## **Product Document**

**Team Number: 2** 

#### **Team Members:**

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Website URL: <a href="http://tweetguard.me">http://tweetguard.me</a>

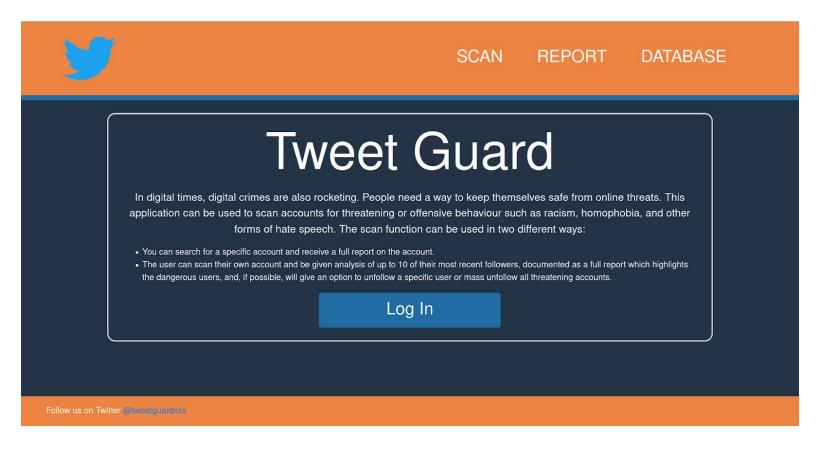
**Disclaimer 1:** While interacting with this application, you will view offensive and inappropriate tweets. These words and statements do not reflect the views of the developers. The very nature of the app is to aid users in minimising exposure to these tweets. We have, however, redacted offensive tweets from this document.

**Disclaimer 2:** To avail of the full functionality of the application, a Twitter account is needed. If you do not have a Twitter account, and would prefer not to make one, you can use the credentials for our admin account during log in:

**Username:** TweetGuardxxx **Password:** DigitalCrimes5

**Disclaimer 3:** There are a number of input fields throughout the app, where you can enter in a user's Twitter handle. **You should not include the "@" symbol at the beginning of the handle**. For example, a user's Twitter handle is @firstname.secondname99. To act upon this account, simply type "firstname.secondname99".

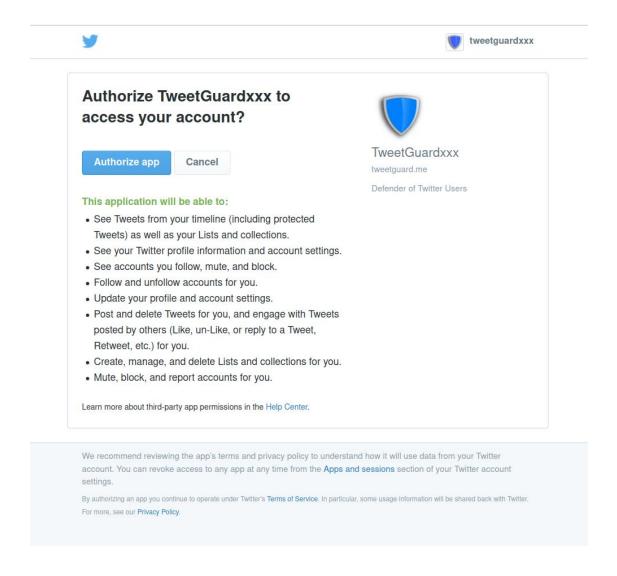
#### **Home Screen**



This is the entry point to the application and the first page you will see. To avail of the full functionality of the application you need to log into Twitter. On the top-right are the different sections of the website. This is the main navigation bar of the site. You can click these links to go to each section, but you will need to log in to actually use the functionality. If you are not logged in, and you attempt to scan or report, you will be prompted to log in. The Twitter bird on the top-left can be clicked on any page to be redirected to the homepage. On the footer is a link to our admin Twitter account's page. To get started, press the "Log In" button. This will take you to the Twitter API's OAuth screen to log into Twitter.

