



# TigerSnatch: User's Guide

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## Introduction

TigerSnatch is a service that helps Princeton students with course enrollment through its Subscriptions and Trades features. With Subscriptions, students can subscribe to full sections of a course, and when a new spot is available, TigerSnatch will notify subscribed students via email. Indeed, TigerSnatch Subscriptions eliminate the need to manually and repeatedly check the Course Offerings for available spots. With TigerSnatch Trades, a first-of-its-kind system at Princeton, if students are currently enrolled in a full section (e.g. precept) and wish to enroll into another full section, TigerSnatch will automatically find and facilitate swaps between students who wish to enroll in each other's sections. This way, students no longer have to go through the trouble of searching for someone they know to swap with. Overall, TigerSnatch seeks to alleviate the stress of course enrollment for Princeton students during course selection and add/drop periods.

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**[t] denotes that either extra steps must be taken, or an assumption has been made, for COS333 grading purposes.**

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## Assumptions

- You are a Princeton student with a valid netID and password.
- You have a Gmail account (either Princeton-provided or personal).
- **[t]** For Professor Dondero and Sata, we assume that you will be using the netIDs `rdondero` and `satada1s`, respectively. We also assume that this is your **first time** visiting TigerSnatch (note that we will have deleted any of your existing user profiles before Dean's Date on May 10th).
- **[t]** For grading purposes, we have manually set the course term to Spring '21 (term code 1214). That is, only courses that are offered in Spring '21 will appear in course search results. This is to ensure that course data do not change during the grading process.

## Use Case 1: Accessing and Getting Started with TigerSnatch

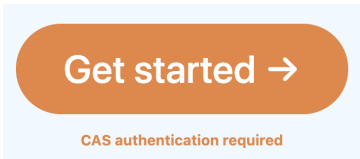
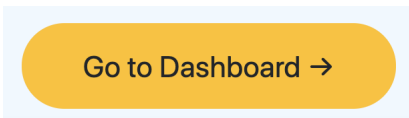

### Pre-requisites

- N/A (besides the Assumptions above)

### Features demonstrated

- Landing page
- Login and CAS authentication
- Tutorial page for first-time users
- Dashboard page



Steps	Intended Behaviors
Go to <a href="https://tigersnatch.herokuapp.com/">https://tigersnatch.herokuapp.com/</a> .	You should be immediately navigated to the TigerSnatch Landing page which briefly describes TigerSnatch's mission. In the nav bar, you see the About and Tutorial pages and the Login button.
Click the <b>Get started</b> button.	<p>If you are not logged in with CAS, please complete login with CAS. You will then be directed to the Tutorial page.</p> <p>If you are already logged in with CAS, you are immediately directed to the Tutorial page. Note that if it is not your first time logging in, you will be directed to the Dashboard page.</p> 
Read through the <b>Tutorial</b> page.	The Tutorial page provides a general overview of the purpose, site layout, and features of TigerSnatch for first-time users. You can access the Tutorial page again if needed via the nav bar.
Click <b>Go to Dashboard</b> at the bottom of the Tutorial page. 	This will take you to your personalized Dashboard. As a first-time visitor, you have no subscribed sections displayed, your default email is your Princeton email ( <a href="mailto:netid@princeton.edu">netid@princeton.edu</a> ), and your Trades Tracker is also empty.
<b>[t]</b> Check that your email address as shown in <b>Contact Preferences</b> (lower-left) is correct. If not, change it to an email address that you own by typing a new email address and clicking <b>Change</b> . This mainly applies to users (such as Prof. Dondero) whose Princeton email address is not <a href="mailto:netid@princeton.edu">netid@princeton.edu</a> , but rather <a href="mailto:netid@cs.princeton.edu">netid@cs.princeton.edu</a> .	<p><b>Contact Preferences</b></p> 



## Use Case 2: Subscribe to a full section

### Pre-requisites

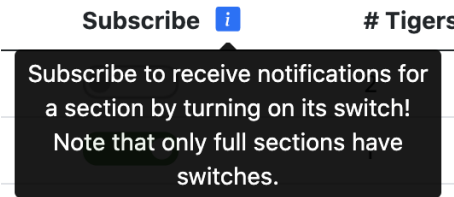
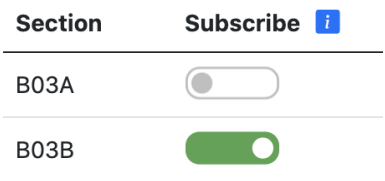

- You have completed Use Case 1

### Features demonstrated

- Searching for a course
- Typical course page
- Subscription to a course section
- Dashboard page

