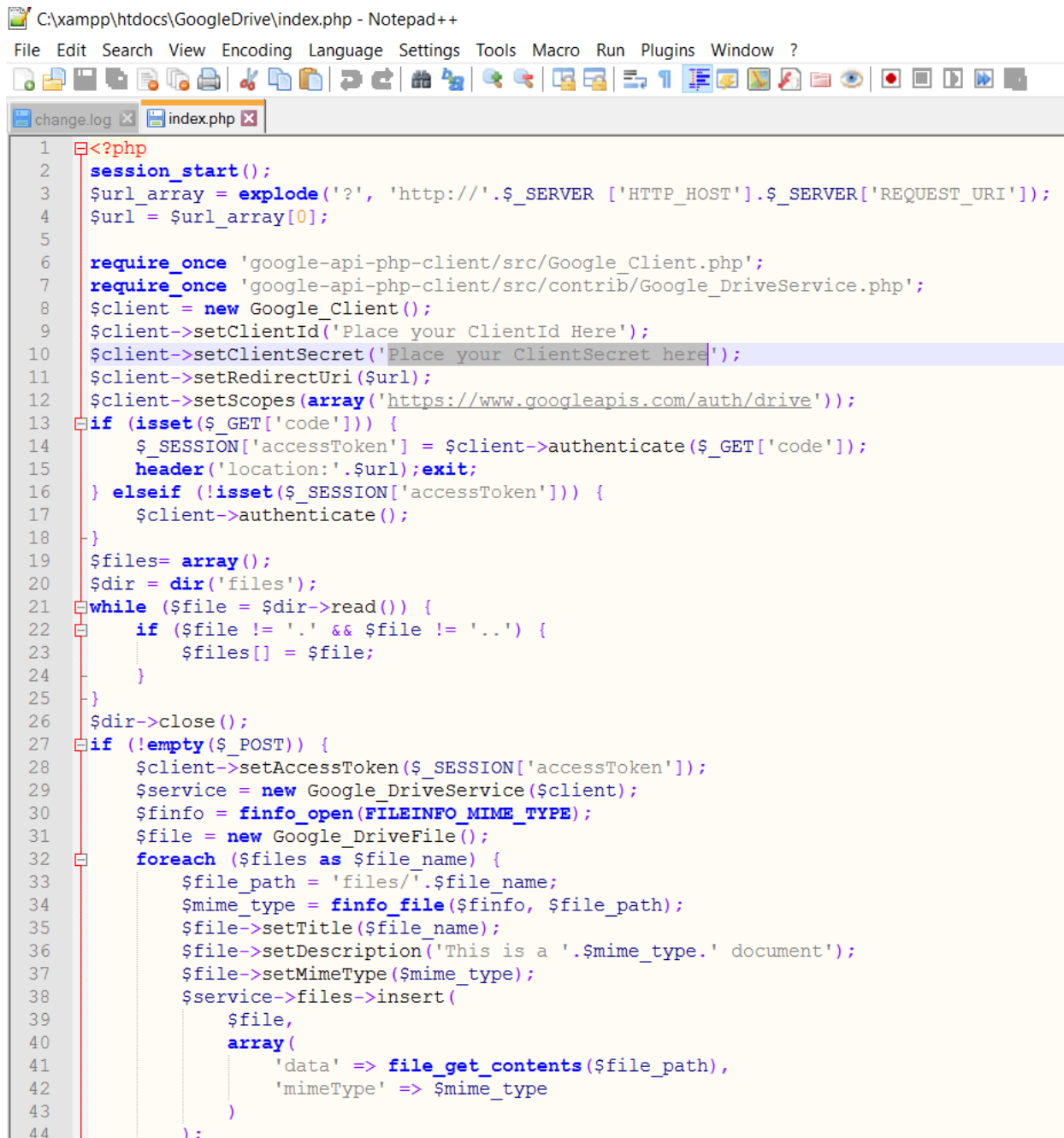
The screenshot shows the 'Create client ID' page in the Google APIs console. The left sidebar has 'APIs & services' selected, with 'Dashboard', 'Library', and 'Credentials' listed below. The main area is titled 'Create client ID' and contains the following fields:

- Application type:** A radio button selection with 'Web application' selected. Other options are 'Android Learn more', 'Chrome App Learn more', 'iOS Learn more', 'PlayStation 4', and 'Other'.
- Name:** A text input field containing 'Techdefeat'.
- Restrictions:** A section with the instruction 'Enter JavaScript origins, redirect URIs or both'. It contains two sub-sections:
 - Authorised JavaScript origins:** A text input field containing 'http://localhost'. Below it is a link 'https://www.example.com'.
 - Authorised redirect URIs:** A text input field containing 'http://localhost/google drive'. Below it is a link 'https://www.example.com/oauth2callback'.
- Buttons:** At the bottom, there is a 'Creating ...' button with a progress indicator and a 'Cancel' button.