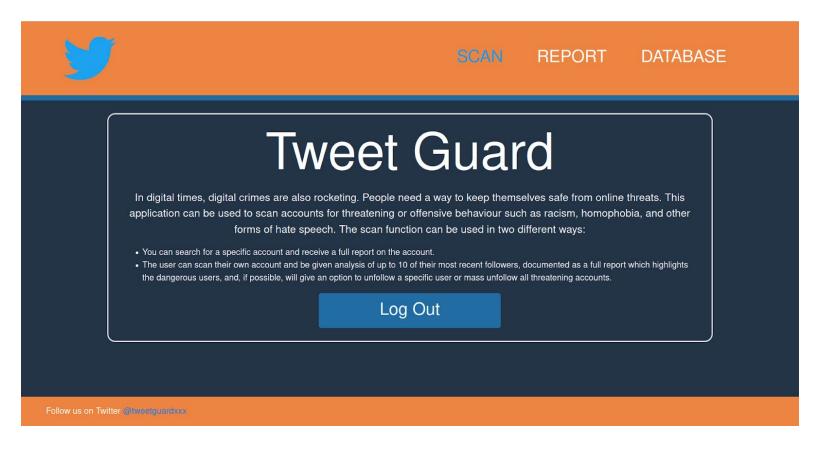
Possible Bug: You may login and still not have full access to the application i.e. The report page and ability to scan personal account. You will know this if the "Log In" button did not change text to be "Log Out". If this happens, please go to the home page and append "/logout" to the url. Then when you log back in you will have access.

## **OAuth Log In**



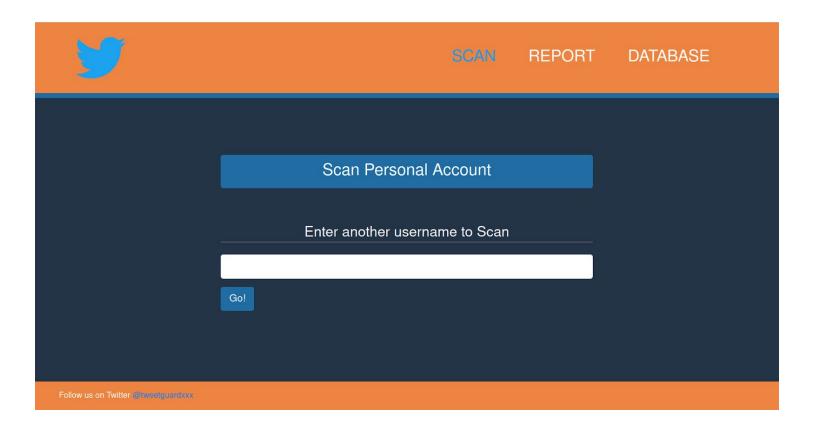
After clicking "Log In" on the homepage, you'll be redirected to Twitter's OAuth page. Here you can log in with the Twitter account you want to use. To log in, enter your username/email in the first input, and your password in the second input. You may check "Remember me" before you log in so that anytime you log in again in the future, you won't need to enter in your username and password. If you forgot your password, click the "Forgot password?" link to start the password reset process on the Twitter website. There is also the "Sign Up for Twitter" link in the top-right. If you don't have a Twitter account, you can create one at this link. A reminder, however, that you can use our admin credentials for the purposes of the beta. Credentials are at the top of the document. Once you have entered your username and password, click "Authorize app" to be redirected to the site.

#### **Back to Home Screen**



Once you log in, you will be redirected back to the home screen. As you can see, the "Log In" button text has now changed to "Log Out" you can now begin navigating the website. If you look at the top navigation bar, you will see the "Scan" link is highlighted blue. This is the hover effect on the links. You can click a blue link to be redirected to that section. We will begin with the scan section. Press the scan link in the nav bar.

