# OAuth 2.0

- Widely adopted by Web Service providers
- Allows Applications to act on User's behalf by gaining a token that serves as ID pass to perform limited tasks
- OAuth01 spec: http://tools.ietf.org/html/rfc5849
- OAuth02 spec: http://tools.ietf.org/html/rfc6749

# OAuth process

- The Consumer application requests OAuth authorization to Target Application, ex. LuckyPants requests authorization to Twitter, because Lucky Pants wants to allow users to tie their LuckyPants accounts to Twitter accounts such that when a LuckyPants user creates or rates a book, their twitter posts a message about that

- Target application verifies the Consumer application is who it claims to be, ex. Twitter makes sure the account that created the application is tied to a phone number in US and sends a text message to that number with a secret password and requests the user comes back and enters the secret message

- Once the verification process is complete, the Target application provides the Consumer application with consumer key and consumer secret (think of it as user ID and password for LuckyPants)

# OAuth Process

I want to use your web services
and get your users personal data

LuckyPants

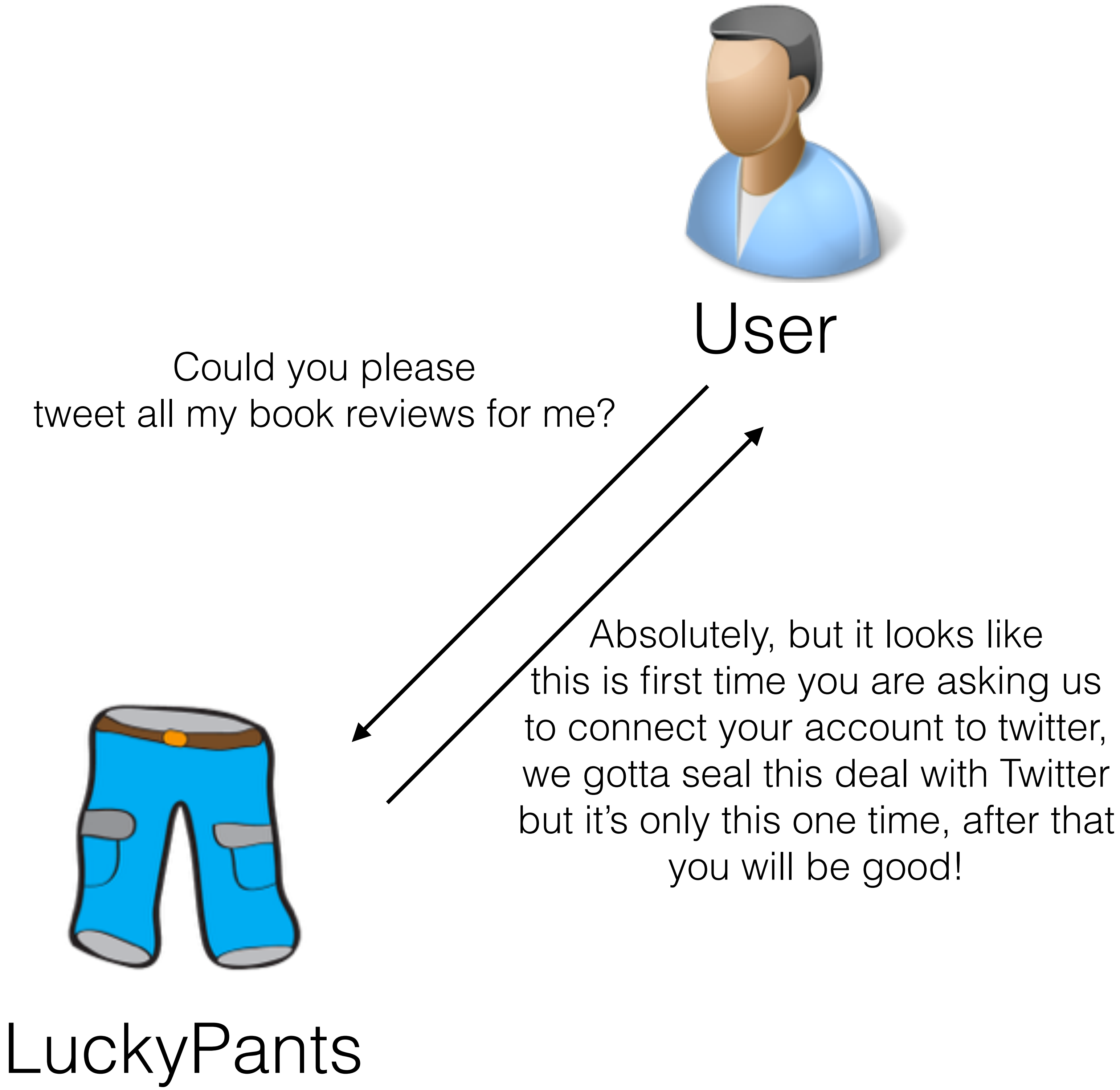
Twitter

Neat! Let me make sure you are
not a hacker… Your account is tied to
a person named Yo Yo
who lives in US and has phone number
xxx-xxx-xxx
I'm going to text a secret code to that number

the code is YYY

Alright, here is Consumer Key and Secret,
make sure you don't share them, because
that's how I will know who you are.
These are just like user name and password
for your email account but they are tied to your application
and since you may have many applications, we create a
new pair of these for each app - go on, do your thing!