Step 9-Then you will get API Client and Secret

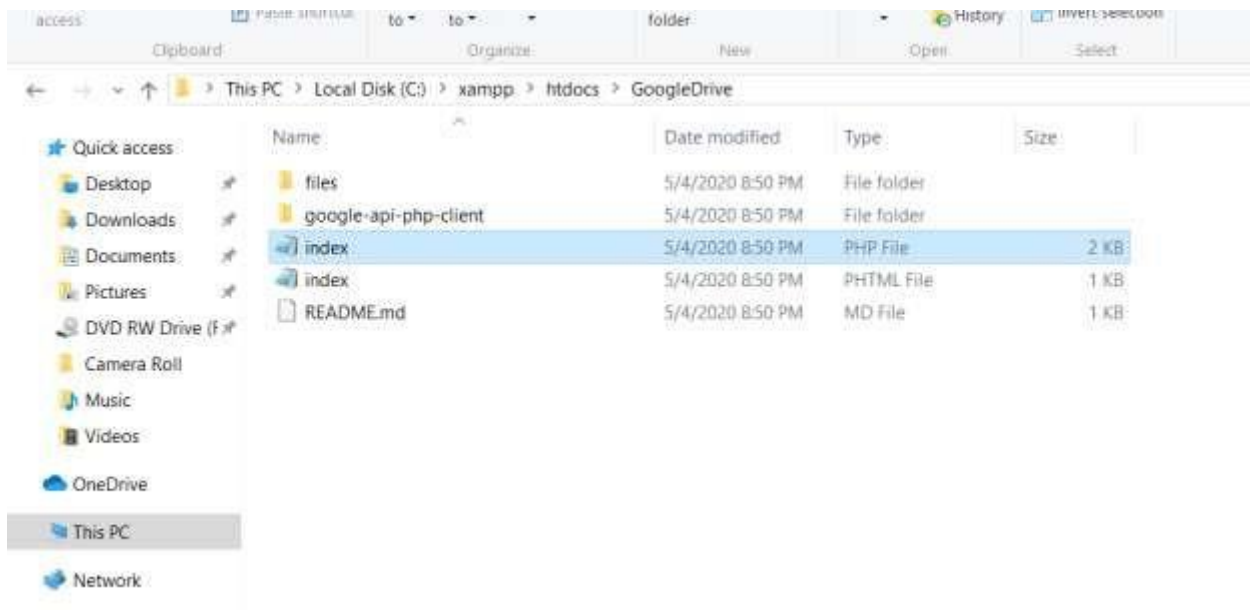


Step 10-Then go to your PHP file and paste your ClientID and ClientSecret here.

