To obtain an API key for the YouTube API, you need to follow these steps:

1. Create a Google Cloud project:

- o Go to the Google Cloud Console (https://console.cloud.google.com/).
- o Sign in with your Google account.
- o Click on "Create Project".
- o Enter a project name and location, then click "Create".

2. Enable the YouTube Data API:

- o In your new project dashboard, navigate to the "APIs & Services > Library".
- o Search for "YouTube Data API v3".
- o Click on the API and then click "Enable" to enable it for your project.

3. Create API credentials:

- o Go to the "APIs & Services > Credentials" section in the Cloud Console.
- o Click "Create Credentials" and select "API key".
- Optionally, you can set application restrictions (such as restricting the API key to specific IP addresses) and API restrictions (restrict the key to only call the YouTube Data API).

4. Use your API key:

o After creating the API key, you'll receive it in a popup window. Copy this key; you'll use it in your application to authenticate API requests.