# OAuth Process



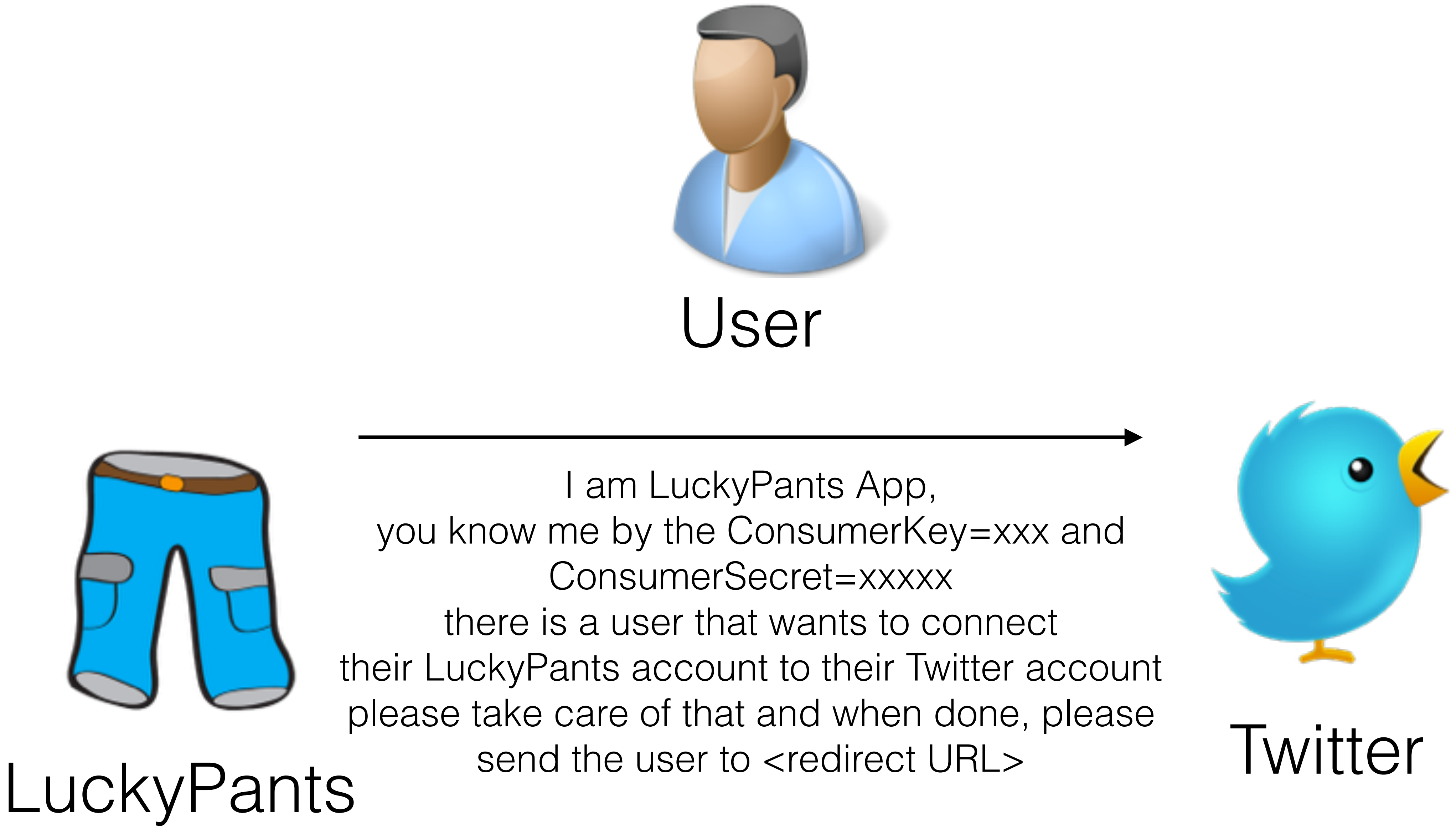
User

Could you please
tweet all my book reviews for me?

Absolutely, but it looks like
this is first time you are asking us
to connect your account to twitter,
we gotta seal this deal with Twitter
but it’s only this one time, after that
you will be good!

