Twitter Tracery Bot

(CheapBotsDoneQuick Alternative)

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This is a quick guide on how to set-up Twitter-Quotes-Bot either using a free platform called *'<u>Replit</u>'* or it can also be hosted on a server if you have access to one.

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Set-Up Using Replit :



- 1. Sign up on <u>replit.com</u>
- 2. Close/Skip/Dismiss any welcome screens that might pop up
- **3.** Go to <u>https://replit.com/@loonathedorm/Twitter-Tracery-Bot</u>
- 4. Click on 'Use Template'



5. In the new window that shows up, change the name to anything you like. Then, Click '<u>Use Template</u>' again.



6. Dismiss any welcome screen or any screen asking for missing secrets/details.

- Now we're moving towards setting up our Twitter Developer Account.
- We need to get twitter developer account credentials.

7. Make sure you're logged in to your Twitter bot account and navigate to <u>developer.twitter.com</u>

8. Click on 'Developer Portal' on the top



9. Scroll down and click 'Sign up for Free Account'

We do not need the expensive af paid plans.



 Now you need to describe your bot's functionality in 250+ words.

10. Tick all the checkboxes and click submit.



Now on the projects window, click the settings gear icon besides the default project app.



12. Scroll down to 'User Authentication Settings' and click 'Set Up'

User authentication settings

User authentication not set up

Authentication allows users to log in to your App with Twitter. It also allows your App to make specific requests for authenticated users.

Set up

13. Tick 'Read and Write'



14. Tick 'Web App, Automated App or Bot'

Type of App (required) The type of App enables OAuth 2.0 Authentication. () Native App () Public client () Web App, Automated App or Bot ()

Confidential client ①

15. Under App Info, Enter your Twitter profile URL for the <u>Callback URL</u> and <u>Website URL</u>. All other fields are optional so we skip those and click 'Save'

• A window shows up with OAuth Client ID and secret. You can save these if you want but we do not need them for our bot and you can always re-generate these if you need them in the future.

16. Click Done

17. Now under your project app, click 'Keys and Tokens'



18. Under 'Consumer Keys' click 'Regenerate' for <u>API Key</u> <u>and Secret</u>.



19. Save both the keys that pop-up in a notepad, we need these in the next steps. These keys are not to be shared with anyone as they allow direct access to your Twitter account.

Did you save your API Key and API Key Secret?
 Save them in a secure location Treat them like a password or a set of keys If security has been compromised, regenerate them DO NOT store them in public places or shared docs
API Key ①
Сору
API Key Secret ①
Сору
Yes, I saved them

20. Do the same for <u>Access Token and Secret</u> under Authentication Tokens and save these as well.

21. Now come back to replit, Under Tools, click on Secrets.



22. In the secrets window on the right side, we need to add 4 secrets as shown in the picture. To add a secret, click 'New Secret' (If the secrets names already exist, just fill in the appropriate values.)

Configure Repl × 👌 Secrets × ×	+	:
Secrets	{} Edit as JSON 🖽 Docs + New Se	cret
ට් consumer_key	ට ල •••••	:
ට consumer_secret	ᠪ ⊚ ••••••	:
ට access_token	ᠪ ⊚ ••••••	:
ට access_token_secret	ᠪ ⊚ ••••••	:

 The names and values are as follows: consumer_key = API KEY consumer_secret = API KEY SECRET access_token = ACCESS TOKEN access_token_secret = ACCESS TOKEN SECRET

23. Enter the values that we saved from previous steps.

24. Now come to the Files tab on the left side. Click on the settings file.



25. Change the 'time_between_tweets' value on line 4 to whatever interval you want. This value is in seconds.
 Recommended to set something above 1800.



26. Make sure line 7 'using_repit' says True.

- You can change options in **[OTHER SETTINGS]** as per your preference
- For replit you do not need to make any further changes to the settings file.

27. Now from files, click on the bot.json file. It already contains some default text.

	■ README.md × settings × bot.json × × +			
∽ Files 🕀 💽 🗄	📀 bot.json			
🗅 .gitignore	<pre>1 ~ { 2 ~ "origin": ["The future belongs to those who believe in the beauty of</pre>			
0 bot.json	their dreams.", "In the middle of every difficulty lies opportunity.","Don't			
لمر CBDQ-like Python Bot Hos	watch the clock; do what it does. Keep going.","Success is not final, failure is not fatal: It is the courage to continue that counts.","Believe			
🍦 keep_alive.py	you can and you're halfway there.", "The only limit to our realization of			
LICENSE	tomorrow will be our doubts of today.","The best way to predict the future			
🔷 main.py	it.", "Difficulties in life are intended to make us better, not			
✓ Tools	success."			
naranase nennkkei nnrs	3			
	4			
Extensions Git Markdown	o 3			

- 28. Replace the contents of this file with the contents of your json file that was being used with CheapBotsDoneQuick. (Tracery Grammar format)
- 29. Now we are all set up. Time to run the bot.

Click on the green 'Run' button on the top.



• Keep an eye on the console window at the bottom right corner. It will show you the updates and info. Give it a few minutes to set everything up.

• When it's successful you should see something similar to the picture. You should see below shown message on the top window and the info for the first tweet that your bot has posted in the bottom console window.

