Twitter bots can do interesting things.

You ask a question to @DearAssistant (like how many calories in Diet Coke) and it will tweet the answer much like Siri or Google Now. Tweet your location to @WhatTheFare and it will let you know the Uber fare to your destination. The @HundredZeros bot tweets links to eBooks that are free on Amazon. The @Big_Ben_Clock bongs every hour. The @GrammarNazi bot finds tweets with misspelled words and responds with the correct spelling. The list is endless.

Twitter Rules around Automation

In the following tutorial, we will learn how to quickly create Twitter bots that can:

1. Retweet tweets
2. Favorite tweets
3. Reply to tweets
4. RT tweets but after adding their own comment
5. Auto Follow Twitter users

Creating these Twitter bots is easy but before you get started, please make sure that you have read the Twitter Rules around automation. It says that you may not use the Twitter service for the purpose of spamming anyone. Some of the factors that are taken into account when determining what conduct is considered to be spamming are:

- If your updates consist mainly of links, and not personal updates;
- If you send large numbers of duplicate @replies or mentions;
- If you send large numbers of unsolicited @replies or mentions;
- Randomly or aggressively following, favoring or Retweeting Tweets;
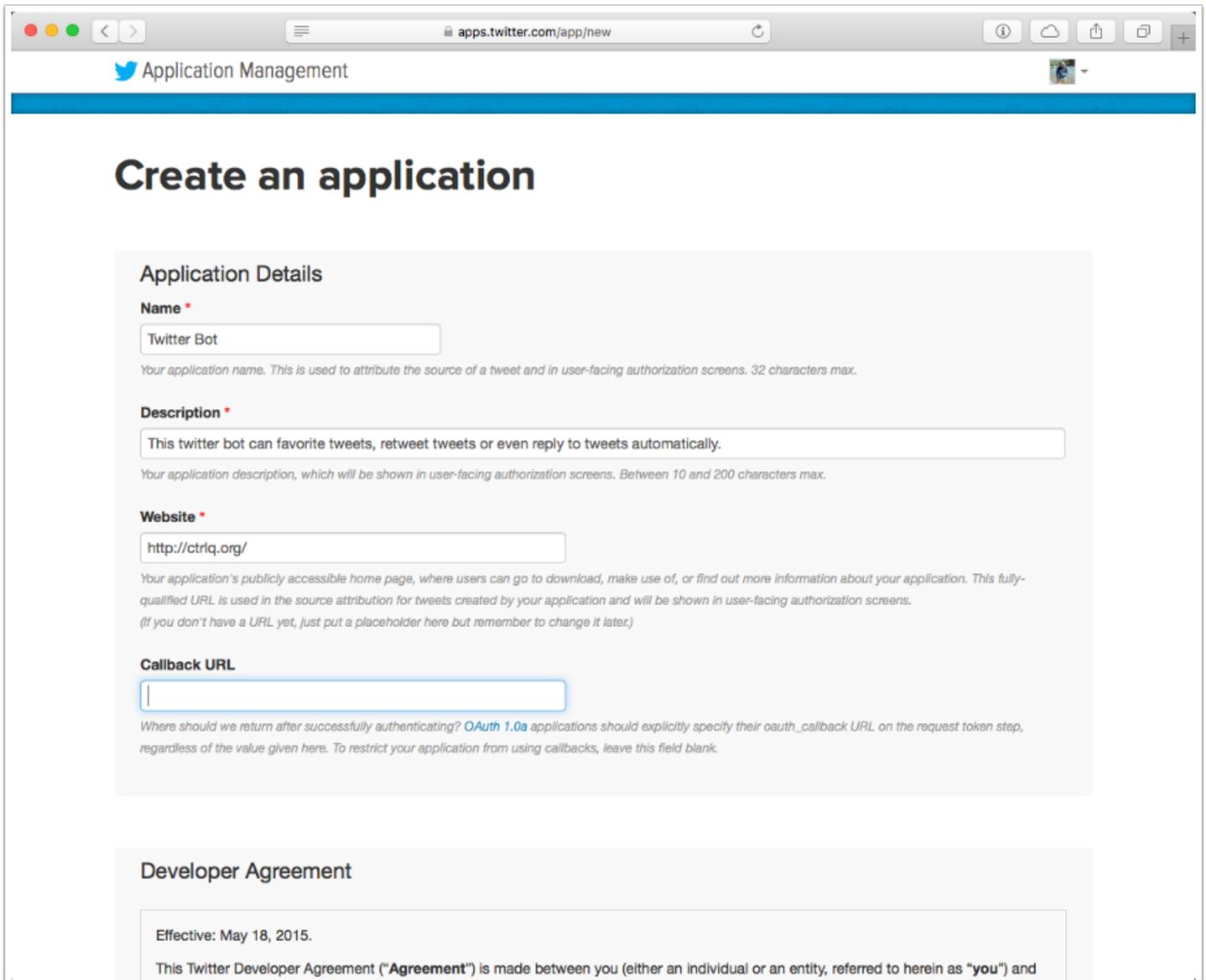
The rules also say:

