Enhanced Twitter (X) Bot

Overview

The **Enhanced Twitter (X) Bot** is a robust and highly customizable automation tool designed to manage and grow your Twitter account. It uses built-in anti-detection and safety features to increase your account's visibility and engagement while minimizing the risk of suspension.

Core Functionalities

- **Engagement Automation**: Automatically likes and follows accounts based on keywords and customizable probabilities.
- **Follower Management**: Efficiently follows back new followers and can periodically clean up non-followers.
- **Scheduled Tweets**: Posts "boost" or promotional tweets at set intervals, automating your content strategy.
- **Robust Anti-Detection**: Includes configurable delays, random activity patterns, and rate limit compliance to mimic human behavior and ensure safe operation.
- **Comprehensive Logging**: Tracks all bot actions, API responses, and performance statistics for easy monitoring and analysis.

Technical Capabilities

This bot is a ready-made solution built with a preferred tech stack (Python), and is designed for scalability and long-term sustainability. It meets the requirements for a high-quality automation solution.

Key Capabilities

- **Account Management**: This bot can manage a single Twitter (X) account, performing all follower-related actions like following, unfollowing, liking, and posting.
- **Anti-Ban Measures**: The bot includes **proxy rotation**, **human-like interactions**, and **API rate limit handling**. It uses random delays and configurable action limits to avoid detection and ensure long-term account sustainability.
- **Customizable Actions**: The bot's behavior is fully controlled by input parameters, allowing for highly specific automation strategies.
- **Immediately Usable Code**: The bot is a complete, working solution that requires only API credentials and configuration to run.

Preferred Tech Stack

This bot is developed in **Python**, utilizing the **requests-oauthlib** library for API communication. It's built to be robust and stable, using **threading** to perform multiple tasks concurrently.

Demo Walkthrough

1. The Bot's Dashboard

The bot's dashboard is the Apify Console. Here, you manage all aspects of the bot, from input parameters to viewing real-time logs and output. The input form provides a clear interface for configuring the bot's behavior.

2. Core Functionalities in Action

Automated Engagement: The bot actively searches for tweets based on a list of keywords you provide (e.g., "socialmedia," "marketing"). It then evaluates each tweet and, based on the specified probabilities (`like_probability`, `follow_probability`), it will either like the tweet or follow the author. This ensures your account is always interacting with relevant content and users.

Automated Follow-Backs: The bot periodically checks for new followers and automatically follows them back, helping you build a responsive and engaged community. You can configure the check interval (`follow_check_interval`) to suit your needs.

Scheduled Tweets: The bot can automatically post a `boost_message` at a set interval (`tweet_interval`). This is perfect for promoting your content or brand without manual intervention.

Anti-Ban & Detection-Prevention: To avoid triggering Twitter's anti-spam systems, the bot incorporates several safety measures: - **Random Delays**: It uses `min_action_delay` and `max_action_delay` to introduce random, human-like pauses between actions. - **Daily Limits**: The bot respects `max_follows_per_day` and `max_likes_per_day` to keep your activity within safe limits. - **Rate Limit Handling**: The code includes built-in logic to detect and handle API rate limits, pausing operations until the limit resets.

3. Practical Example: A Bot Run

A typical run starts with the bot authenticating with the Twitter API. Once authenticated, it enters its main loop, running the enabled functionalities concurrently.

1. **Start:** The bot begins by posting a `boost_message` if `enable_boost_tweets` is set to `true`.
2. **Search & Engage:** It then performs a search using a random keyword from the `keywords` list. The bot processes the results, liking and following based on the set probabilities and delays.

3. **Follower Check:** In the background, a separate process checks for new followers and follows them back.
4. **Cleanup (optional):** If enabled, the bot will periodically unfollow accounts that do not follow you back.