Steps	Intended Behaviors
Go to your Dashboard (via the nav bar or going to <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a> ).	On the left side of the Dashboard, you will see a search bar, where you can search for a course.
Hover over the search bar to learn how you can search for a course.	A tooltip should appear that tells you to search for a course by its department, number, or title. 
In the search field, enter <b>COS</b> .	A list of search results should appear below the search bar. You can scroll to see them all. Each result corresponds to a course with the string "cos" in its title or department. The course COS126/EGR126 - Computer Science: An Interdisciplinary Approach should be one of the options. 
In the search field, enter <b>126</b> .	A list of courses with the number "126" in its title or course number should appear. The course COS126/EGR126 - Computer Science: An Interdisciplinary Approach should again be one of the options.
In the search field, enter <b>Interdisciplinary</b> .	A list of courses with the string



	<p>"interdisciplinary" in its title should appear. The course COS126/EGR126 - Computer Science: An Interdisciplinary Approach should again be one of the options.</p>
<p>Click on the result for <b>COS126/EGR126 Computer Science: An Interdisciplinary Approach</b>.</p>	<p>The right side of the page should be blurred for at most a few seconds and your mouse should be disabled from clicking anything on the page, as the site updates the latest course data.</p> <p>After this, the right side is updated with the COS126 course page. At the top, you should see the course title. In the middle, you should see a table with full sections for COS126, along with basic section details (e.g. enrollment, time).</p> <p>The search results and your search query (on the left) should not have changed.</p>
<p>Hover over the info icon for the <b>Subscribe</b> column to learn how to subscribe for a section.</p>	<p>A tooltip should appear that tells you to subscribe for a section by toggling its switch on.</p> 
<p>Then, toggle the <b>Subscribe</b> switch on for <b>B03B</b>.</p> 	<p>The switch for B03B is toggled on and colored green. A green pop-up should appear on the top right corner to confirm that you "Successfully subscribed!".</p> 
<p>Hover over the info icon next to <b># Tigers</b> in the course table. Look at the numbers under the # Tigers column.</p>	<p>A tooltip should appear that tells you the purpose of the # Tigers column, which is to show the number of users subscribed to this section. [†] Since there are currently zero users (outside of the TigerSnatch team, Sata, and Prof. Dondero), most entries for # Tigers should be zero.</p>



Make note of # Tigers for P02A and P04C. Then, toggle the <b>Subscribe</b> switch on for P02A and P04C.	Two more green confirmation pop-ups appear. At this point, three Subscription switches are toggled on. You'll also see that the number of users subscribed to P02A and P04C both increased by one (because you just subscribed!).
Return to <b>Dashboard</b> .	On the Dashboard, your Subscriptions are displayed in a table. You should have three subscriptions: COS126 B03B, P02A, and P04C.

#### Comments

- Feel free to continue subscribing to more sections for various courses. Note that we have limited each user to at most 7 Subscriptions (this number is subject to change in the future).










### Use Case 3: Unsubscribe from a full section

#### Pre-requisites

- You have completed Use Case 2, so you are subscribed to COS126 B03B, P02A, P04C.

#### Features demonstrated

- Unsubscribing from a course section

Steps	Intended Behaviors									
Go to your <b>Dashboard</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a> ).	On Dashboard, COS126 P02A should be listed as a subscribed section (and its switch is toggled on).  <table><tr><th>Course</th><th>Section</th><th>Subscribe </th></tr><tr><td><a href="#">COS126/EGR126</a></td><td>B03B</td><td></td></tr><tr><td><a href="#">COS126/EGR126</a></td><td>P02A</td><td></td></tr></table>	Course	Section	Subscribe 	<a href="#">COS126/EGR126</a>	B03B		<a href="#">COS126/EGR126</a>	P02A	
Course	Section	Subscribe 								
<a href="#">COS126/EGR126</a>	B03B									
<a href="#">COS126/EGR126</a>	P02A									
Hover over the info icon for the <b>Subscribe</b> column to learn how to unsubscribe from a section.	A tooltip should appear that tells you to unsubscribe from a section by toggling its switch off.									



Toggle the <b>Subscribe</b> switch off for COS126 P02A.	<p>A pop-up should appear asking you to confirm that you want to unsubscribe from P02A.</p>
If you are unsure whether you want to unsubscribe from a section, you can click Cancel. Click <b>Cancel</b> to not proceed with unsubscribing.	The switch for COS126 P02A is toggled back on.
Toggle the <b>Subscribe</b> switch off for COS126 P02A again. On the confirmation pop-up, click <b>Confirm</b> to proceed with unsubscribing.	<p>The row for COS126 P02A is removed from the Dashboard, indicating that you are no longer subscribed to the section. A yellow pop-up should appear at the top right to confirm that you "Successfully unsubscribed!".</p>
<p>From the Dashboard, click on a hyperlinked <b>COS126/EGR126</b> text under the Course column.</p>	This takes you to the COS126 course page.
Make sure the switch for P02A is turned off to confirm that you just unsubscribed from it.	Users can either unsubscribe from a full section via their Dashboard or its course page. If you unsubscribe from a section via



	the Dashboard, this action is also reflected on the course page, and vice versa.
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#### Comments

- Feel free to continue subscribing and unsubscribing to more sections for various courses. You can watch as the # Tigers value increments (as you subscribe) and decrements (as you unsubscribe).