You may not develop any application that allows for favoriting of Tweets in a bulk or automated manner. Aggressive favoriting is a violation of the Twitter Rules. Automation of Retweets often leads to spam and other negative user experiences; therefore, Retweeting in a bulk or automated manner is prohibited. Automated Retweeting is permitted for apps or accounts that Twitter deems to provide a community benefit.

Step 1: Create a new Twitter App

It is recommended that you **create a new Twitter account for the bot** and not use your main account. Once you have created an account, associate your mobile phone with the Twitter account (Go to Settings - Mobile and verify your phone number). This is required because Twitter would only allow accounts that have a mobile phone associated with them to build apps and bots.

Go to https://apps.twitter.com/app/new and create a new Twitter bot. Enter the application name (say *My First Twitter Bot*), add a description, and put any URL in the website field - like http://ctrlq.org/. Accept the terms and click the "Create" button to build your first Twitter bot app. You can leave the Callback URL field blank.
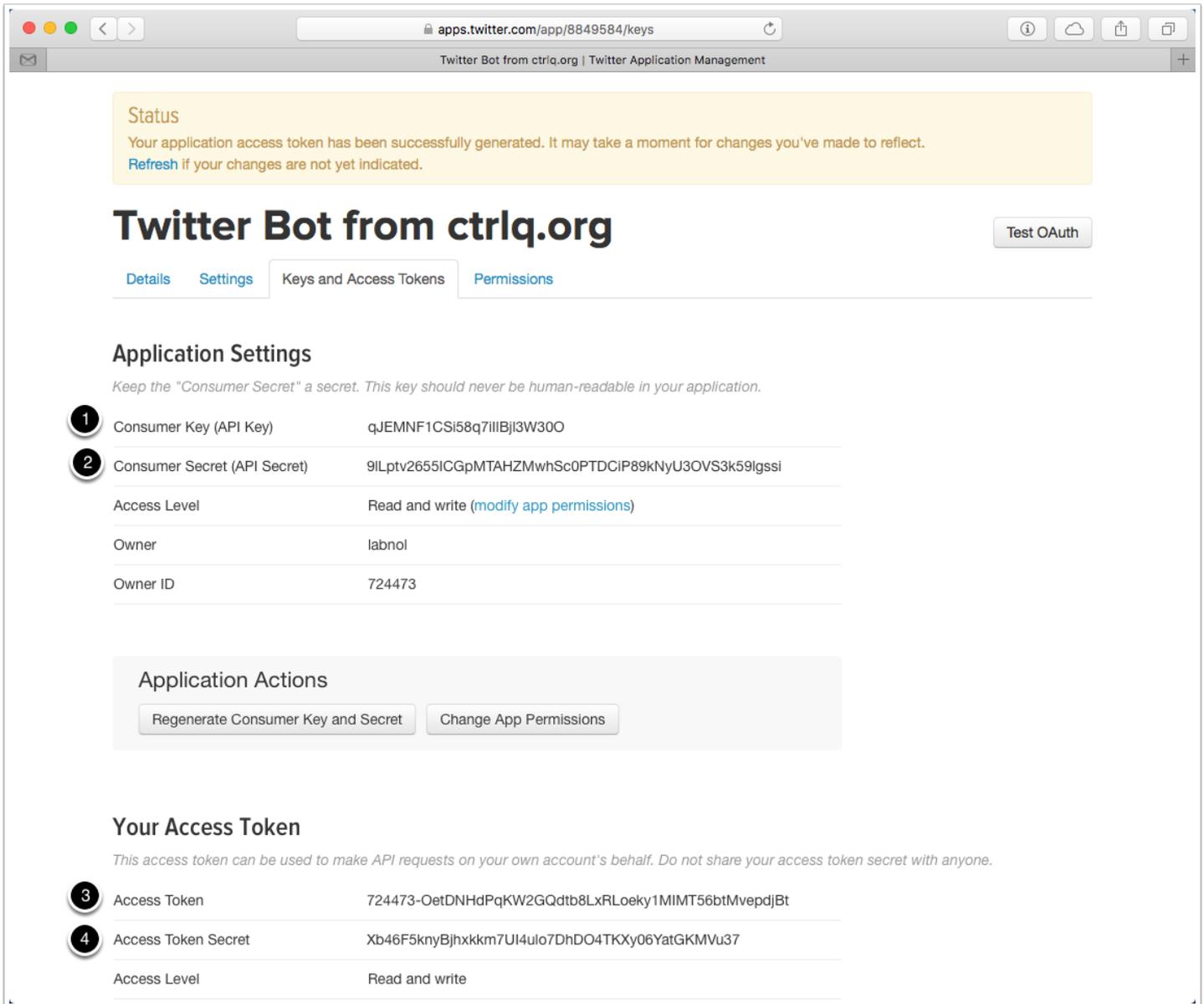
Step 2: Generate the Twitter Keys

