# Tweeti Manual

Labeller Edition

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## Contents

Co	Copyright 2		
1	Background	4	
2	New User  2.1 Logging In	<b>5</b> 5 5	
3	Login / Update Password / Logout	6	
4	Next Tweet	7	
5	Previous Tweet	8	
6	Discuss Button	9	
7	Adding Labels	10	
8	Exclude Button	12	
9	Removing Labels	13	
10	Selecting Text	14	
11	Source Button	16	
12	User Statistics	17	
13	Shortcuts 13.1 General Shortcuts	18 18 18	
Bil	oliography	19	

### 1 Background

Previously, labeling tweets was done using an Excel script. This was not an effective solution because labelers couldn't view each other's labeled tweets, working with Excel was demotivating, and it introduced unnecessary extra steps. For these reasons, the Tweeti (Twitter Intelligence) tool was developed. Tweeti simplifies the labeling process and allows users to click through to the original tweet on Twitter. Additionally, it enables users to view the work of others and access their own statistics. The primary goal of Tweeti is to minimize overhead, allowing the next tweet to be labeled within a few milliseconds.

Tweeti can be accessed through Firefox and Chrome and is available within the police network.

Tweets are always displayed in the center of the screen. Below each tweet, you'll find the label categories, as well as the buttons: "Previous Tweet," "Next Tweet," "Exclude Tweet," and "Discuss Tweet."

Labeling consists of several steps: The first step is to read the tweet and optionally select descriptive words or phrases. The second step is to assign labels, where the selected text is related to the chosen label. Finally, you can click the "Next Tweet" button to continue the process. Note that there is no "Save" button; all changes are saved automatically. It is not possible to skip labeling a tweet.

Tweets can be labeled using the Tweeti labeling tool, available at http://tweeti.pythonanywhere.com/. Below is an overview of all the functions.

## 2 New User

New labelers can only be added by an admin. To create a new user, a username, email address, and password are required. The password is pre-set so that the new user can log in immediately. The first task for a new user is to change their pre-set password.

### 2.1 Logging In

To log in, click the login button in the top right corner of the screen.

#### 2.2 Changing Password

After logging in, you can change your password by clicking "Update Password" in the top right corner.

#### 2.3 Email Notifications

Please note that the update link sent via email (from tweeti@gmail.com) might end up in your spam folder.

## 3 Login / Update Password / Logout

You can log in using the login button located in the top right corner of the screen. Once logged in, the same button can be used to log out or to change your login password.

### 4 Next Tweet

The next-button requests the server to load the next tweet that can be labeled, see figure 1. By pressing the next-button a new tweet is loaded randomly.

If you use the "Next Tweet" button after clicking the "Previous Tweet" button, the same tweet will follow, ensuring the sequence remains consistent.

For example:

TweetA → Next Tweet → TweetB

Previous Tweet → TweetA → Next Tweet → TweetB

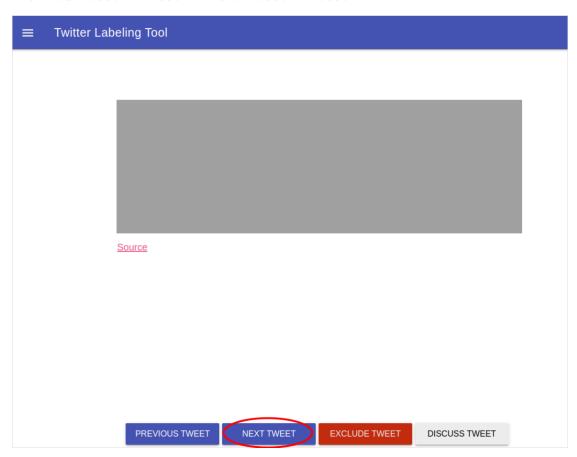


Figure 1: Press the next-button to go to the next tweet.

## 5 Previous Tweet

This button allows you to go back through the history of labeled tweets (see figure 2), with the following considerations:

- The "Previous Tweet" button does not go back further than the last browser refresh. If the browser is closed, the history of previous tweets is lost.
- The labels of previous tweets are displayed as they were originally entered by the user. If another user has made changes to the labels, those changes will not be reflected.