## [t] Use Case 4: Receive notification of an available slot

#### Pre-requisites

- You have completed Use Case 1
- You know how to subscribe to a section. If not, refer to Use Case 2.
- You must have access to the administrator panel to toggle email notifications on and off
  - [t] Normally this prerequisite is not required; notifications would always be on during course enrollment and add/drop periods.



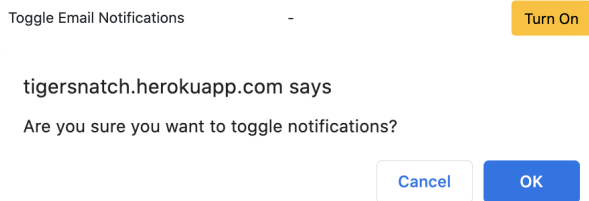
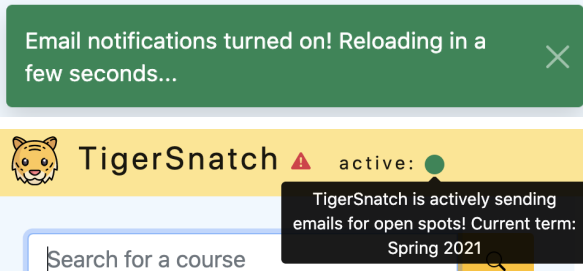
#### Features demonstrated

- Active marker
- Email notifications cron job
- Activity page

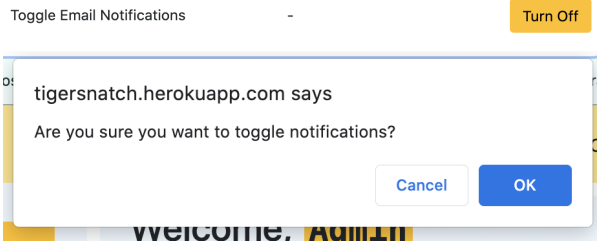
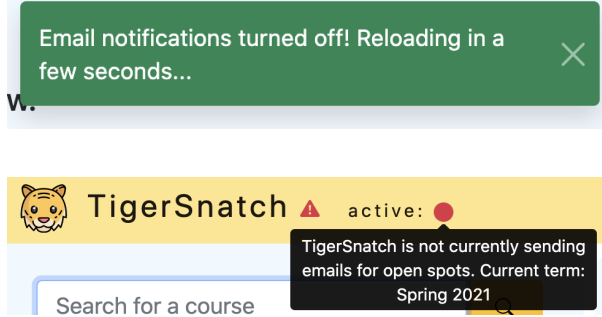
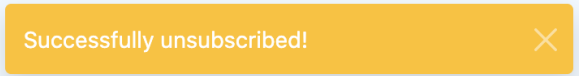
Steps	Intended Behaviors
Go to <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a> .	You should be directed immediately to <b>Dashboard</b> , provided that you are logged in via CAS.
[t] Search for <b>ORF309</b> using the search pane. Click on the ORF309 search hit and let the page load completely.	[t] <b>This step is required for grading purposes in order to "reset" the interval on which we pull new data for ORF309</b> (by default, that interval is every 5 minutes, provided that users are actively viewing ORF309). By resetting this interval, we guarantee that the section-fill action below will not be overwritten by revisiting the ORF309 course page, for the next 5 minutes.
Navigate to <b>Admin</b> (via the navbar).	You should be directed to the admin panel, provided that you are logged in via CAS and are an administrator.
In the admin functions table, enter <b>43626</b> in the <b>Fill Section Enrollment</b> row. This classID	The message "Filled section successfully!" should appear in the upper right, indicating a





<p>corresponds to P01 in ORF309. Click the yellow <b>Fill</b> button.</p> 	<p>successful admin action.</p> 
<p>Navigate to <b>Dashboard</b> (via the navbar) and again search for <b>ORF309</b> using the search pane.</p>	<p>A single search result (for ORF309) should appear in the search results pane.</p>
<p>Click on the ORF309 search hit and Subscribe (i.e. toggle the switch) to section <b>P01</b>.</p>	<p>The message "Successfully subscribed!" should appear in the upper right, indicating a successful Subscription to <b>ORF309 P01</b>.</p>
<p>Navigate to Admin and click the yellow <b>Turn On</b> button in the <b>Toggle Email Notifications</b> row. Click <b>OK</b> to confirm that you want to do this action in the confirmation popup.</p> 	<p>The message "Email notifications turned on! Reloading in a few seconds..." should appear in the upper right, indicating a successful admin action. The page will reload. The <b>active</b> indicator next to the TigerSnatch logo should be green after the reload, and hovering over it should produce a tooltip explaining the meaning of that color.</p> 
<p>Check your email (the address shown at the bottom-left of <b>Dashboard</b>) after approximately 60 seconds.</p>	<p>An email from <a href="mailto:tigersnatch@princeton.edu">tigersnatch@princeton.edu</a> should appear in your inbox (check Spam if not there) indicating that slots are open in ORF309 P01. Note that if you do not complete the next step within 60 seconds, you will again receive the same email.</p> <p><b>[†]</b> Although the received email says that "You'll continue to receive notifications for this section every 2 minutes", we have shortened this interval to every minute for grading purposes.</p>
<p><b>IMPORTANT:</b> Navigate to <b>Admin</b> (via the navbar) and click <b>Turn Off</b> in the <b>Toggle Email Notifications</b> row. Click <b>OK</b> to confirm that</p>	<p>The message "Email notifications turned off! Reloading in a few seconds..." should appear in the upper right, indicating a successful</p>