On the next page, click the *Keys and Access Tokens* tab and then click the *Create my Access Token* button to generate the Consumer Keys and Access Tokens for your Twitter bot. We'll need them in the later step.
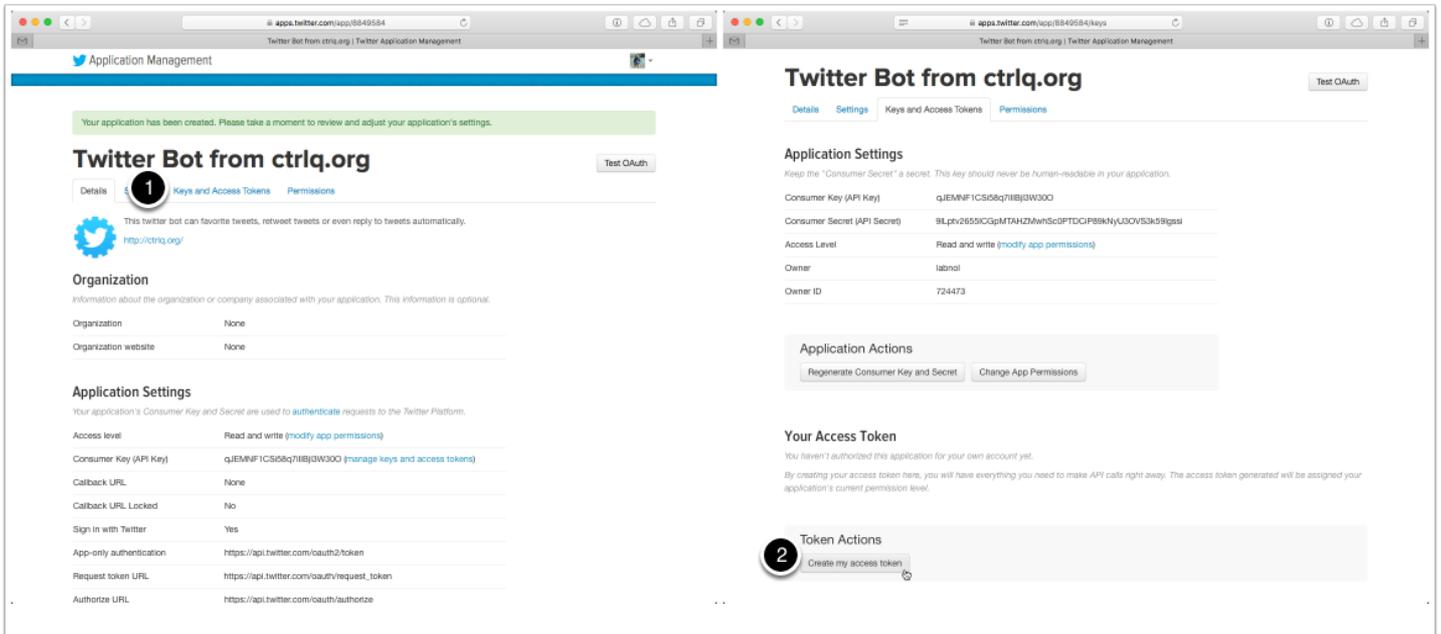
Step 3: Note the Keys and Tokens

Twitter will now generate the keys and secret tokens for your Twitter Bot, make a note of these values and do not ever share them with anyone.