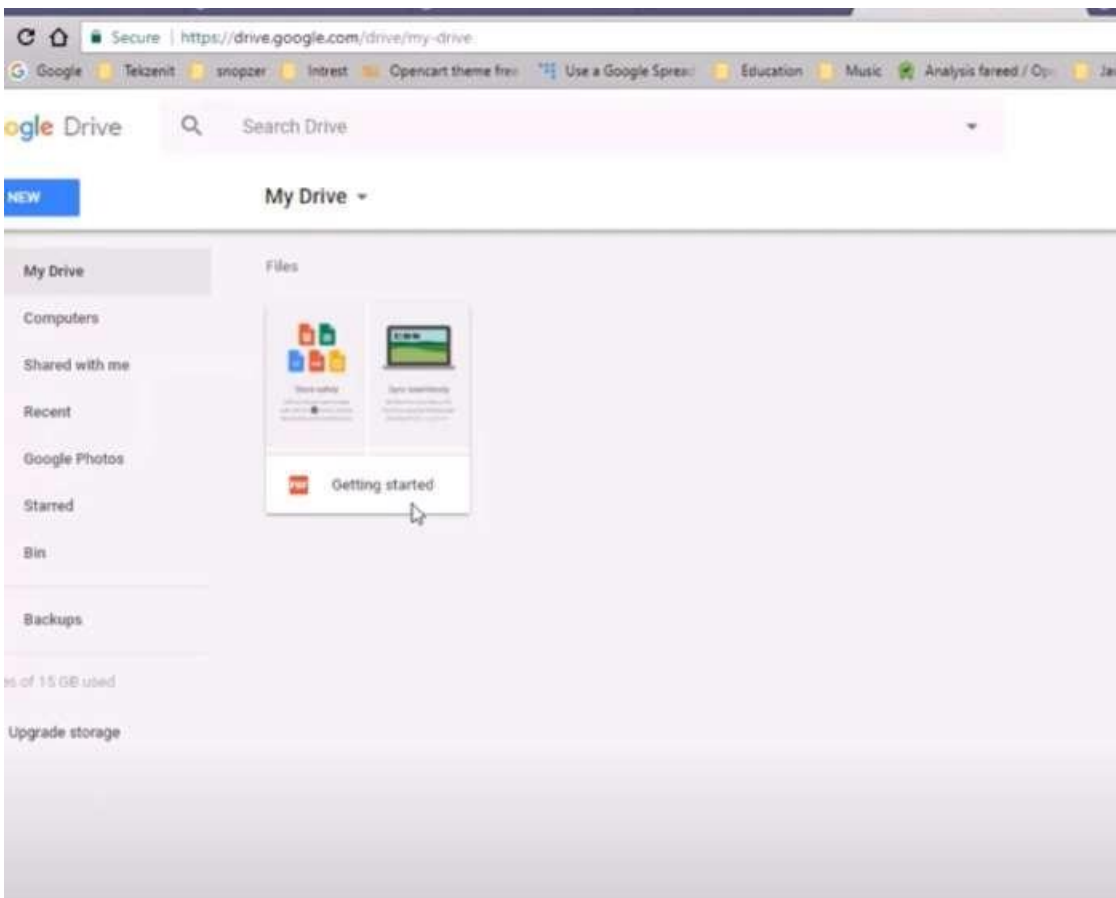


```
1 <?php
2 session_start();
3 $url_array = explode('?', 'http://'.$_SERVER['HTTP_HOST'].$_SERVER['REQUEST_URI']);
4 $url = $url_array[0];
5
6 require_once 'google-api-php-client/src/Google_Client.php';
7 require_once 'google-api-php-client/src/contrib/Google_DriveService.php';
8 $client = new Google_Client();
9 $client->setClientId('Place your ClientId Here');
10 $client->setClientSecret('Place your ClientSecret here');
11 $client->setRedirectUri($url);
12 $client->setScopes(array('https://www.googleapis.com/auth/drive'));
13 if (isset($_GET['code'])) {
14     $_SESSION['accessToken'] = $client->authenticate($_GET['code']);
15     header('location:'.$url);exit;
16 } elseif (!isset($_SESSION['accessToken'])) {
17     $client->authenticate();
18 }
19 $files= array();
20 $dir = dir('files');
21 while ($file = $dir->read()) {
22     if ($file != '.' && $file != '..') {
23         $files[] = $file;
24     }
25 }
26 $dir->close();
27 if (!empty($_POST)) {
28     $client->setAccessToken($_SESSION['accessToken']);
29     $service = new Google_DriveService($client);
30     $finfo = finfo_open(FILEINFO_MIME_TYPE);
31     $file = new Google_DriveFile();
32     foreach ($files as $file_name) {
33         $file_path = 'files/'.$file_name;
34         $mime_type = finfo_file($finfo, $file_path);
35         $file->setTitle($file_name);
36         $file->setDescription('This is a '.$mime_type.' document');
37         $file->setMimeType($mime_type);
38         $service->files->insert(
39             $file,
40             array(
41                 'data' => file_get_contents($file_path),
42                 'mimeType' => $mime_type
43             )
44         );
45     }
46 }
```

Step 11-The file path of our folder (C/xampp/htdocs/GoogleDrive)







Step 12-View of my Google Drive as We created this google account newly



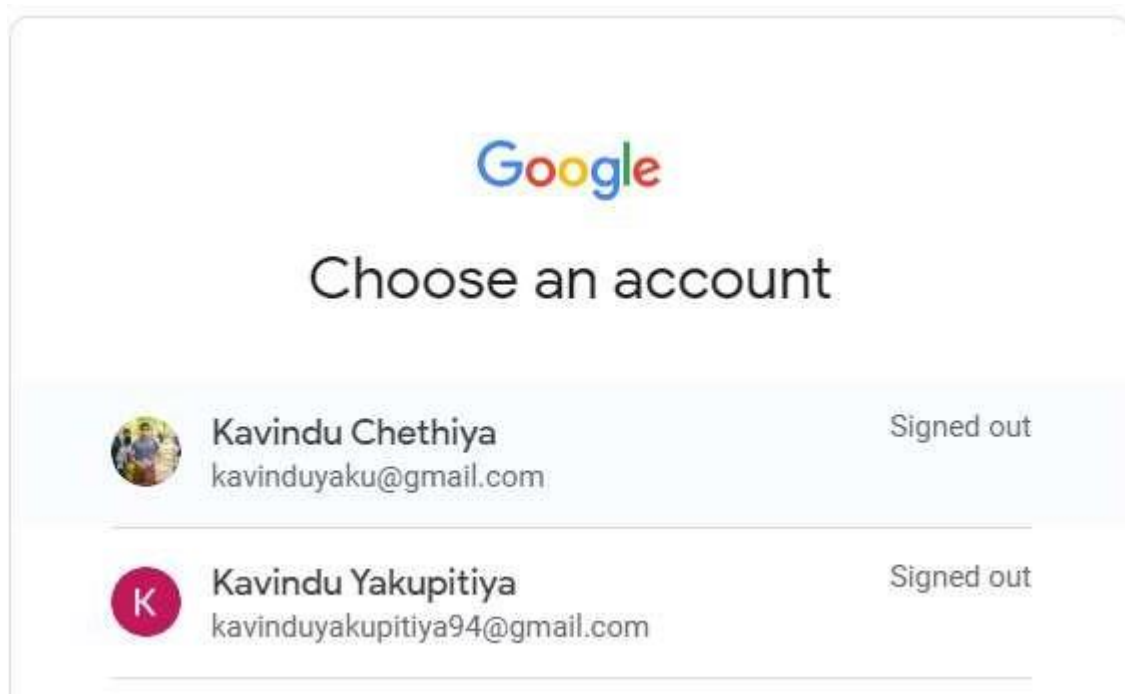
Step 13-View through the browser after creating the folder.

