

Getting Started with the Analysis of Facebook Data for MATH1608PP Understanding Big Data for Social Networks

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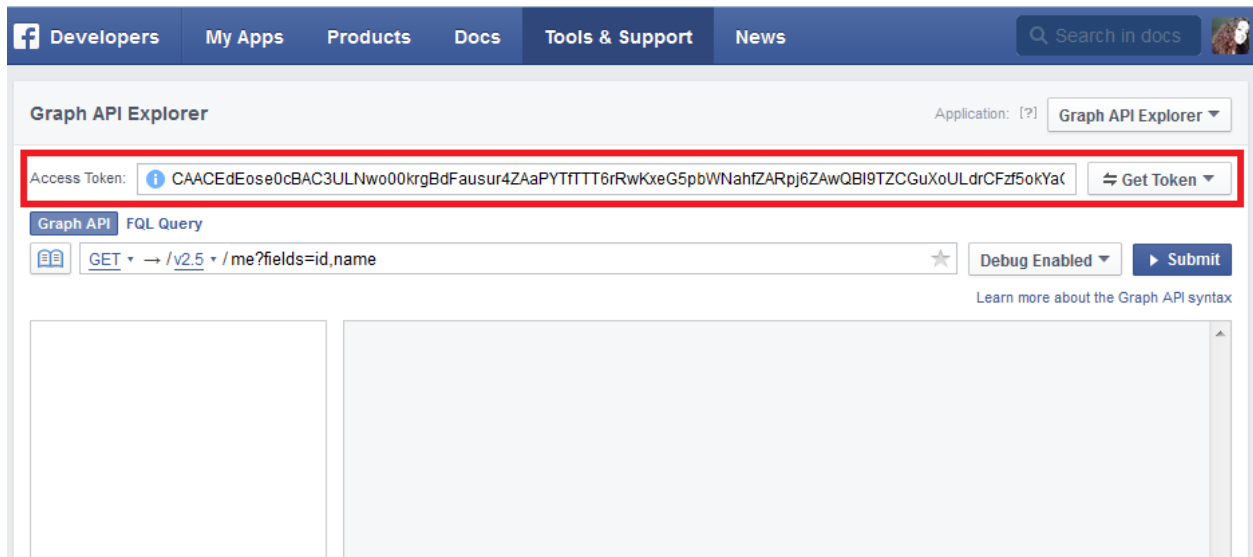


Figure 1: This is the page that you should get when you follow the link <https://developers.facebook.com/tools/explorer/> and login to Facebook. The token in the red box won't appear initially.

1 Connecting to Facebook

1.1 Connecting via a Temporary Access Token

One way to establish a connection with Facebook is to use a temporary **Access Token**. It is straightforward to generate a “temporary token”.

- You need to go to the **Graph API Explorer** webpage (“API” stands for **A**pplication **P**rogramming **I**nterface) following the link <https://developers.facebook.com/tools/explorer/>.
- Now login to you Facebook account.

You should get a page that looks something like Figure 1, but without the token in the red box at this stage.

- Click on **Get Token** followed by **Get User Access Token**, then make sure that **User_about_me**, **User_friend** and **User_location** (at least) are selected to allow the **Graph API Explorer** (and hence **R** and other apps) to access your profile. We will make use of this later.
- Finish by clicking on **Get Access Token**.

Now copy the very long “Access Token” into your **R** script, assigning it to a character variable called **token**. Here is an example:

```
# token generated here: https://developers.facebook.com/tools/explorer
# The token is a character string and needs to be placed in quotation marks
# The token is very long
#
token <- "EAACEdEose0cBA08poCeP3IWR9fbBAokfvUIhevwEM34wZB1qSxLWkY4vNS3UjUcmb7rZAeJ6kpG4UnjupihkFjxAUn0xP"
```

Now **R** can make use of your Facebook temporary access token. Please remember you have to get a new temporary access token about **every two hours**. Facebook and **R** will inform you about the expiry of your token.

Your token needs to be passed as an argument to **Rfacebook** functions that access Facebook, as we shall see.

1.2 Connecting via an App

The above token is an example of a temporary access token in that it only lasts for two hours, after which another token has to be obtained.

An alternative is to connect via an App. This is discussed in <http://thinktostart.com/analyzing-facebook-with-r/>.

In this module, we only work with a temporary access token. Our experience has been that it is possible to access a larger quantity of information with a temporary access token than with an App.

1.3 Installing the Rfacebook Package and Testing your Connection

Try the code below to test your connection.

First, you will have to install the Rfacebook package on your machine if it doesn't already have this. This package should be installed on University machines.

We will help you with this, if you have problems.

Now load the package into R:

```
library(Rfacebook) # load the Rfacebook package
```

Now extract information from a page:

```
my_page <- getPage("plyminternational", token, n = 10) # Get just a few posts for speed
```

```
## 10 posts
```

Please note that page name is obtained from the page URL. Here it is

<https://www.facebook.com/#!/plyminternational>

from which plyminternational was extracted.