Step 4: Copy the Twitter Bot

Now that our Twitter App is ready, it is time to create the Twitter Bot using Google Scripts. Click the link to the Google Sheet that you received in your email to copy the sheet in your own Google Drive.
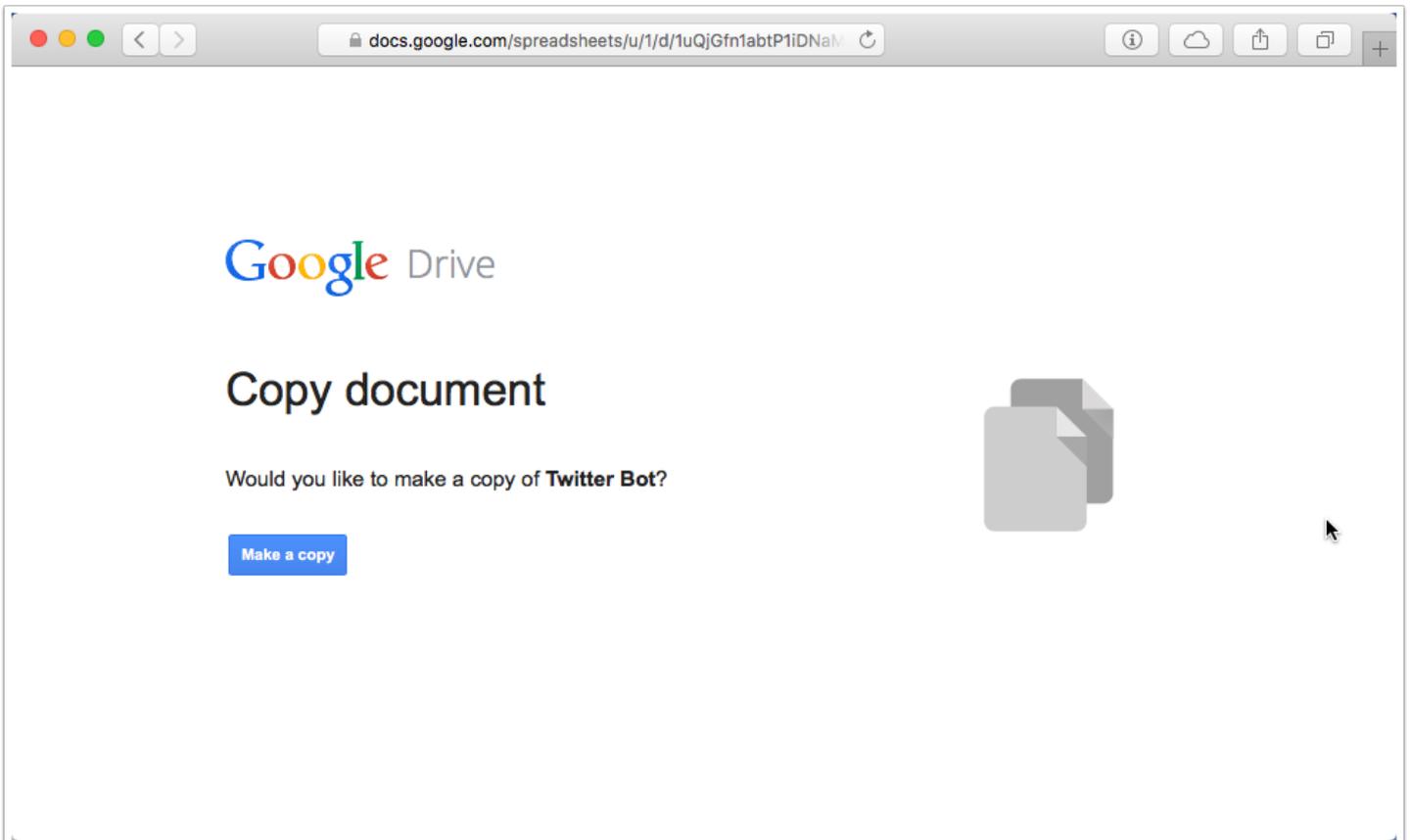
Step 5: Configure the Bot