#### **Scan Home**



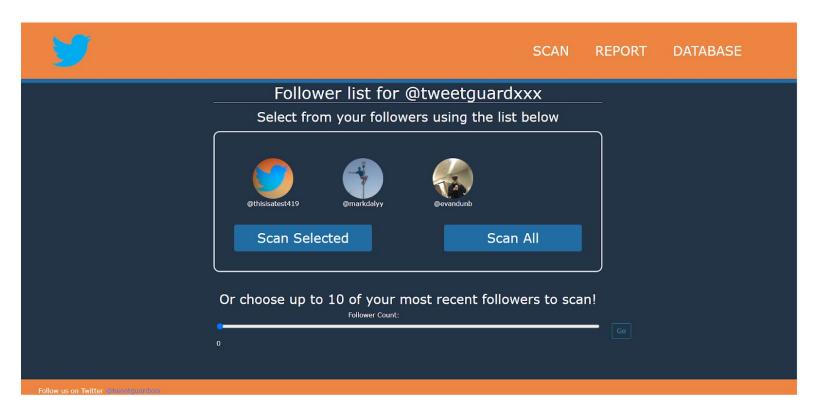
This is the homepage of the scan section. This section is to scan for racist tweets, as determined by our algorithm that uses logistic regression.

There are two parts to the scan functionality. You can either tell the application to get a list of your followers. You will then be able to select which users to receive a scan report for, or you can enter a specific user to scan. This page is where you choose one of these options. To view a list of your followers, click the "Scan Personal Account" button. This will take you to a new page where you can choose who to scan.

Alternatively, you can enter in a specific user handle into the text input box. Press the "Go!" button to submit the user's handle and receive a report. There may be three outcomes from the submission of the input box. The first, and most desirable is being redirected to the scan report page. The second is the case where the account is protected. This happens if they have protected Twitter privacy settings. You will receive a red flash message that tells you that the account can't be scanned. The third situation is the case where the user handle doesn't match any account. You will receive a red flash message to tell you the account can't be scanned. First, we will look at the option to view a list of your followers. Press the "Scan Personal Account" button to begin. We will come back to this page to demonstrate the second input later.

**NOTE:** Depending on the amount of followers you have, there may be a delay in displaying them. This is due to limitations with the Twitter API. While the application is collecting your followers, the Twitter bird will be replaced by a loading icon. This is how you know the application is working on it. You will also see this icon on when the application is scanning users, as this may have a delay as well.

#### **Scan Choose**



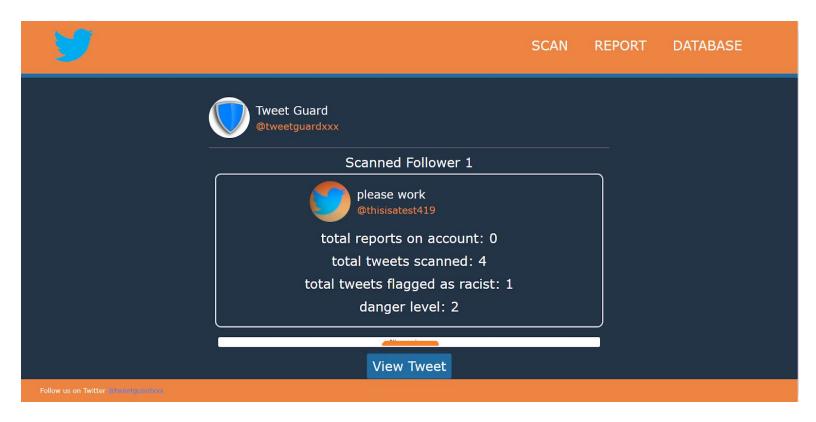
Once the application has collected your followers, you will see them listed here. Again, you have two options on this page. You have the option to select certain followers to scan from the list, or you can use the slider to scan up to ten of your most recent followers. Both of these options will redirect you to the same page, with the results depending on what you select. To select specific followers, click on their profile pictures. When a user is selected, their picture will fade to indicate they've been selected. You can unselect a selected user by clicking their profile picture again. Once you've selected the users you want to scan, press the "Scan Selected" button. The Twitter bird will be replaced by the loading icon and scanning will begin.

To select a number of your most recent followers, simply slide the slider until the number underneath indicates the amount of followers you want. Once you have selected the desired amount of followers, press "Go!" beside the slider and scanning will begin.

**Note 1:** Our algorithm can take a while to scan users depending on how many tweets they have and how many followers were selected. Due to this limitation, we recommend selecting a maximum of three followers to scan for the beta. This will save you the risk of waiting too long for results.