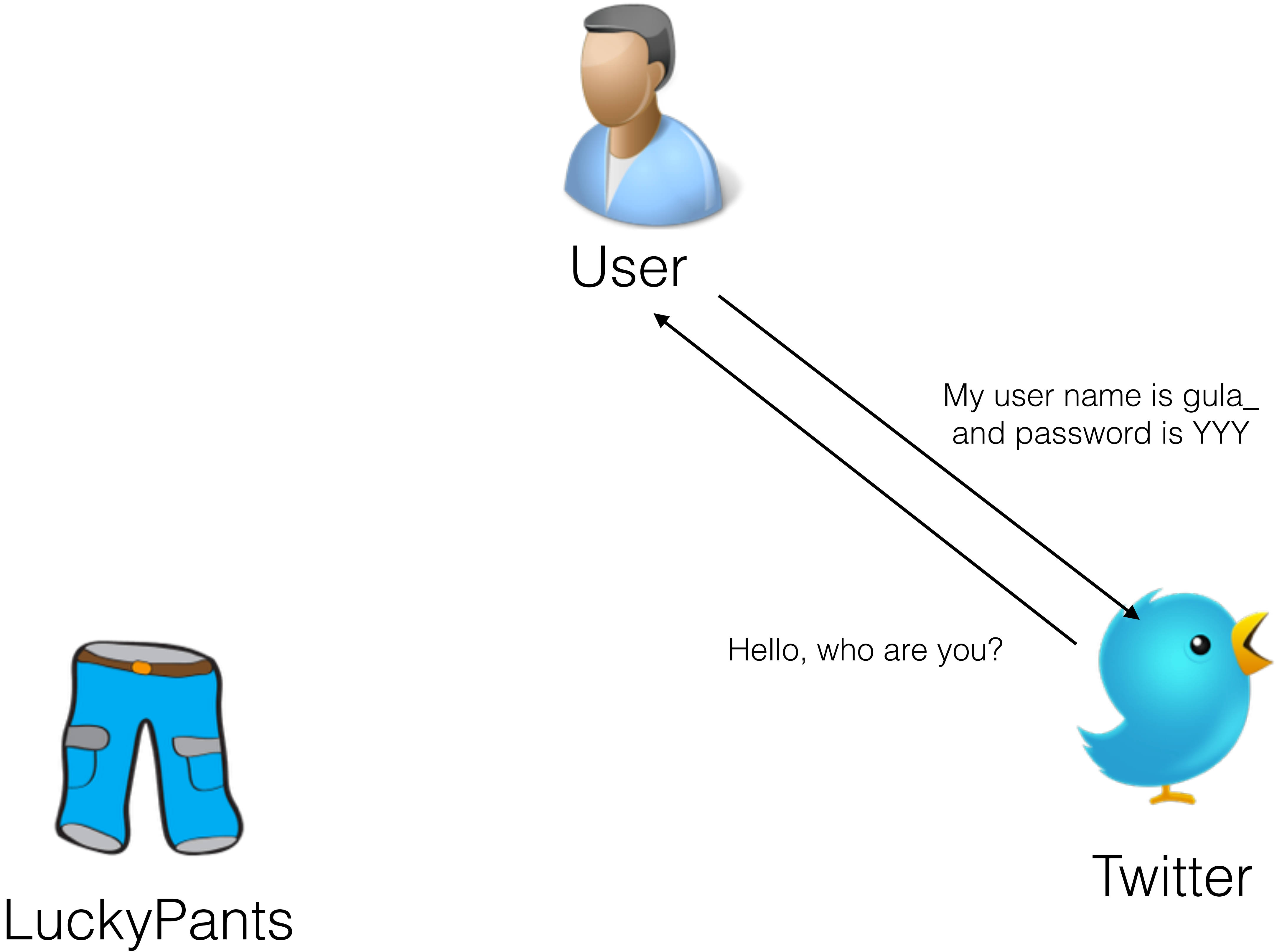
LuckyPants

# OAuth Process



I am LuckyPants App,
you know me by the ConsumerKey=xxx and
ConsumerSecret=xxxxx
there is a user that wants to connect
their LuckyPants account to their Twitter account
please take care of that and when done, please
send the user to <redirect URL>

# OAuth Process



User

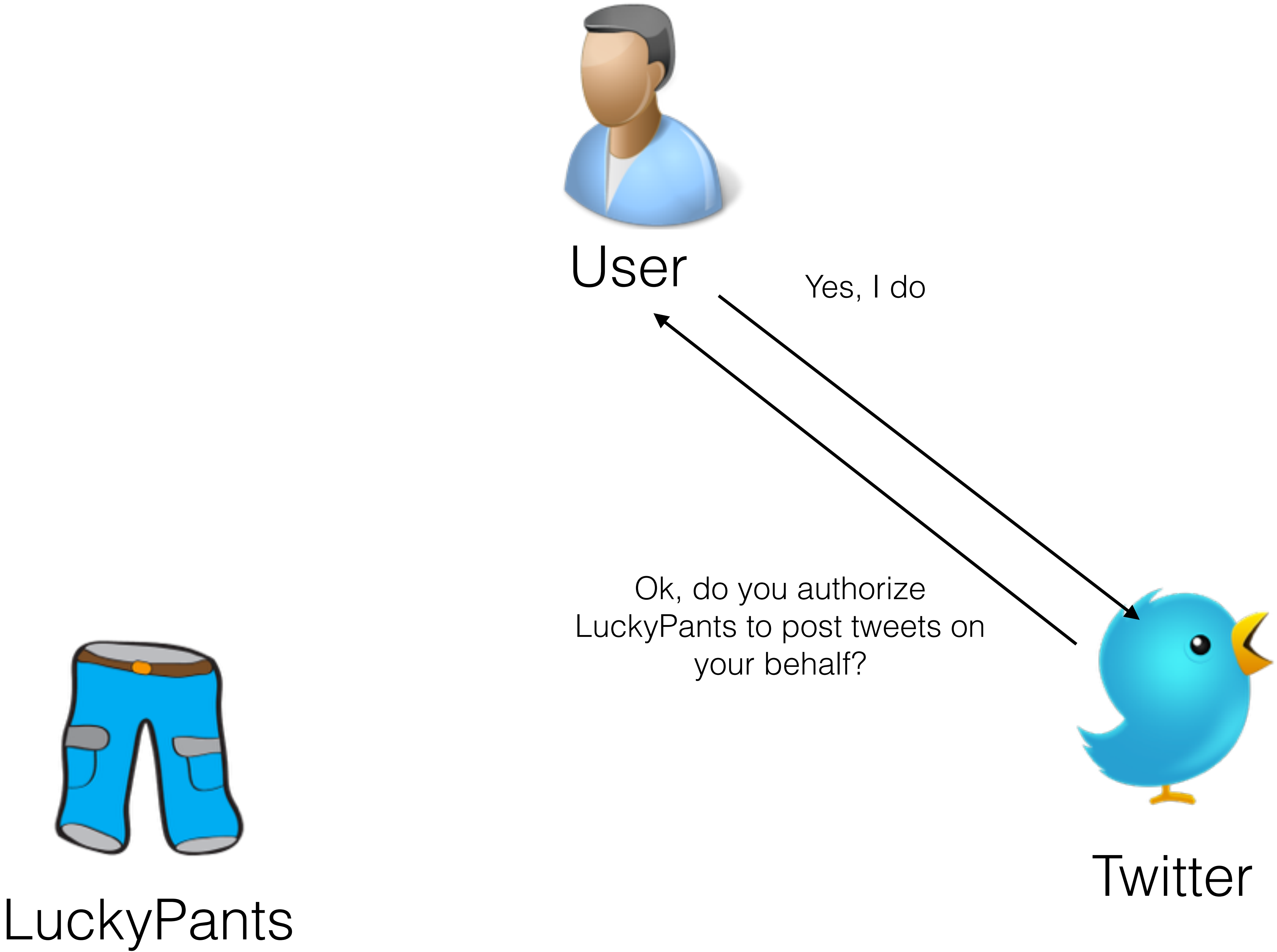
My user name is gula_
and password is YYY

Hello, who are you?