In the Google sheet, go to the Twitter Bots menu and choose Configure.
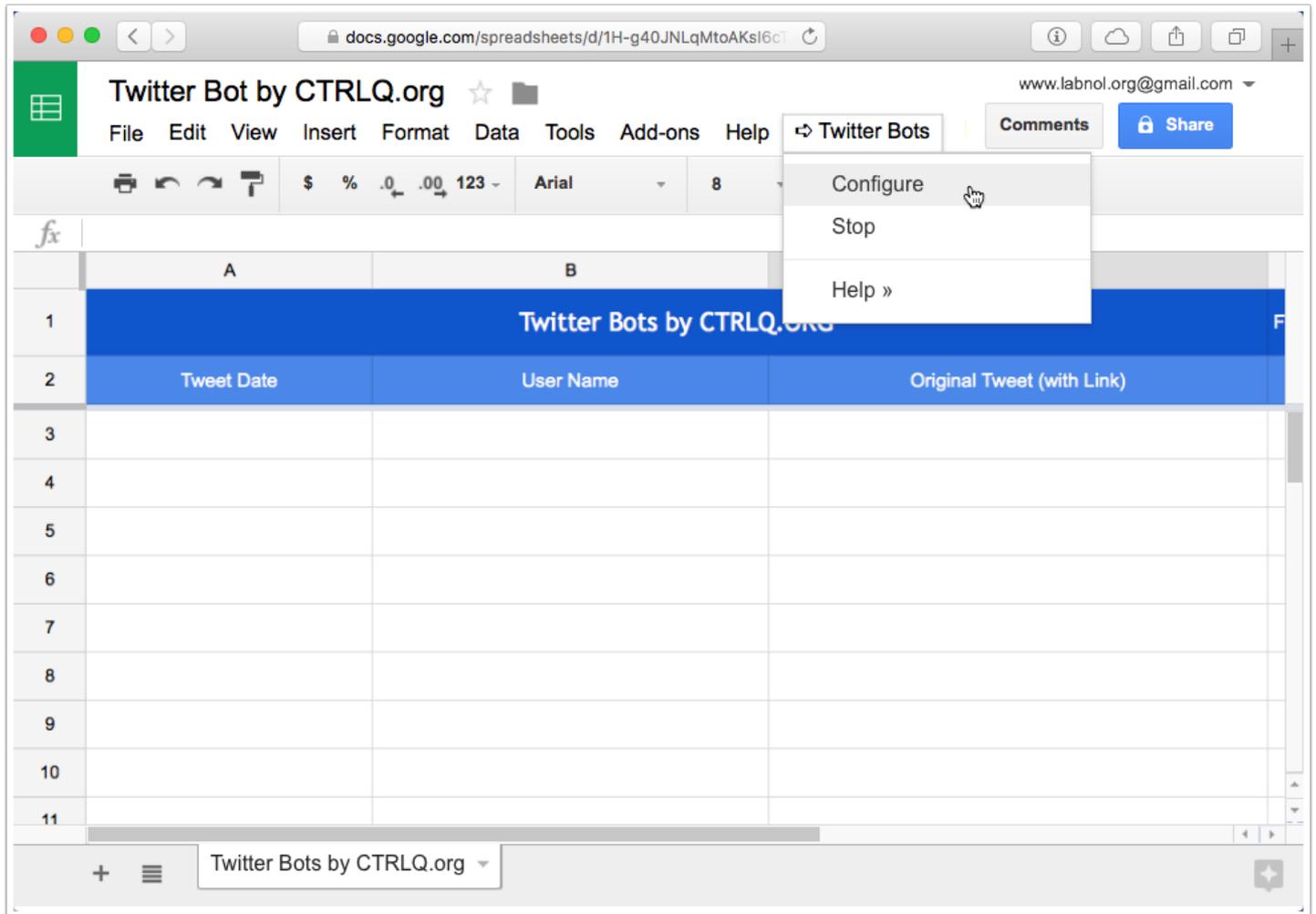
Step 6: Authorize the Bot

If you are running the Google Sheet for the first time, you may have to authorize the sheet to connect with Twitter. Click "Continue" when the Authorization Required dialog pops-up and then click Allow at the permissions prompt.