**Note 2:** The "Scan All" button has no functionality yet. This is due to the fact that scanning takes a while. We plan to add functionality to this button, but you can safely ignore it for the beta.

## **Selected Followers**

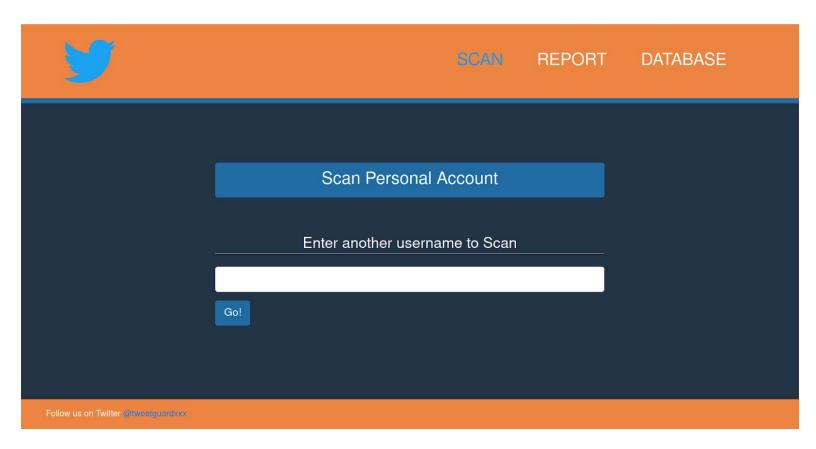


This is the result page for the scan choose page. When you select specific followers, or you select a certain number of followers on the slider, the results of the scan are shown here. On the top, you will see your Twitter profile picture, name and handle. Then you will see a list of users whose scan returned racist tweets. For each user, there will be a bordered box with a summary of their Twitter info, and underneath that, will be a list of their racist tweets. You can press the "View Tweet" button underneath each tweet which will send you to the Tweet displayed on the Twitter website. If no threatening tweets were found for any of the selected users, the page will tell you no threatening tweets were found.

Now is the time to head back to the homepage of the scan section to touch on the second option, where you can enter in a specific user's Twitter handle. Click the "Scan" link in the navigation bar to return to this page.

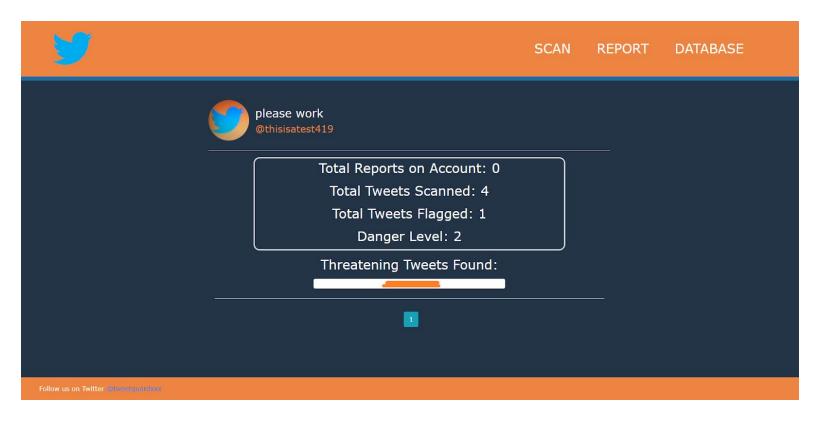
**Note 1:** After beta we plan on adding the ability to unfollow, block and mute users who were scanned as racist.

# **Returning to Scan Home**



Recall that you can enter in a specific user handle into the text input field to scan their account. This works for users who are not followers of yours, however, as previously stated, if the account is protected, you won't be able to scan them. Once you enter a user handle, press the "Go!" button under the input field and the scan will begin.