<p>you want to do this action in the confirmation popup.</p> 	<p>admin action. The page will reload. The <b>active</b> indicator next to the TigerSnatch logo should be red after the reload, and hovering over it should produce a tooltip explaining the meaning of that color.</p> 
<p>Navigate to <b>Dashboard</b> and unsubscribe from ORF309 P01 in the Snatches table. Confirm that you'd like to unsubscribe in the confirmation popup.</p>	<p>The message "Successfully unsubscribed!" should appear in the upper right, indicating a successful un-Subscription from ORF309 P01. The row for ORF309 should disappear.</p> 
<p>Navigate to <b>Activity</b> and look at the <b>Subscriptions</b> column.</p>	<p>The most recent message should be <b>[datetime] → x spots available in ORF309 P01</b>, where x is an integer. This message means that TigerSnatch sent you an email about x open slots in ORF309 at the time <i>datetime</i>.</p>

#### Comments

- For purposes of grading, enrollment in ORF309 P01 must be manually filled (it is in fact not full) to "fool" our notification algorithm into thinking that slots opened up, causing an email to be sent.
- Be sure to check your spam folder in case the TigerSnatch email is flagged as spam.

## Use Case 5: Change email for notifications

#### Pre-requisites

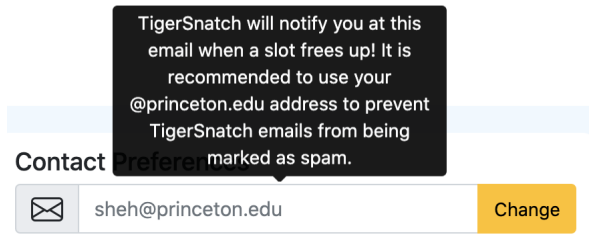
- You've completed Use Case 1.

#### Features demonstrated

- Dashboard preferences pane



- Email address change

Steps	Intended Behaviors
Go to <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a> .	You should be directed immediately to the Dashboard, provided that you are logged in via CAS.
In the <b>Contact Preferences</b> pane (lower-left of the Dashboard), look at your current email address, which is the pre-filled form value.	By default, your email in the TigerSnatch system is simply <a href="mailto:yourNetID@princeton.edu">yourNetID@princeton.edu</a> . Note that hovering over the email form field produces a tooltip describing how TigerSnatch uses your email address. 
Enter a new email (an address that you own) and click <b>Change</b> .	The page should reload, and the pre-filled form value in the <b>Contact Preferences</b> pane should reflect the email address you just submitted. Completing Use Case 4 will notify you at this new email address.

#### Comments

- It is preferred that users set their email to their @princeton.edu address to significantly reduce the chance that TigerSnatch emails are not sent to spam.

## Use Case 6: Set your current enrollment, and find & email a Trade

#### Pre-requisites

- You have completed Use Case 2.

#### Features demonstrated

- Trades
- Activity page
- Trades Tracker

Steps	Intended Behaviors
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<p>Go to <b>Dashboard</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a>). Search for <b>COS126</b> on the search bar, and click on the search result for <b>COS126/EGR126</b>.</p>	<p>The Course page for COS126 is shown.</p>
<p>Under the “Trade sections with another Tiger?” panel, select <b>B03A</b> as your current enrollment from the dropdown and click the gray <b>Save</b> button.</p> <div data-bbox="224 598 782 730"><p>Trade sections with another Tiger? </p><div><div>Your current enrollment: <span>▼</span></div><div>Save</div></div><div><div>Find Trades!</div><div>Remove me from this Trade</div></div></div>	<p>A green toast indicating that you have successfully saved your current section shows up on the top right.</p> <div data-bbox="828 554 1421 640"><p>Successfully saved your current section for this course! </p></div> <p>The yellow <b>Find Trades</b> button and the red <b>Remove me from this trade</b> button become enabled.</p> <div data-bbox="831 831 1416 877"><div>Find Trades!</div><div>Remove me from this Trade</div></div>
<p>Go to <b>Dashboard</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a>).</p>	<p>The <b>Trades Tracker</b> panel on the bottom right displays the message “You seek to trade out of COS126 B03A”.</p> <div data-bbox="844 1083 1391 1176"><p><b>Trades Tracker</b> </p><p>→ You seek to trade out of <b>COS126 B03A</b></p></div>
<p>Go back to the COS 126 course page by clicking on the hyperlink to <b>COS126 B03A</b> in the Trades Tracker.</p> <div data-bbox="224 1383 418 1423"><p><b>COS126 B03A</b></p></div>	<p>The Course page for COS126 is shown.</p>
<p>Click the <b>Find Trades</b> button.</p>	<p>A modal titled <b>Potential Trades</b> shows up. The modal contains a table with columns “NetID,” “Current Section,” and “Contact.”</p>