This Twitter bot runs in your own Google Account and connect directly to Twitter via Twitter API and Google APIs. It does not share any of your data with any service.
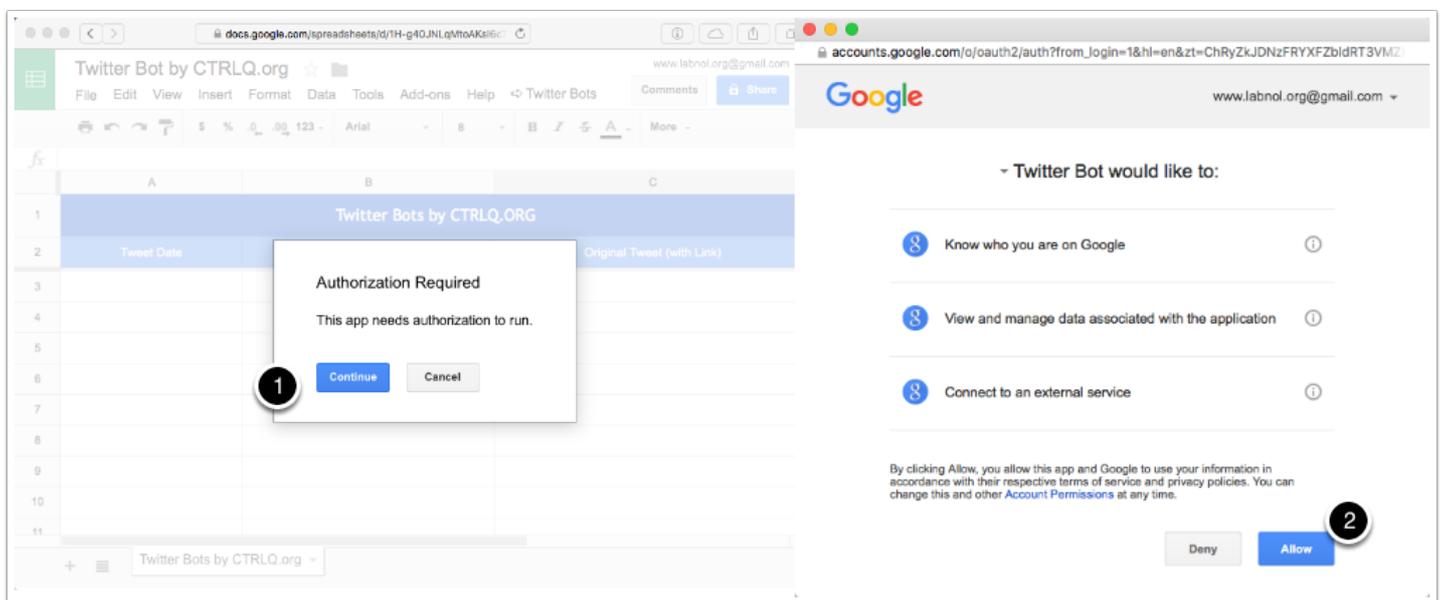
Step 7: Write the Bot Rules

The bot is almost ready now. Enter the Twitter Keys that you created in Step #3 in the corresponding inbox boxes.