#### NOTE

- When you click the "Previous" button, the tweet will automatically be marked with "No Label" even if it already has existing labels.
- If a tweet has been excluded, it will still appear in the history and will also receive the "No Label" label.

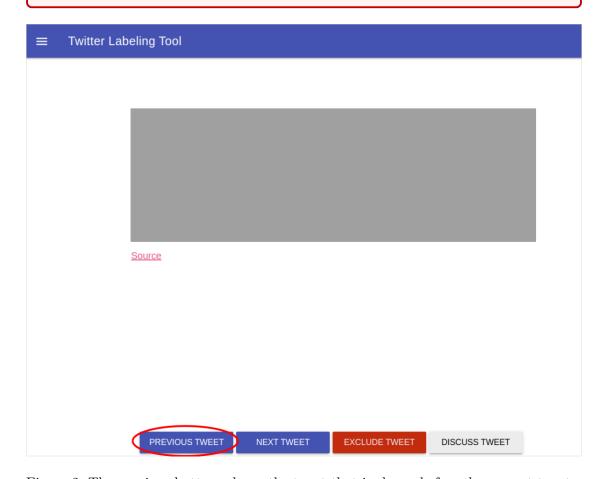


Figure 2: The previous buttons shows the tweet that is shown before the current tweet.

## 6 Discuss Button

The "Discuss" button can be used to mark tweets that need to be discussed during one of the weekly labeling meetings, see figure 3. Once a tweet is marked for discussion, it will not be shown to other users until it has been reviewed. Use this button for tweets where there is significant uncertainty about which labels are appropriate.

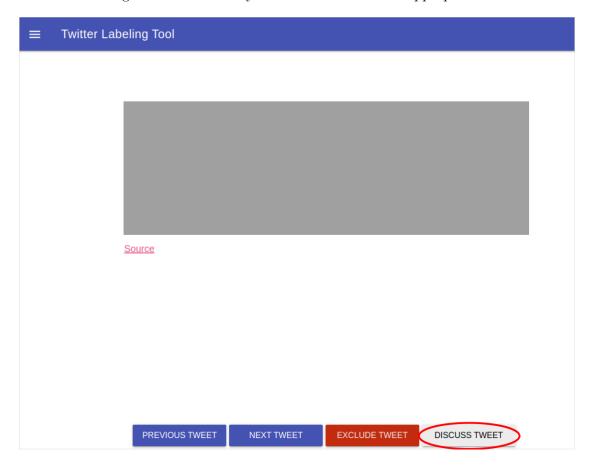


Figure 3: The discuss buttons marks the current tweet to be discussed.

## 7 Adding Labels

Labels can be added in two ways: through the menu or via a shortcut key. In both cases, the label is immediately saved to the server, and the user's ID is included in the process so that changes can be undone if necessary.

The label buttons can either directly add a label or open a menu to allow hierarchical labelling (this structure can be set via de admin view).

When the user click a menu button, a menu of labels will appear, as shown in figure 4. The user can now click on a label from the manu or press a shortcut key (shown in red) to add the related label (e.g. press the M-button to include the mainstream Media label

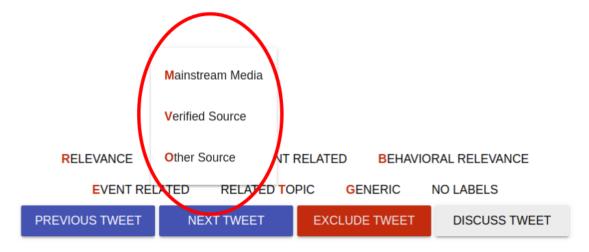


Figure 4: Menu is shown when the user clicks on a manu label, labels can be added by clicking a menu item or by pressing the shortcut button.

When a label is added, a tag is show above the label buttons containing the label name, as shown in figure 5. The color of a tag (to group labels) can be set within the admin view.