	<div><div>Potential Trades</div><div>⚠ Clicking 'Email' will add an entry for you &amp; the match in Activity.</div><table><thead><tr><th>NetID</th><th>Current Section</th><th>Contact</th></tr></thead><tbody><tr><td>zishuoz</td><td>B03B</td><td><div>✉ Email</div></td></tr><tr><td>ntyp</td><td>B03B</td><td><div>✉ Email</div></td></tr></tbody></table><div>Close</div></div>	NetID	Current Section	Contact	zishuoz	B03B	<div>✉ Email</div>	ntyp	B03B	<div>✉ Email</div>
NetID	Current Section	Contact								
zishuoz	B03B	<div>✉ Email</div>								
ntyp	B03B	<div>✉ Email</div>								
<div><div>[t] Click the <b>Email</b> button for the row with netid ntyp.</div><div><div>✉ Email</div></div></div>	<div><div>A popup with the message “Are you sure you want to email this user? They will be notified on their Activity page if you confirm!” shows up.</div><div>tigersnatch.herokuapp.com says</div><div>Are you sure you want to email this user? They will be notified on their Activity page if you confirm!</div><div><div>Cancel</div><div>OK</div></div></div>									
<div><div>Click <b>OK</b> on the popup.</div></div>	<div><div>A Gmail window opens in a new tab. The sender of the Gmail is yourself, [t] and the receiver of the Gmail will be <a href="mailto:ntyp@princeton.edu">ntyp@princeton.edu</a>. The body of the Gmail contains a message that requests a trade with the receiver.</div></div>									
<div><div>Click the <b>Send</b> button on the bottom left of the new window to send the Gmail message.</div></div>	<div><div>Shortly after the email sends successfully, the Gmail window closes automatically.</div></div>									
<div><div>Go to <b>Activity</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/activity">https://tigersnatch.herokuapp.com/activity</a>).</div></div>	<div><div>You will see an entry in the Trades column indicating that you have contacted ntyp for a course trade.</div><div><div>Trades</div><div>May 05, 2021 @ 6:38 PM ET → You contacted ntyp to swap into COS126 B03B</div></div><div><div>The person (in this case, ntyp) you contact will also have an entry added to the Trades column on the Activity page. It looks like this:</div></div></div>									



	<div><div>Trades</div><div>May 05, 2021 @ 6:38 PM ET → sheh contacted you about swapping into your section COS126 B03B</div></div>
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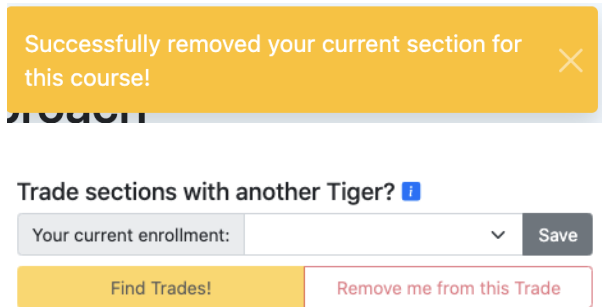
## Use Case 7: Clear your current enrollment

Pre-requisites

- You have completed Use Case 6.

Features demonstrated

- Trades
- Trades Tracker

Steps	Intended Behaviors
Go to <b>Dashboard</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a> ). Search for <b>COS126</b> on the search bar, and click on the search result for <b>COS126/EGR126</b> .	The Course page for COS126 is shown.
Under the “Trade sections with another Tiger?” panel, click the red <b>Remove me from this trade</b> button.	A yellow toast indicating that you have successfully removed your current Trade shows up on the top right. The yellow <b>Find Trades</b> button and the red <b>Remove me from this trade</b> button is disabled. The <b>Your current enrollment</b> dropdown is emptied. 
Go to <b>Dashboard</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a> )	The <b>Trades Tracker</b> panel on the bottom right now displays the message “You've not yet specified any currently-enrolled sections - navigate to a course page and submit your currently enrolled section for that course to look for Trades.”