#### **Scan User**

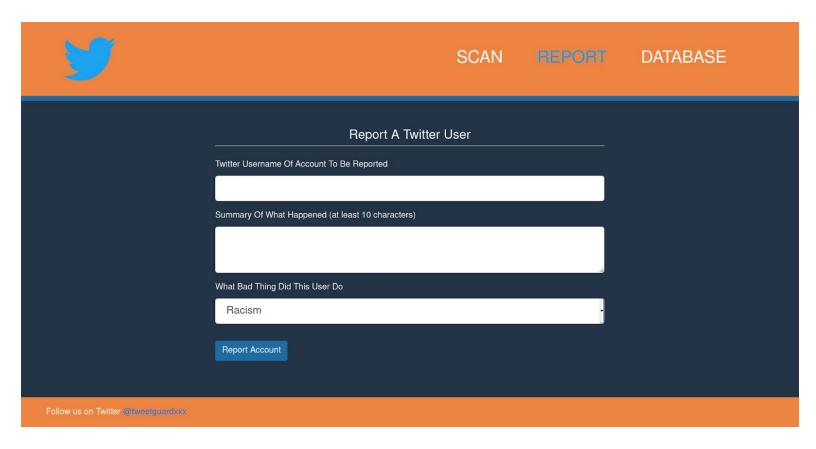


The resultant page is very similar in design and content as the selected followers page, however it's not identical. As with the selected followers page, you will see the scanned user's twitter information and a summary of their account. However, you will only see the list of that user's threatening tweets. These tweets will be paginated to make navigation easier, with a maximum of 10 tweets per page.

**Note 1:** After beta we plan on adding the ability to unfollow, block and mute users who were scanned as racist.

Now it's time to move on to the report section. Click the "Report" link in the navigation bar to view this page.

## Report



On this page, you can report a specific user based on a number of categories (Racism, Homophobia, Sexism, Transphobia, Fraud). This adds an extra layer to the investigation of the account by adding a human element to reports. To make a report, enter a user's Twitter handle, a summary of the inappropriate behaviour and select the category it falls under. Once you are satisfied with the report, press the "Report Account" button. This report will be entered into our database and you can view it, alongside other user reports in the Database section. As with the scan section, if you report an account that doesn't exist, a red flash message will appear, and the report won't be submitted. When a report is successfully submitted, a green flash message will appear telling you the report was successful.

Make sure to enter a valid account username, and to put at least 10 characters of a summary in of what happened.

#### **Database Home**



The database home page hosts two main features, and also has access to other sub-pages.

Firstly of the two features is a database search, where the user can enter an account name to search up all the associated reports with it. The account name can only be submitted and searched if it is a valid Twitter account name. Twitter users with protected accounts are still searchable in this database, and can be reported in general.

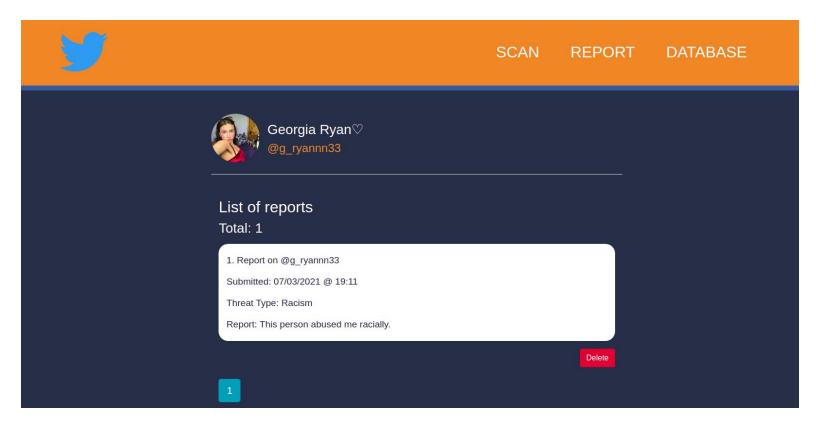
Secondly on this page, we see a recent reports section in which the most recent user-made reports are shown. This section aims to keep our customers informed on the most dangerous recently active accounts on Twitter. The usernames are clickable, returning the database search page of the account with that username. Note also that these reports are paginated, so click the numbers underneath to flick through the most recent reports.

This page should be entirely functional and we are not currently aware of any bugs.

Between the recent reports section and the search section there are three links: one to the "total reports list" page, one to the "make a report" page, and one to the "my reports" page. The contents and functionality of these pages are detailed in this document.

This page is available without a login.