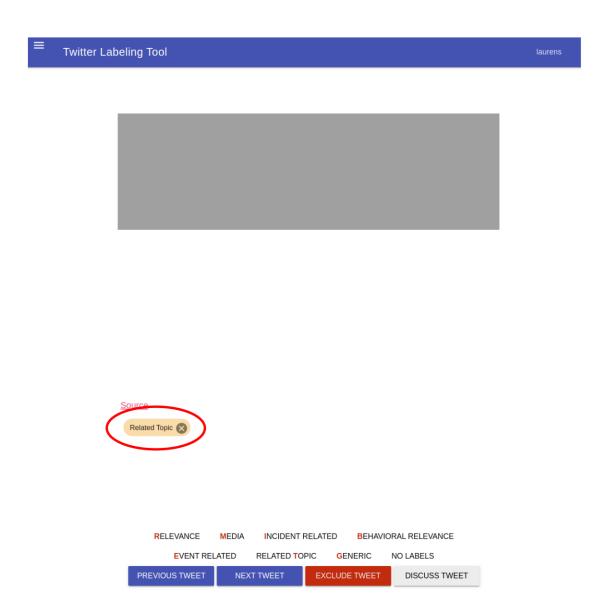


Figure 5: When a label is added, a tag is shown, in this case "Related Topic".

## 8 Exclude Button

The "Exclude" button can be used to remove tweets from the dataset (see figure 6). Use this button to indicate that a tweet is written in a different language or is clearly about a different subject than the incident being labeled. When using the "Exclude Tweet" button, a confirmation prompt will appear to prevent mistakes.

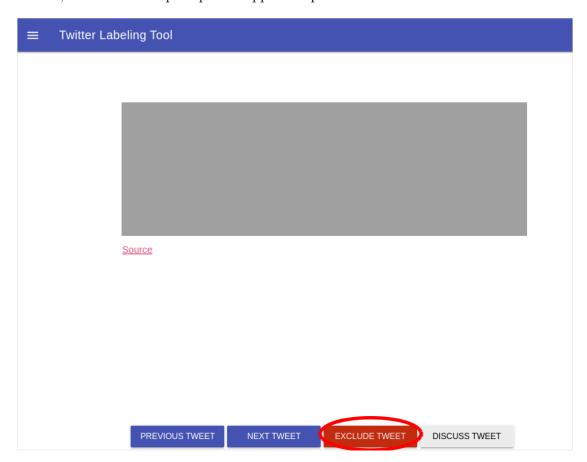


Figure 6: Exclude button to mark the current tweet for removal.

## 9 Removing Labels

Existing labels can be removed by clicking the "X" on the label, see figure 7. As with adding labels, these updates are immediately saved to the server, and the user's ID is included in the process.



Figure 7: A label can be removed by using the X-button on the tag.

## 10 Selecting Text

Before adding a label, the selected text will be captured and linked to the label (see figure 8. When you hover over a label with selected text, that selected text will become visible again, as shown in figure 9.

#### NOTE

Currently, all occurrences of the selected words are highlighted, but in the backend, only the specific selected text is stored.

This feature allows you to associate a specific part of the tweet with a label. If you want to add multiple labels, after selecting the text and applying the first label, you should deselect the text before adding the next label. This way, the text won't be linked to the subsequent label. Alternatively, you can choose to select different text for the next label.

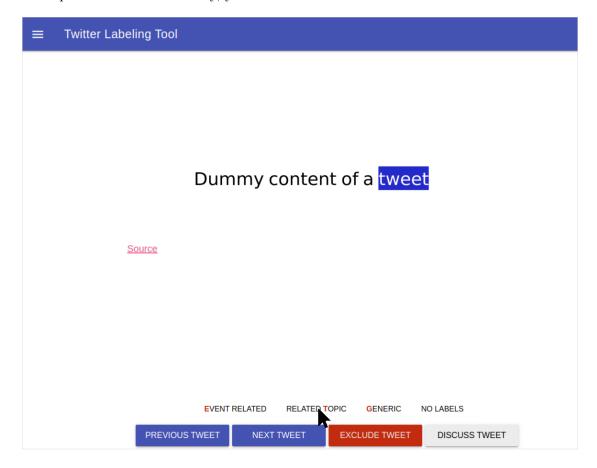


Figure 8: Selecting text before adding a label results in a annotated text.