Twitter

LuckyPants

# OAuth Process



User

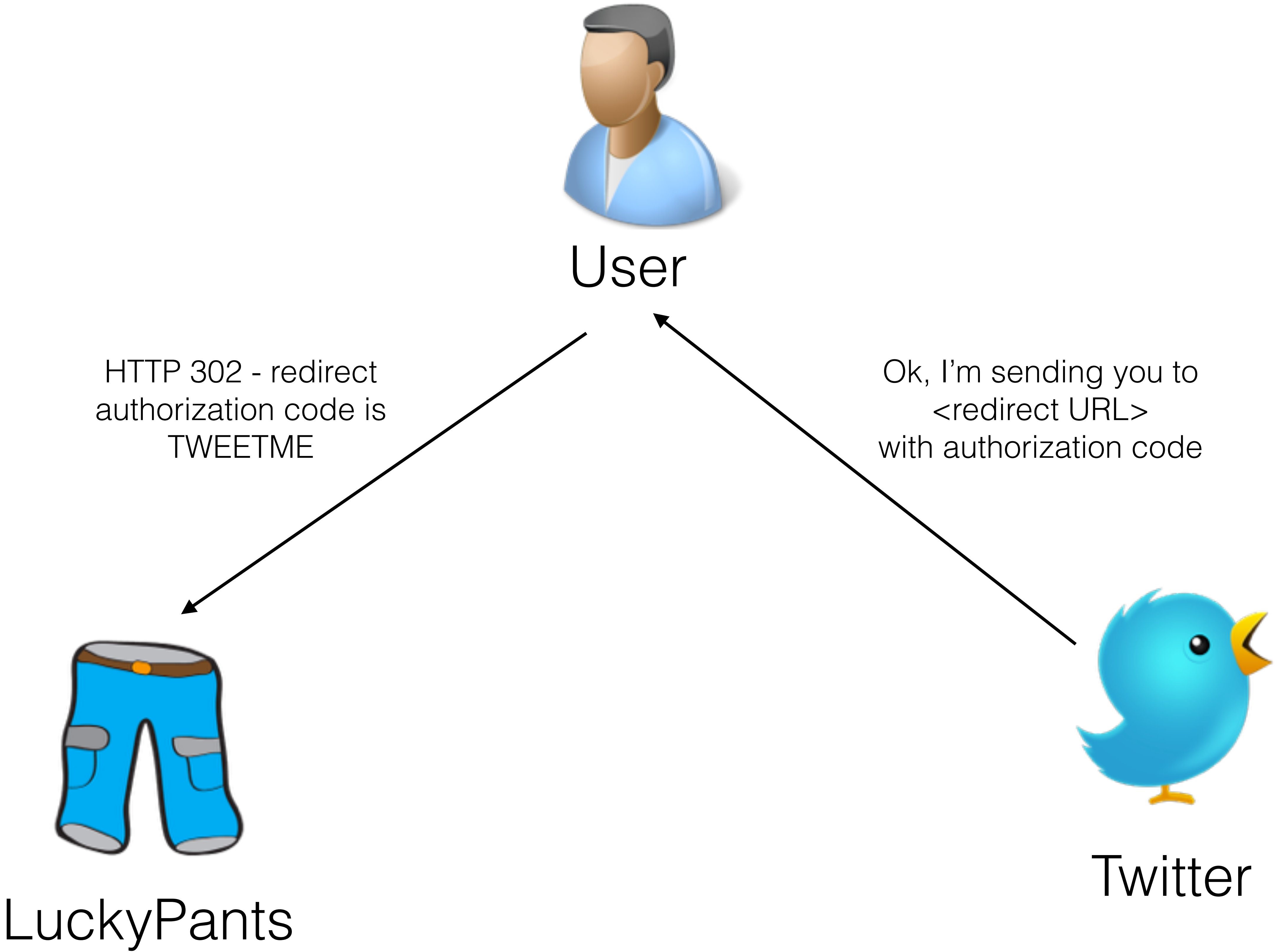
Yes, I do

Ok, do you authorize LuckyPants to post tweets on your behalf?