Configure Repl × 🔒 Secrets × 🖵 Webview ~ × +	:
C twitter-quotes-bot.cidimi9739.repl.co	ß
Bot Script is running! If the bot still isn't functioning, check replit console for more details.	
>_ Console \sim \times $$ Shell \times +	:
<pre>Replit: Updating package configuration ####> Running in replit mode ####> Obtained Credentials ####> Starting loop #####> Time between tweets set to 1800 seconds * Serving Flask app '' * Debug mode: off WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead. * Running on all addresses (0.0.0.0) * Running on http://127.0.0.1:8080 * Running on http://172.31.196.22:8080 Press CTRL+C to quit Posted: ID=1684418282651275265, QUOTE=The only limit to our realization of tomorrow will be our doubts of today.</pre>	n

• You should also see a new tweet on your Twitter profile.

- Now we need to set-up another service that will keep the bot awake.
- **30.** From the WebView window on the top, we need to copy the URL shown. (I'd recommend not sharing this url anywhere else publicly)



- **31. Go to <u>cron-job.org</u> and sign up.** (You can just use random details and a secondary email for this)
- 32. On the dashboard, click 'CREATE CRONJOB' on the right side.

≡ cron-job.org			ENGLISH ~ D LOGOUT
Dashboard Dashboard			CREATE CRONJOB
O enabled cronjobs	0 disabled cronjobs	0 successful cronjobs	O failed cronjobs

33. Enter details as shown below.

- **Title:** 'Anything you want'
- URL: Paste the URL we copied from replit earlier, include 'https://' at the beginning of the URL to avoid any errors.

34. Make sure 'Enable Job' is turned on. (Refer next picture)

35. Set 'Execution Schedule' to <u>1 minute</u>.

Create cronjob			
Ö	ΞĖ		
COMMON	ADVANCED		
Title Twitter Quotes Bo	ot		
URL* https://twitter-quo	URL* https://twitter-quotes-bot.cidimi9739.repl.co/		
Folder	Folder		
Enable job Save responses in job history			
Execution schedule			
● Every 1 minute(s)			
O Every day at 0 ▼ : 00 ▼			

- 36. Next, in the notify section you can enable the first option for email notifications if/when the bot goes down.
- 37. Make sure the third option is disabled.



• You should now see your monitor and its uptime on your dashboard and in the Cronjobs section. This should keep the Twitter bot running constantly.

Cronjobs					
Cronjobs			S		☐ MANAGE FOLDERS
Title, URL		Last execution	Next execution Actions		
		0	Twitter Quotes Bot https://twitter-quotes-bot.cidimi9739.repl.co/	-	Today at 10:03:00 AM

- Note : Since replit is a free service, I've noticed that regardless of this monitor, the bot might go down sometimes but should also come back online automatically.
- For full 24x7 uptime you will need to host the bot on a Linux cloud server or something similar but that will most likely be a paid service.

-----End of Replit Guide-----

Set-Up for Linux :

1. Clone the GitHub repo and move into its folder:

git clone https://github.com/loonathedorm/Twitter-Tracery-Bot.git && cd Twitter-Tracery-Bot

2. Run the following command to install the required packages (Assuming you already have python installed):

pip3 install tweepy flask tracery3 colorama

- 3. Follow <u>steps 12 25</u> from Replit Section to obtain Twitter Developer Account credentials and save them in a notepad.
- 4. Open settings file mentioned in <u>step 29</u> of the replit section:
 - a. Add Twitter Developer credentials into the settings file under the appropriate options :
 - i. consumer_key = API KEY
 - ii. consumer_secret = API KEY SECRET
 - iii. access_token = ACCESS TOKEN
 - iv. access_token_secret = ACCESS TOKEN SECRET
 - b. Edit <u>time_interval</u> value in line 4 as per your choice. Recommended above 1800. The value is in seconds.
 - c. Set value of `<u>using replit</u>` on line 7 to `False`
 - **d.** You can change options in **[OTHER SETTINGS]** as per your preference

5. Open the bot.json file.

- a. Replace the sample quotes/lyrics already present in the file with your own content.
- b. Each individual quote/lyric should be enclosed in double quotes "Like This" and separated by a comma as done in the sample content.
- c. The bot.json file follows the format used in CheapBotsDoneQuick. So if you have an existing file from there, it can be used here directly.

6. Time to run the bot. We will be using the screen command to run the bot in background on our Linux server :

- a. Make sure you have screen installed: sudo apt install screen
- b. Start new session: screen -S TwitterBot
- c. Run the bot: python3 main.py

7. Hit <u>Ctrl+A+D</u> to exit the screen session, the bot should continue to run in the background.

• To get back to the bot you can use the command screen -r



Basic Troubleshooting :

- If your bot isn't working as expected, the easiest way to identify any issues is to scroll through the output in the <u>console window</u> on replit. You will probably see what the exact issue is.
- I have also added basic tests to the bot to narrow down possible point of failure :
 - a. Go to the shell window in replit and type :

python3 main.py --quote

~/Twitter-Quotes-Bot\$ python3 main.py --quote
####---> Current Version = v3
Often, foley artists will use well controlled forest fires to simulate the sound
of a plant growing, but speeded up.

If you receive an error here, this means something is wrong with the <u>bot.json</u> file parsing.

b. Go to the shell window in replit and type :

python3 main.py --tweet



If you receive an error here, this means something is wrong with Twitter API. It could be an error on your side while entering the credentials or it could also be an error on Twitter's side like their servers being down.

Updating the Bot :

- There is a simple update checker built into the bot.
- Whenever the bot is run for the first time or restarted after going to sleep, it will automatically check for updates and download/apply them if possible



- The above message means the update process is complete.
- Now you can just hit 'RUN' to restart the bot.

For any further questions/queries/ideas/suggestions, you can contact me directly on Twitter <u>@loonathedorm</u>