#### **Database Search**

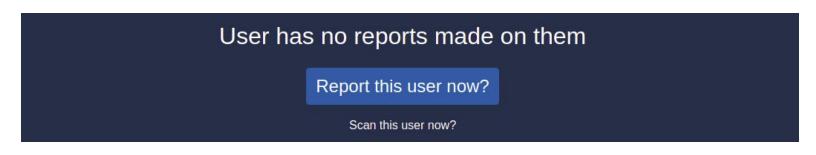


The database search page can be found by either clicking a username that is a link, or by using the search feature on the database home page. This feature is available without a login.

The page content is simple and it contains only some small info on the user, and then the list of user-made reports that were made on the user. These are also paginated so to look through them use the numbered buttons underneath.

If you have made the report on the user yourself, you are given the option to delete that report if you feel you have made an error or no longer wish to account for it on our website. Simply click the red delete button, and then choose confirm on the box that comes up to delete a report.

If the user has no reports made on them, you will see a section like this under their username, which gives options to make a report or to scan that user.



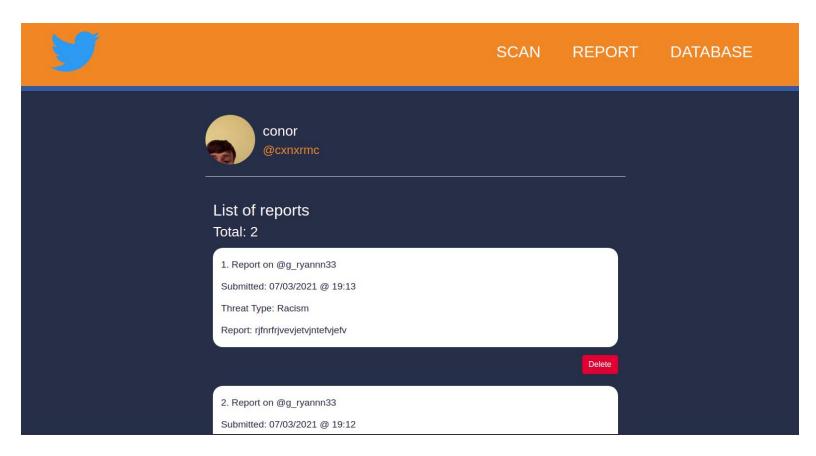
# **Total Reports**



This is a simple page that ranks the accounts that have been most reported in the past. They are ranked in order of the total number of reports made. It aims to provide customers with a list of the most dangerous accounts.

This page is yet to be styled and is available with or without login.

## **My Reports**



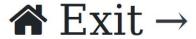
This page contains all the reports that the logged in user has made. Its main aim is to allow users to manage their made reports, and gives the main functionality of deleting any reports that they are not happy with, or simply just don't want on the site anymore.

This page is naturally only available if you are logged in.

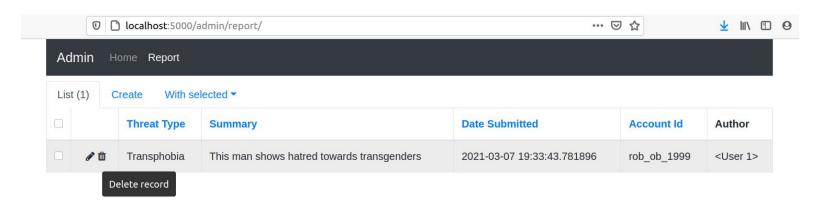
#### **Admin System**



# ◆ View Reports →



To access the admin system, you must be logged in with our tweetguard account (credentials on page 1). You can then add "/admin" to the base URL and will be directed to the page above. The View Reports arrow will bring you to view all of the reports in the database. The Exit arrow will return you to the web application home page. The admin system allows us to delete reports from users as shown below.



## **Additional Notes & Bugs**

- Some of the application's styling is not finished and so user experience is not as pleasant as desired.
- If you are not logged in and you try to visit a restricted access page, you will be redirected to login with Twitter. After login you will be directed back to the home page rather than to the restricted access page that you were trying to visit. This slight inconvenience is yet to be resolved.
- The loading icon will reappear when you click the back button on your browser.
- The "View Tweet" button in the scan function works on localhost but is not displayed on the deployed version.