LuckyPants

Twitter

# OAuth Process



User

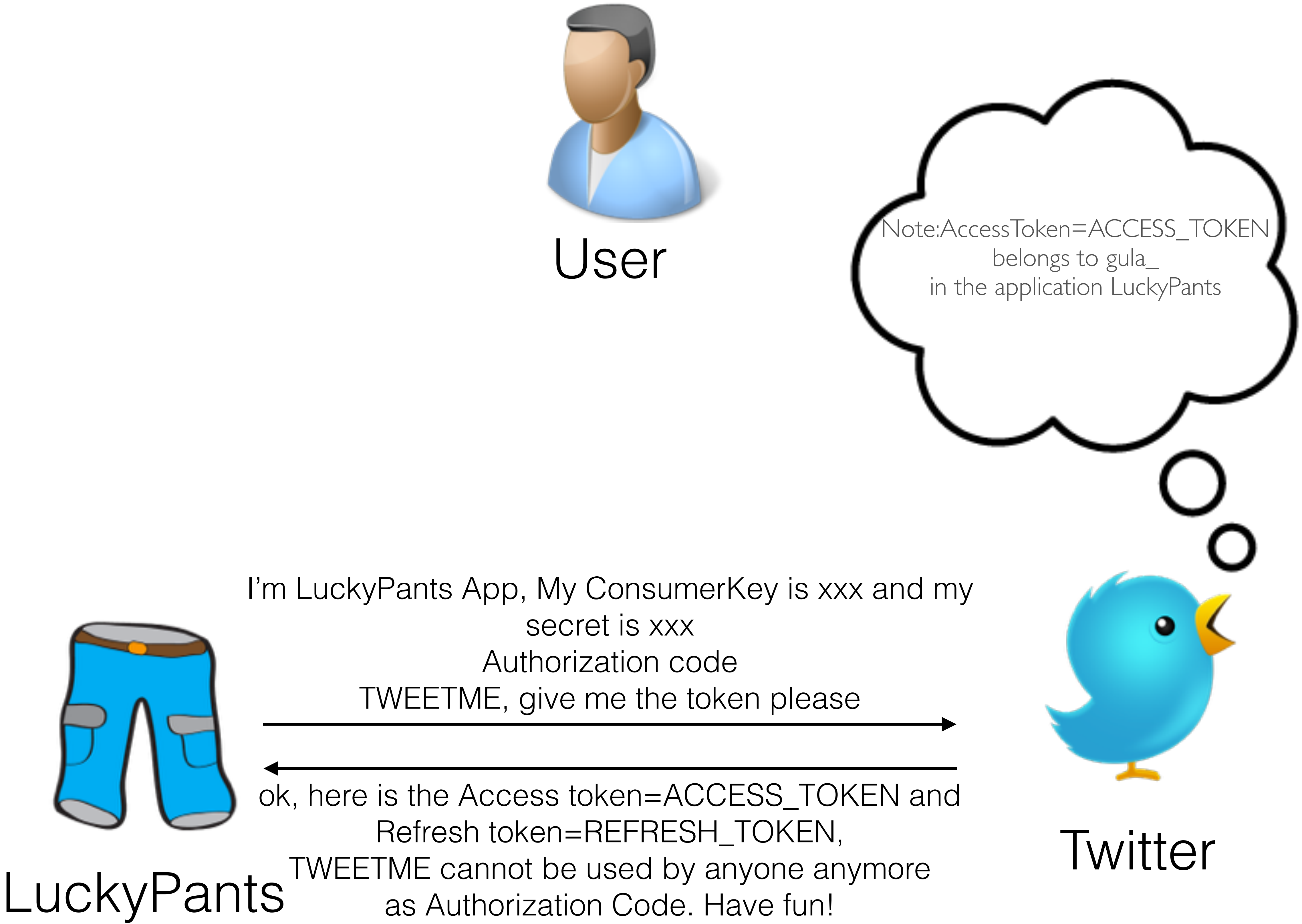
HTTP 302 - redirect
authorization code is
TWEETME

Ok, I’m sending you to
<redirect URL>
with authorization code

LuckyPants

Twitter

# OAuth Process



User

Note:AccessToken=ACCESS_TOKEN
belongs to gula_
in the application LuckyPants

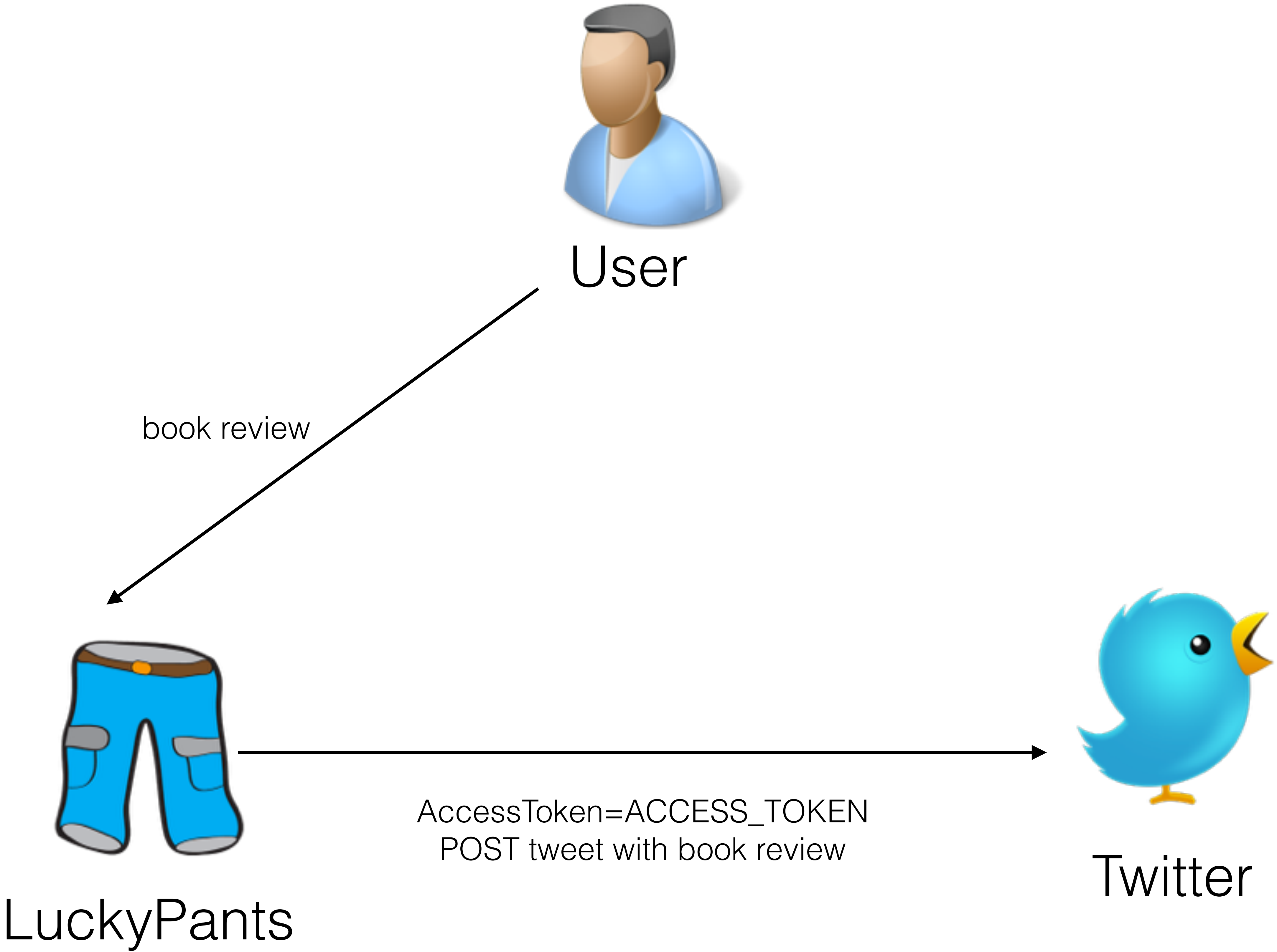
I’m LuckyPants App, My ConsumerKey is xxx and my secret is xxx
Authorization code
TWEETME, give me the token please

ok, here is the Access token=ACCESS_TOKEN and Refresh token=REFRESH_TOKEN,
TWEETME cannot be used by anyone anymore as Authorization Code. Have fun!