	<b>Trades Tracker</b> ⓘ You've not yet specified any currently-enrolled sections - navigate to a course page and submit your currently enrolled section for that course to look for Trades!
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## Use Case 8: Blacklist and unblacklist a user (Admin)

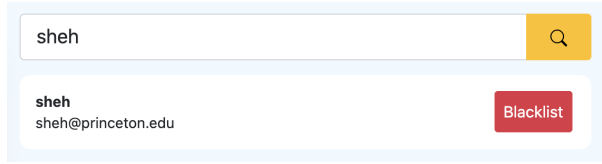
**[†]** As discussed in Professor Dondero's office hours and in TigerSnatch's weekly meeting with Sata, we present screenshots of the blacklisting and unblacklisting process and the result. These features were demonstrated live during the TigerSnatch presentation. **Note that attempting to test this feature will not work, because user sheh is an administrator. Thus, we respectfully request that the graders do not attempt to complete this Use Case.**

### Prerequisites

- You have completed Use Case 1.
- You must have access to the administrator panel.

### Features demonstrated

- Administrator panel
- Blacklisting and unblacklisting specific users

Steps	Intended Behaviors
Go to <a href="https://tigersnatch.herokuapp.com/admin">https://tigersnatch.herokuapp.com/admin</a> .	You should be directed immediately to the administrator panel, provided that you are logged in via CAS and are an administrator.
Observe the search panel on the left side of the screen. Search for a user whom you wish to blacklist from TigerSnatch. <b>[†]</b> For grading purposes, we will specifically search for user sheh (one of the developers of TigerSnatch).	The search pane should show one or more netID matches to the search query, in this case: 
Click <b>Blacklist</b> on the specific netID search hit you wish to blacklist. Confirm that you want to blacklist that user by clicking <b>OK</b> .	You are first prompted with the below popup, on which you click <b>OK</b> :



	<div>Are you sure you want to blacklist this user?</div> <div>Cancel OK</div> <p>The message "Successfully blacklisted/unblacklisted user! Reloading in a few seconds..." should appear in the upper right, indicating a successful admin action:</p> <div>Successfully blacklisted/unblacklisted user! Reloading in a few seconds...</div> <p>The page will reload. The blacklisted user (<b>[t]</b> in this case, sheh) should no longer appear in the search pane if you were to search for that netID again. Instead, it should appear in the <b>Blacklist</b> pane in the lower-left of the administrator panel:</p> <div>Blacklist <b>[t]</b> sheh Unblacklist</div>
The blacklisted user ( <b>[t]</b> in this case, sheh) should now see a "blacklisted" page when attempting to access any CAS-protected page on TigerSnatch.	<p>The page content looks like this:</p> <div>You have been blocked from accessing TigerSnatch. If you believe this is a mistake, please contact the TigerSnatch admins (tigersnatch@princeton.edu).</div>
Suppose you wish to unblacklist a user. In the <b>Blacklist</b> pane in the lower-left of the administrator panel, locate the netID of the user you wish to remove from the TigerSnatch blacklist. Click <b>Unblacklist</b> on the specific netID entry you wish to unblacklist. Confirm that you want to unblacklist that user by clicking <b>OK</b> .	<p>You are first prompted with the below popup, on which you click <b>OK</b>:</p> <div>Are you sure you want to unblacklist this user?</div> <div>Cancel OK</div> <p>The message "Successfully blacklisted/unblacklisted user! Reloading in a few seconds..." should appear in the upper right, indicating a successful admin action:</p>





	<div>Successfully blacklisted/unblacklisted user! Reloading in a few seconds...</div> <p>The page will reload. The blacklisted user ([t] in this case, sheh) should no longer appear in the <b>Blacklist</b> pane in the lower-left of the administrator panel.</p>
The blacklisted user ([t] in this case, sheh) should now be able to access any TigerSnatch page available to non-administrator users.	

#### Comments

- Blacklisting users should be a last-resort action for Admins.

## Use Case 9: Retrieve user data (Admin)

#### Prerequisites


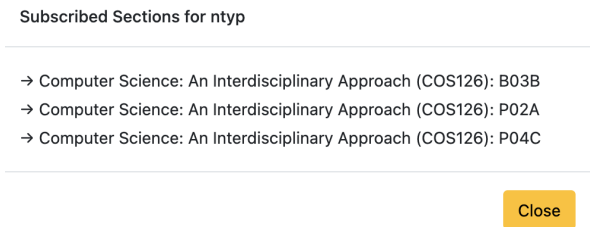
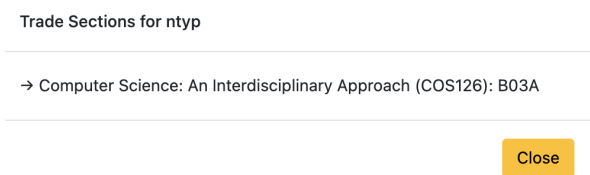
- You have completed Use Case 1.
- You must have access to the administrator panel.