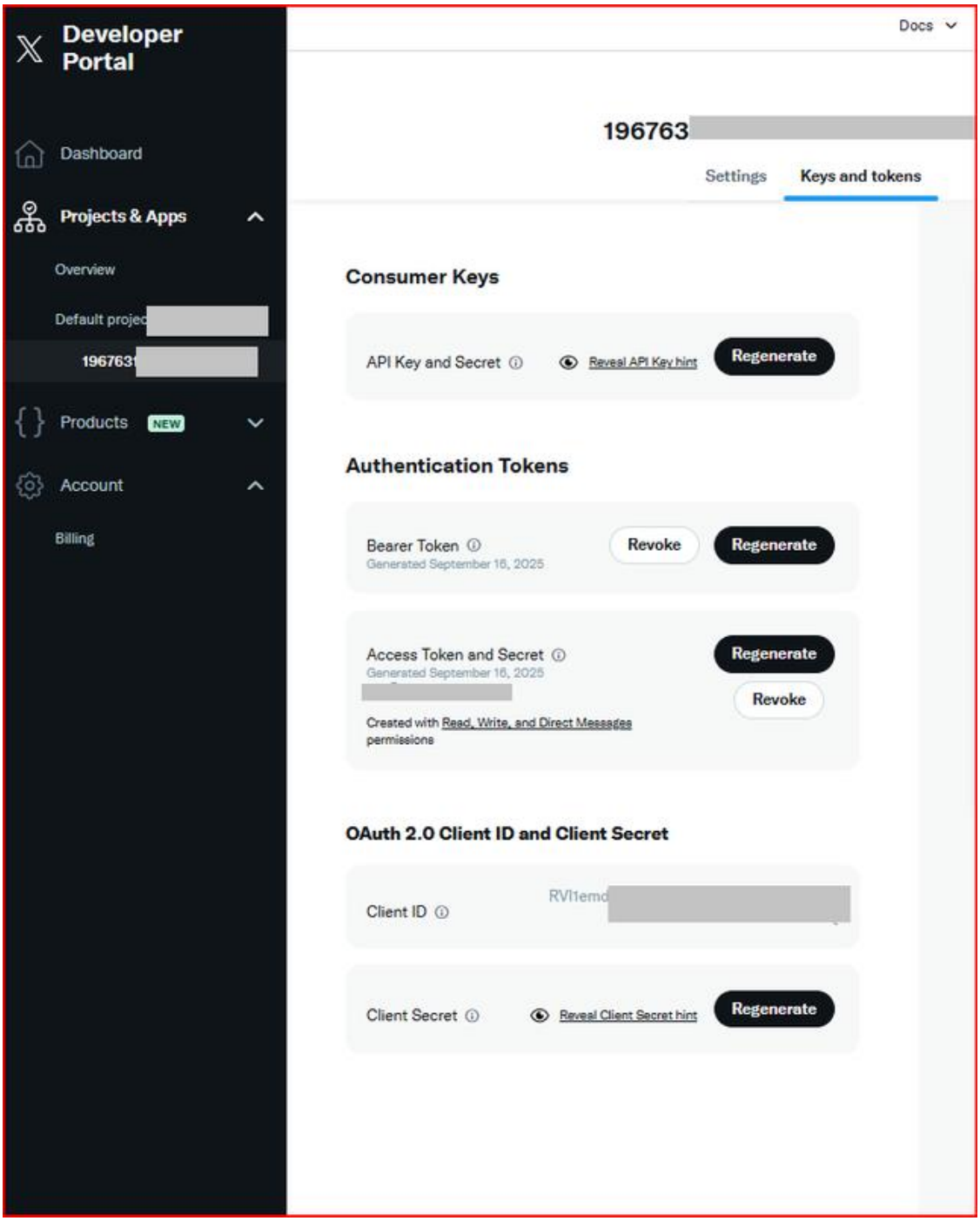
All these actions are logged in real-time to the Apify Console, providing full transparency on what the bot is doing at any given moment.

Prerequisites and Installation

To use this actor, you will need a Twitter (X) Developer Account and a set of API credentials.