LuckyPants

Twitter

# OAuth Process



User

book review

LuckyPants

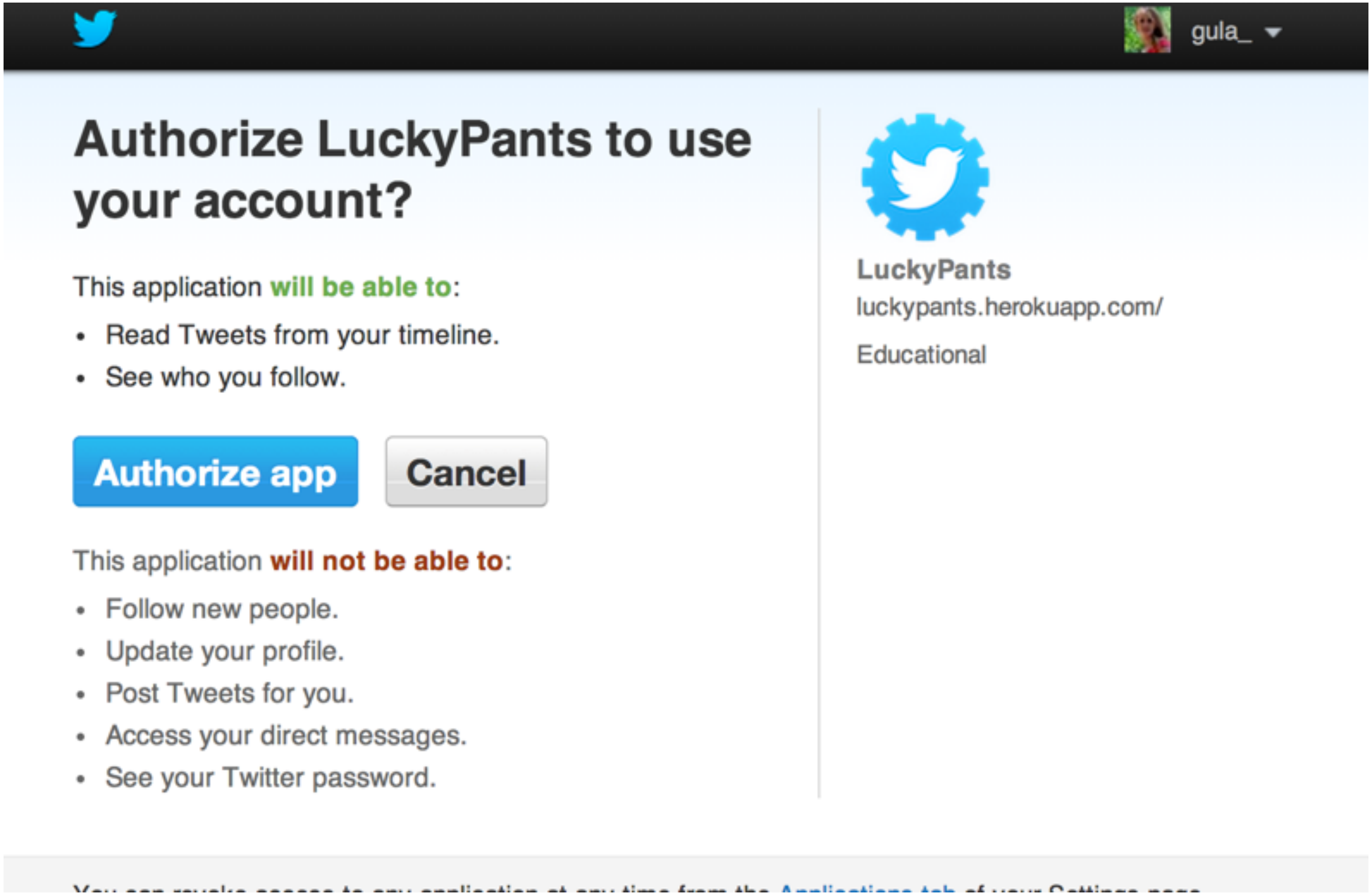
AccessToken=ACCESS_TOKEN
POST tweet with book review

Twitter

# More OAuth resources

- https://developers.google.com/oauthplayground/
- https://apigee.com/resources/facebook

# OAuth Process



## Authorize LuckyPants to use your account?

This application **will be able to**:

- Read Tweets from your timeline.
- See who you follow.