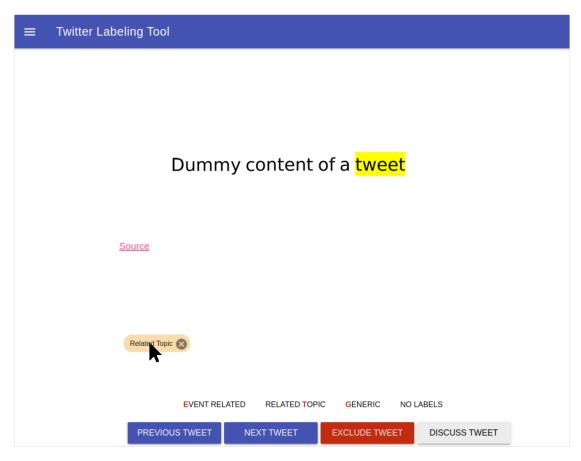


Figure 9: Hovering the label with annotated text results in a highlight of the annotated text.

## 11 Source Button

The "Source" button (see figure ??) can be used to open the current tweet directly on Twitter. When you click the "Source" button, a new tab will open and navigate to Twitter. Be aware that Twitter will likely place cookies on your browser.

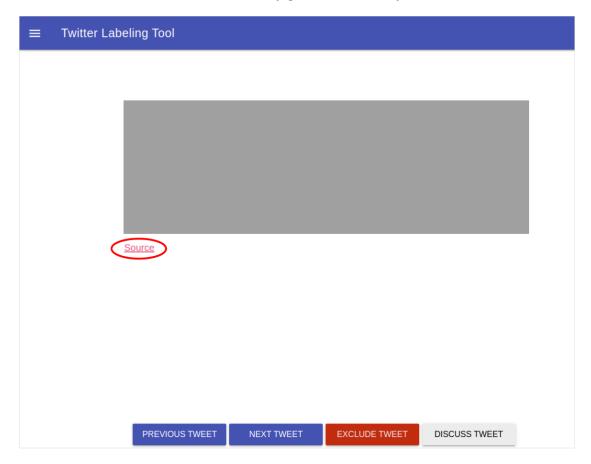


Figure 10: Source-button to open the original tweet

### 12 User Statistics

By clicking the hamburger menu in the top left corner, you can view some user statistics:

Average time (in milliseconds) spent per tweet during the current session. Number of tweets labeled during the current session. Time (in milliseconds) that the current tweet has been displayed.



Figure 11: Press the hamburger menu to show the user statistics.

#### 13 Shortcuts

To speed up the labeling process, several shortcuts are available. General shortcuts allow you to navigate to the previous or next tweet, menu shortcuts display a labeling menu, and label shortcuts add labels from a menu. For example, to add the label "First person observation," you would first use the shortcut R to display the "Relevance" menu, then press F to add the label. In the tool, menu and label shortcuts are highlighted in red as a reminder.

#### 13.1 General Shortcuts

Shortcut	Description
Enter Backspace N	Next tweet Previous tweet Add "No Labels" label

#### 13.2 Label Menu Shortcuts

Defined within the admin view, each label button contains a red token which represents the shortcut for the label (see figure 12. Note that if a button is related to a menu is steat of a label, the label menu will appear which includes additional buttons with shortcuts that can be used to select the related label.

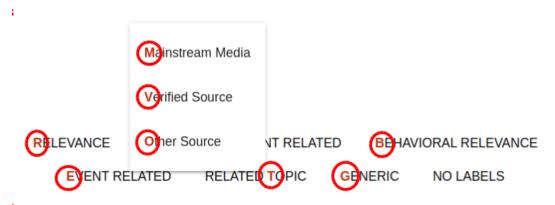


Figure 12: Label shortcuts are presented in red.

# **Bibliography**