#### Features demonstrated

- Administrator panel
  - Get Subscribed Sections
  - Get Trade Sections

Steps	Intended Behaviors
[t] Complete Use Case 2. For the purposes of grading, let <b>NETID</b> be the netID of the grader (likely either rdondero or satada1s) for the remainder of steps in this Use Case.	[t] <b>NETID</b> should be subscribed to COS126 B03B, P02A, and P04C. Confirm this by visiting <b>Dashboard</b> and looking at your Snatches table.
[t] Complete the first two steps of Use Case 6.	[t] <b>NETID</b> should have a current enrollment set to COS126 B03A. Confirm this by visiting <b>Dashboard</b> and looking at your Trades Tracker panel in the lower right.
Go to <a href="https://tigersnatch.herokuapp.com/admin">https://tigersnatch.herokuapp.com/admin</a> .	You should be directed immediately to the administrator panel, provided that you are logged in via CAS and are an administrator.



Scroll down on the table with columns "Descriptions," "Inputs," "Action" and locate the row with description <b>Get Subscribed Sections</b> .	<p>This is what the table will look like:</p> 
On the <b>Get Subscribed Sections</b> row, enter <b>NETID</b> in the input column, and click the yellow <b>Get</b> button on the Action column.	<p>A modal containing subscribed sections for <b>NETID</b> will show up, containing (at least) these three entries:</p> 
Click <b>Close</b> on the modal.	The modal closes.
In the table, locate the row with the description <b>Get Trade Sections</b> .	
On the <b>Get Trade Sections</b> row, enter <b>NETID</b> in the input column, and click the yellow <b>Get</b> button on the Action column.	<p>A modal containing Trade sections (i.e. currently enrolled sections) for <b>NETID</b> will show up, containing (at least) the following entry:</p> 
Click <b>Close</b> on the modal.	The modal closes.

#### Comments

- Normally, this Use Case would be performed on a user other than yourself. The first two steps of this Use Case are for the purposes of grading, so the graders can get reproducible results and see content in the generated modals.

## Use Case 10: Clear subscriptions (Admin)

### Prerequisites



- You have completed Use Case 1.
- You must have access to the administrator panel.

#### Features demonstrated

- Administrator panel
  - Clear Section Subscriptions
  - Clear Course Subscriptions\*
  - Clear All Subscriptions\*

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**\* The TigerSnatch team respectfully requests that the grader does NOT interact with the Clear All Subscriptions and Clear Course Subscriptions features. *For Clear Section Subscriptions, please do not deviate from our directions.* These features are present mainly if the database becomes severely corrupted, which is an unlikely event. Additionally, interacting with the Clear All Subscriptions and Clear Course Subscriptions will cause Use Case 6 to produce wrong results for the next grader. If a grader would like to see the features in action, please wait until all graders have finished testing the other Use Cases, or arrange a time with the TigerSnatch team (sheh@princeton.edu).**

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Steps	Intended Behaviors
<b>[†]</b> Complete Use Case 2. For the purposes of grading, let <b>NETID</b> be the netID of the grader (likely either rdondero or satada1s) for the remainder of steps in this Use Case.	<b>[†] NETID</b> should be subscribed to COS126 B03B, P02A, and P04C. Confirm this by performing Use Case 9 (specifically the result of the <b>Get Subscribed Sections</b> functionality):  Subscribed Sections for ntyp  → Computer Science: An Interdisciplinary Approach (COS126): B03B → Computer Science: An Interdisciplinary Approach (COS126): P02A → Computer Science: An Interdisciplinary Approach (COS126): P04C  <div>Close</div>
Go to <a href="https://tigersnatch.herokuapp.com/admin">https://tigersnatch.herokuapp.com/admin</a> .	You should be directed immediately to the administrator panel, provided that you are logged in via CAS and are an administrator.


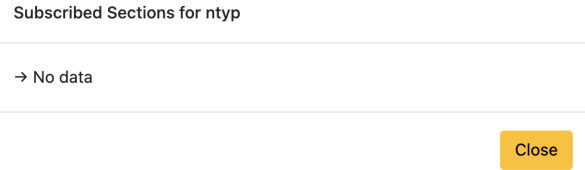


Scroll down on the table with columns "Descriptions," "Inputs," "Action" and locate the row with description <b>Clear Section Subscriptions</b> .	<p>This is what the table will look like:</p> 
<b>[t]</b> On the <b>Clear Section Subscriptions</b> row, enter <b>43383</b> (classID for COS126 P02A, obtainable from the course registrar webpage) in the input column, and click the yellow <b>Clear</b> button on the Action column.	<p><b>[t]</b> A popup with text "Are you sure you want to clear subscriptions for class 43383? This action is irreversible." shows up.</p> 
Click <b>OK</b> on the popup.	<p>A green toast with text "Cleared successfully" shows up on the upper right.</p> 
<b>[t]</b> <b>NETID</b> should no longer be subscribed to COS126 P02A. Confirm this by performing Use Case 9 (specifically the result of the <b>Get Subscribed Sections</b> functionality for user <b>NETID</b> ).	<p><b>[t]</b> This step confirms that the previous <b>Clear Section Subscriptions</b> action worked for COS126 P02A (COS126 P02A is no longer in the modal generated by Use Case 9):</p> 
<b>[t]</b> <b>DO NOT PERFORM ANY OF THE BELOW STEPS. SEE THE * WARNING ABOVE THIS TABLE.</b>	
In the table, locate the row with the description <b>Clear Course Subscriptions</b> .*	
<b>[t]</b> On the <b>Clear Course Subscriptions</b> row, enter <b>002051</b> (courseID for COS126, obtainable from the course registrar webpage) in the input column, and click the yellow <b>Clear</b>	<p><b>[t]</b> A popup with text "Are you sure you want to clear subscriptions for course 002051? This action is irreversible." shows up.</p>