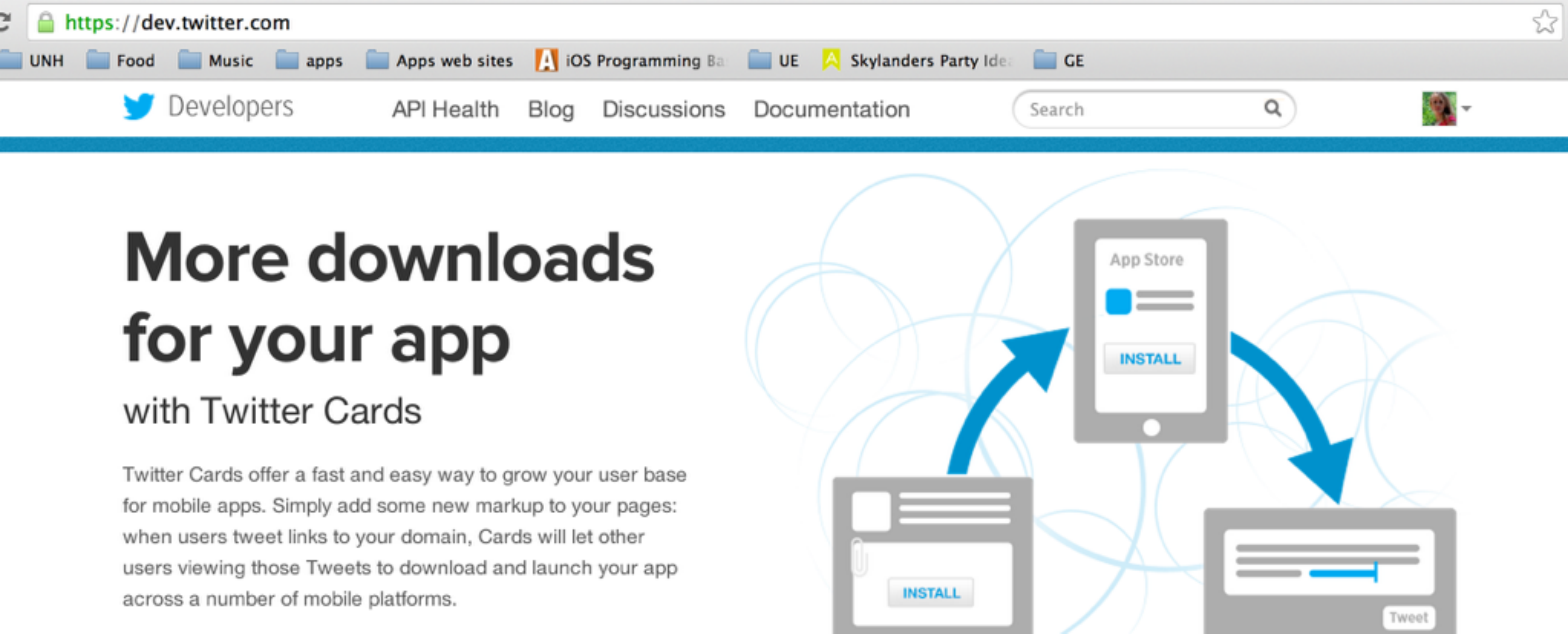
This application **will not be able to**:

- Follow new people.
- Update your profile.
- Post Tweets for you.
- Access your direct messages.
- See your Twitter password.

**LuckyPants**
luckypants.herokuapp.com/
Educational

You can revoke access to any application at any time from the Applications tab of your Settings page.

# Twitter

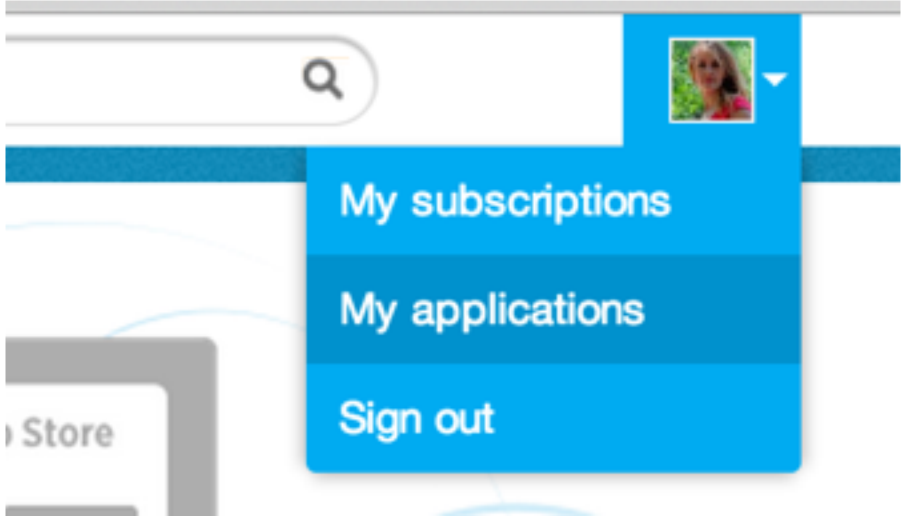


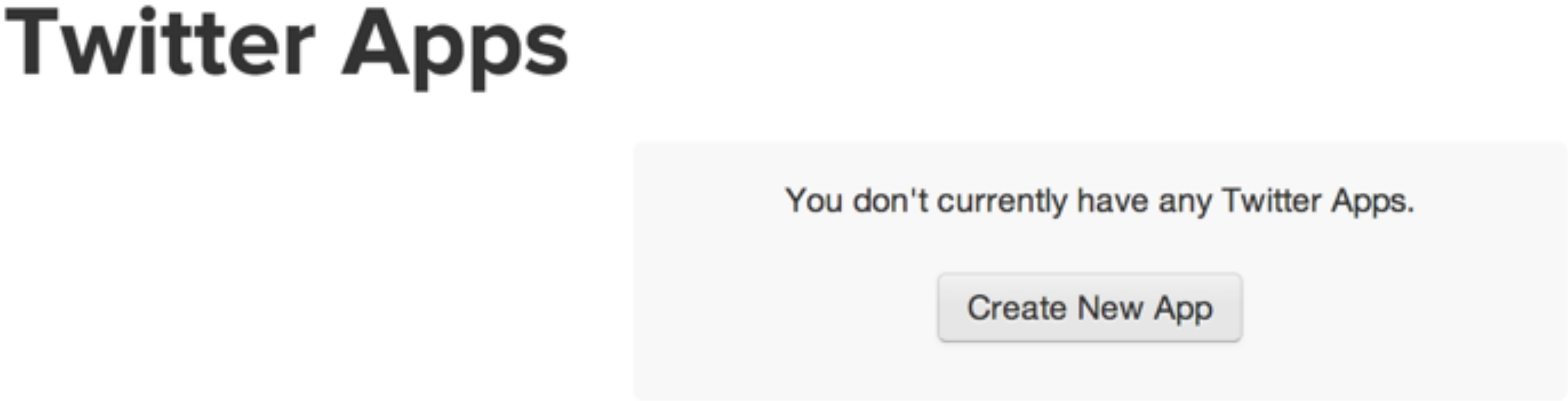
More downloads for your app

with Twitter Cards

Twitter Cards offer a fast and easy way to grow your user base for mobile apps. Simply add some new markup to your pages: when users tweet links to your domain, Cards will let other users viewing those Tweets to download and launch your app across a number of mobile platforms.