Next, we'll write rules for our Twitter bot. For instance, we may have a rule that searches for the word "acommodate" and replies with the text "I think the correct spelling is accommodate". Another rule could favorite tweets sent by @BarackObama containing the word India. In this case, the search phrase would be from:BarackObama India and so on.
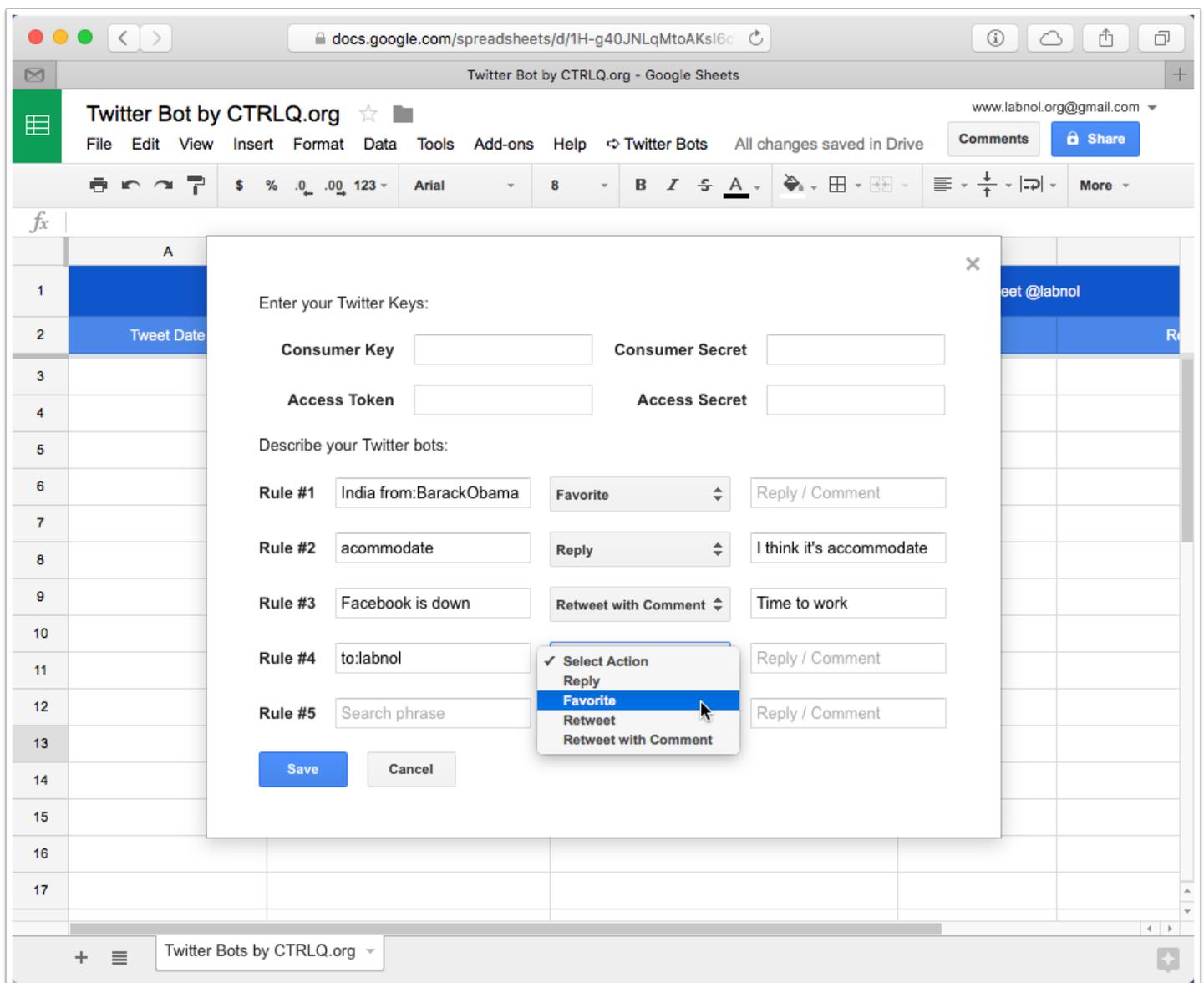
Step 8: Start the Twitter Bot

Once you've written all the rules, click the Save button to run your Twitter bots. The bot will send a test tweet to @labnol to test your Twitter keys and if the connection is successful, the bots will go live.

They will run in the background every 10-15 minutes on Google Servers and you can close the Google Sheet as well. All the bot activity will be logged in the Google Sheet so you know what's happening behind the scenes.