Getting Twitter API Credentials

1. **Apply for a Twitter Developer Account:** Navigate to the Twitter Developer Portal and apply for a Developer account.
2. **Create a New Project and App:** Once your developer account is approved, create a new Project and a new App within the developer portal.
3. **Generate Your Credentials:** Under the "Keys and tokens" section of your app, you will find your **Consumer Key**, **Consumer Secret**, **Access Token**, and **Access Token Secret**. These are your secrets and should be handled with care.

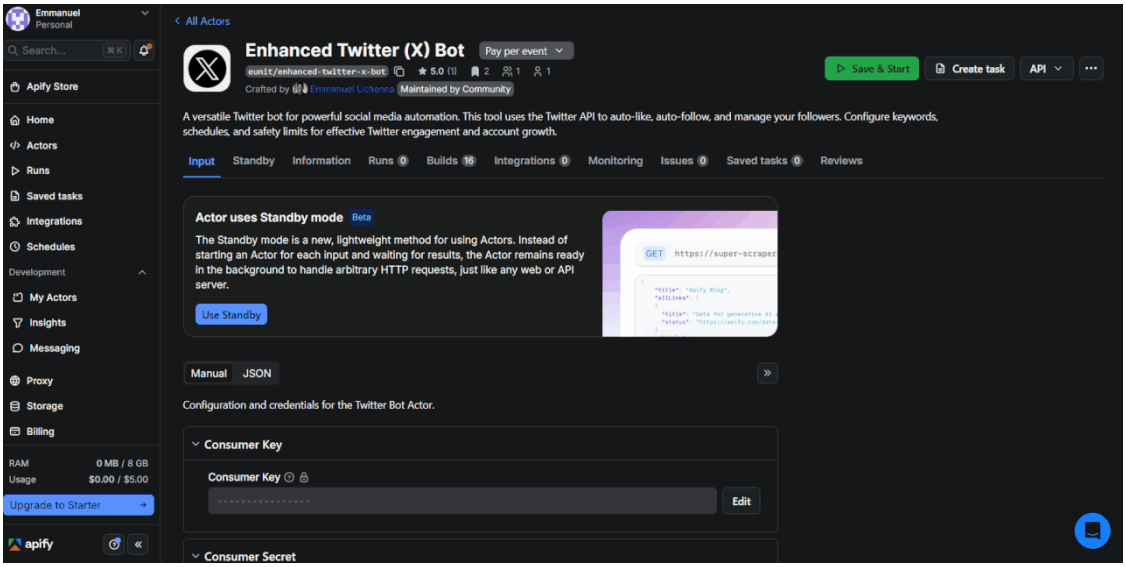


Input Parameters

The bot's behavior is controlled by the following input parameters, which you can configure in the Apify console:

- **Twitter API Credentials** (`consumer_key`, `consumer_secret`, `access_token`, `access_token_secret`, `bearer_token`)

- **Bot Intervals** (`tweet_interval`, `search_interval`, `follow_check_interval`, `cleanup_interval`)
- **Action Delays** (`min_action_delay`, `max_action_delay`, `min_follow_delay`, `max_follow_delay`)
- **Engagement Settings** (`keywords`, `like_probability`, `follow_probability`, `enable_engagement`)
- **Tweet Automation** (`enable_boost_tweets`, `boost_message`)
- **Follower Management** (`enable_follow_back`, `enable_cleanup`, `enable_unfollow`)
- **Daily Limits** (`max_follows_per_day`, `max_likes_per_day`, `max_tweets_per_day`)
- **General Settings** (`woeid`, `language`, `report_file`, `performance_threshold`)



Input GIF

Output Structure

The bot's output is primarily delivered through logs and is not a JSON dataset. During the run, the bot prints real-time updates to the console and also saves detailed logs to a file named `twitter_bot.log`.

Console and Log Output The logs provide a clear history of all bot actions, including: - Authentication status and session management. - Searches performed and the number of tweets found. - Follow, like, and tweet actions taken. - Information on unfollows during a cleanup run. - API responses and error messages (e.g., rate limit notices). - Hourly statistics on follower count, following count, and other engagement metrics.

Example Tweet

https://x.com/Eunit99Designs/status/1967893851890233634