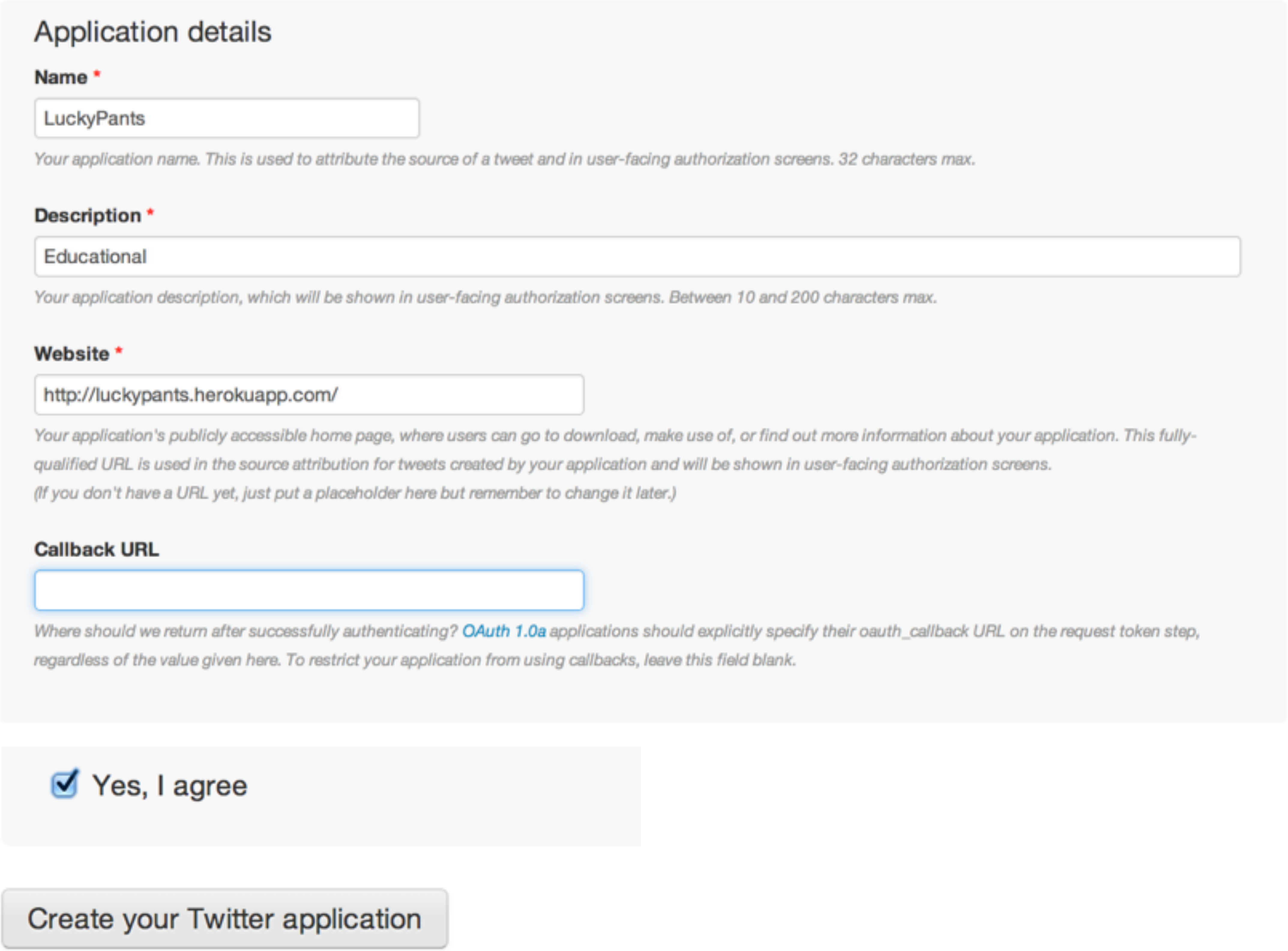
# Twitter




## Twitter Apps

You don't currently have any Twitter Apps.

# Twitter



Application details

**Name** *

LuckyPants

*Your application name. This is used to attribute the source of a tweet and in user-facing authorization screens. 32 characters max.*

**Description** *

Educational

*Your application description, which will be shown in user-facing authorization screens. Between 10 and 200 characters max.*

**Website** *

http://luckypants.herokuapp.com/

*Your application's publicly accessible home page, where users can go to download, make use of, or find out more information about your application. This fully-qualified URL is used in the source attribution for tweets created by your application and will be shown in user-facing authorization screens.*
*(If you don't have a URL yet, just put a placeholder here but remember to change it later.)*

**Callback URL**

*Where should we return after successfully authenticating? OAuth 1.0a applications should explicitly specify their oauth_callback URL on the request token step, regardless of the value given here. To restrict your application from using callbacks, leave this field blank.*

☑ Yes, I agree

# Twitter OAuth credentials

- You should now see API key
- Click on “manage API keys”
- Copy the API key and API secret (AKA consumer key, consumer secret)