Index of /

Name	Last modified	Size	Description
 boom/	2017-11-22 12:38	-	
 c2Education/	2017-11-21 12:58	-	
 googledrive/	2017-11-24 16:18	-	
 pos/	2017-11-13 09:44	-	
 pos1/	2017-11-21 12:53	-	

Apache/2.4.17 (Win32) OpenSSL/1.0.2d PHP/5.6.21 Server at localhost Port 80

Step 14-Then you have to log in from your specific google account in order to get the details.



Step 15-In here I have added a hardcode upload button to upload a file to the google drive.



Step 16-And fill all the required details in your index PHP code.

```
C:\xampp\htdocs\GoogleDrive\index.php - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
change log index.php index.php.ini
1 <?php
2 session_start();
3 $url_array = explode('?', 'http://'.$_SERVER['HTTP_HOST'].$_SERVER['REQUEST_URI']);
4 $url = $url_array[0];
5
6 require_once 'google-api-php-client/src/Google_Client.php';
7 require_once 'google-api-php-client/src/contrib/Google_DriveService.php';
8 $client = new Google_Client();
9 $client->setClientId('Place your ClientId Here');
10 $client->setClientSecret('Place your ClientSecret here');
11 $client->setRedirectUri($url);
12 $client->setScopes(array('https://www.googleapis.com/auth/drive'));
13 if (isset($_GET['code'])) {
14     $_SESSION['accessToken'] = $client->authenticate($_GET['code']);
15     header('location:'.$url);exit;
16 } elseif (isset($_SESSION['accessToken'])) {
17     $client->authenticate();
18 }
19 $files= array();
20 $dir = dir('files');
21 while ($file = $dir->read()) {
22     if ($file != '.' && $file != '..') {
23         $files[] = $file;
24     }
25 }
```


Step 17-Set ClientID and ClientSecret which you generated through your Google Drive API settings.

```
$client = new Google_Client();  
$client->setClientId('130871042163-ffntfjac0d419bks89m78pgls584tvc8.apps.googleusercontent.com');  
$client->setClientSecret('tla-jFTiTw92NH0idR0Dmvlb');  
$client->setRedirectUri($url);
```

Step 18-Process of setting scope.

```
$client->setScopes(array('https://www.googleapis.com/auth/drive'));
```

Step 19-Process of adding access token to the session.

```
if (isset($_GET['code'])) {  
    $_SESSION['accessToken'] = $client->authenticate($_GET['code']);  
    header('location:'.$url);exit;  
} elseif (!isset($_SESSION['accessToken'])) {  
    $client->authenticate();  
}
```

Step 20-Adding all the fileinfo to the Session according to requirement.

```
$dir->close();  
if (!empty($_POST)) {  
    $client->setAccessToken($_SESSION['accessToken']);  
    $service = new Google_DriveService($client);  
    $finfo = finfo_open(FILEINFO_MIME_TYPE);  
    $file = new Google_DriveFile();  
    foreach ($files as $file_name) {  
        $file_path = 'files/'.$file_name;  
        $mime_type = finfo_file($finfo, $file_path);  
        $file->setTitle($file_name);  
        $file->setDescription('This is a '.$mime_type.' document');  
        $file->setMimeType($mime_type);  
        $service->files->insert(  
            $file,  
            array(  
                'data' => file_get_contents($file_path),  
                'mimeType' => $mime_type  
            )  
        );  
    }  
}
```

Step 21-After that this will be your final output after uploading the file.