Here's a sample tweet sent by our Twitter bot (Rule #2)
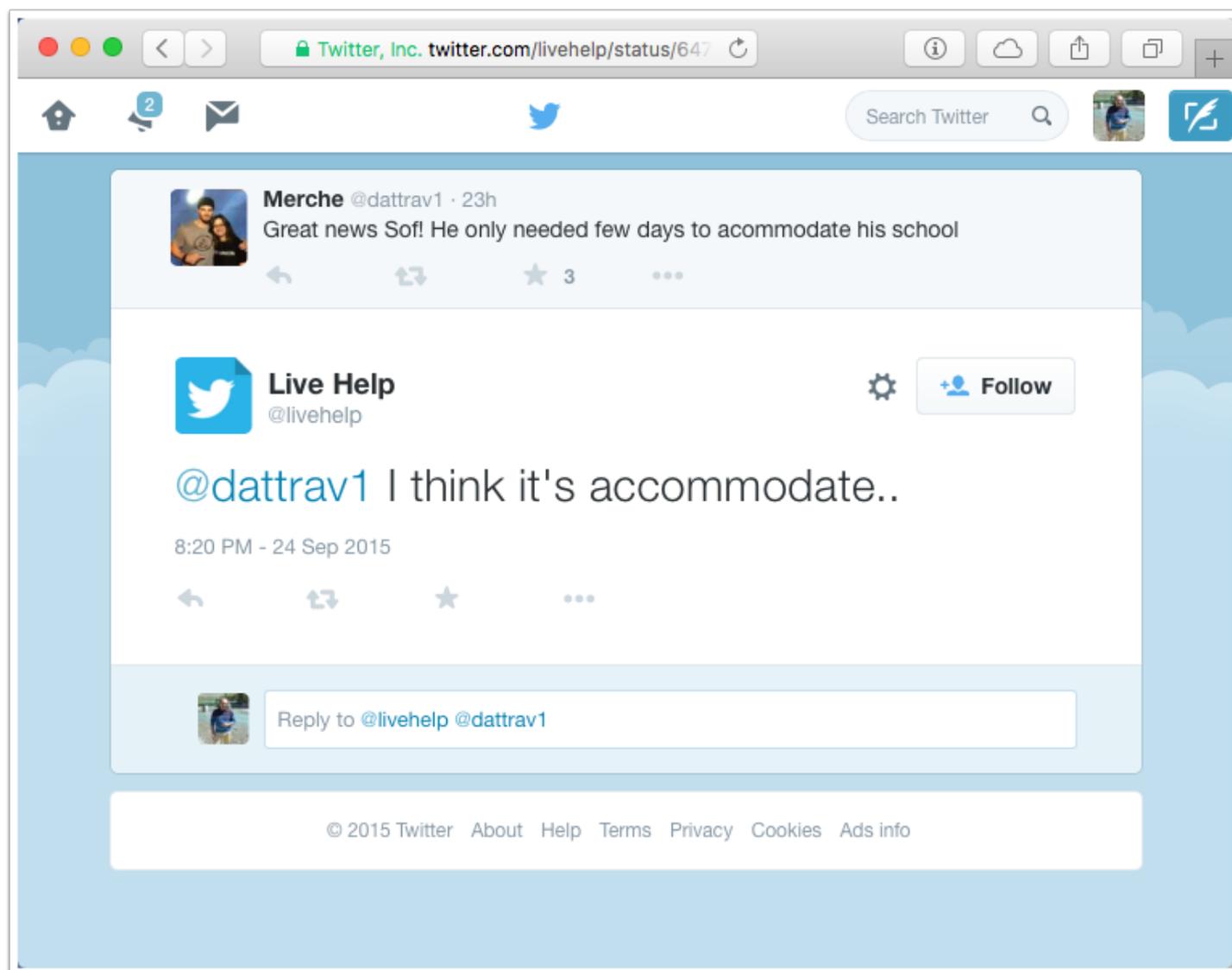
Twitter Bot - FAQ

1. How many bots can I create?

You can create up to 5 rules per sheet and each rule is equivalent to a separate bot. If you need more bots, create another copy of the Google sheet and repeat all the steps.

2. How do I stop the Twitter bot?

Go to the Google sheet, choose the Twitter Bots menu and select Stop to deactivate the bot.

3. My Twitter bot is not working. I am getting an error that Twitter is unable to perform write operations.

It is likely that your Twitter app has been suspended for retweeting / favoriting too quickly. Remove the RT/favoriting rules and create a new Twitter app.

4. Why is the Twitter bot requiring access to my docs and email?

The Twitter bot uses the Twitter library and this is configured to email the user in the event of a failure. Similarly the same bot can be used to write to Google Docs as well instead of sheets. Hence it is requiring access to these Google Services.

5. I think someone else is using my Twitter keys. What should I do?

Go to apps.twitter.com, open your Twitter bot app and regenerate the keys. This will render the other keys useless.

6. Is my data 100% safe?

The Twitter bot uses Google Apps Script to directly connect to the Twitter API and no other third-party has access to even a bit of your data.

Next Steps

You can get the Twitter Bot app from Digital Inspiration. We've created more useful Twitter apps include:

- Twitter Bot - Setup your own Twitter bots that can @reply to tweets, retweet and favorite tweets.
- Tweet Archiver - Save tweets for any #hashtag in a Google Sheet.
- Personalized Tweets - Send tweets and DMs in bulk from a Google Sheet.

All the Twitter bots are written using Google Scripts. For support and customization, contact Amit Agarwal at amit@labnol.org or tweet @labnol.