button on the Action column.	<p>tigersnatch.herokuapp.com says</p> <p>Are you sure you want to clear subscriptions for course 002051? This action is irreversible.</p> <p><a href="#">Cancel</a> <a href="#">OK</a></p>
Click "OK" on the popup.	<p>A green toast with text "cleared successfully" shows up on the right.</p> <p>Cleared successfully! <a href="#">×</a></p>
<b>[+]</b> <b>NETID</b> should no longer be subscribed to COS126 B03B and P04C. Confirm this by performing Use Case 9 (specifically the result of the <b>Get Subscribed Sections</b> functionality) for user <b>NETID</b> .	<p><b>[+]</b> This step confirms that the previous <b>Clear Course Subscriptions</b> action worked for COS126 (no COS126 Subscriptions are in the modal generated by Use Case 9):</p> <p>Subscribed Sections for ntyp</p> <p>→ No data</p> <p><a href="#">Close</a></p>
<b>[+]</b> Complete Use Case 2, again.	<p><b>[+]</b> <b>NETID</b> should be subscribed to COS126 B03B, P02A, and P04C. Confirm this by performing Use Case 9 (specifically the result of the <b>Get Subscribed Sections</b> functionality) for user <b>NETID</b>:</p> <p>Subscribed Sections for ntyp</p> <p>→ Computer Science: An Interdisciplinary Approach (COS126): B03B → Computer Science: An Interdisciplinary Approach (COS126): P02A → Computer Science: An Interdisciplinary Approach (COS126): P04C</p> <p><a href="#">Close</a></p>
In the table, locate the row with the description <b>Clear All Subscriptions</b> .* Click the <b>Clear</b>	<p>A popup with text "Are you sure you want to clear all subscriptions? This action is irreversible." shows up.</p>



button.	<p>tigersnatch.herokuapp.com says</p> <p>Are you sure you want to clear all subscriptions? This action is irreversible.</p> <p><input type="button" value="Cancel"/> <input type="button" value="OK"/></p>
Click <b>OK</b> on the popup.	<p>A green toast with text “cleared successfully” shows up on the right.</p> 
<b>[†]</b> <b>NETID</b> should no longer be subscribed to COS126 B03B, P02A, and P04C. Confirm this by performing Use Case 9 (specifically the result of the <b>Get Subscribed Sections</b> functionality) for user <b>NETID</b> .	<p><b>[†]</b> This step confirms that the previous <b>Clear All Subscriptions</b> action worked (zero Subscriptions are in the modal generated by Use Case 9 for user <b>NETID</b>):</p> 

#### Comments

- It is very rare that Subscriptions need to be manually cleared. Do not perform Use Case 10 unless there is a major database corruption, as it affects Subscriptions, perhaps the primary core feature of TigerSnatch.

## Use Case 11: Use TigerSnatch from a mobile device

#### Pre-requisites

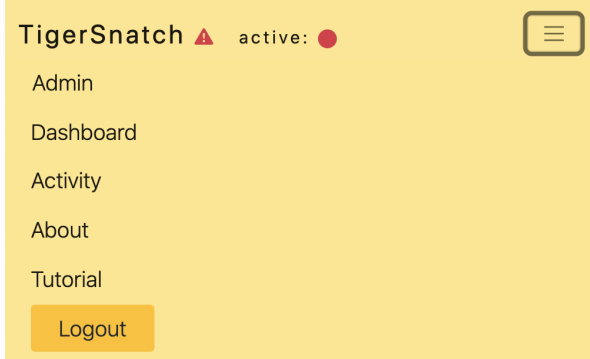
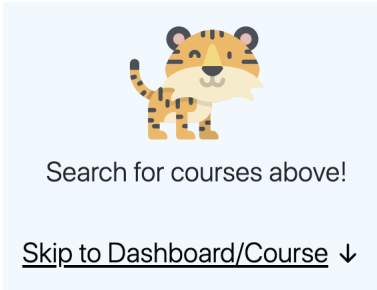

- You have completed Use Case 1.
- You are either using a mobile device (e.g. an iPhone) or a very narrow (< 992px) desktop browser window.

#### Features demonstrated

- Special mobile functionality, UI, and convenience features

Steps	Intended Behaviors
Go to <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a>	You should be directed immediately to <b>Dashboard</b> , provided that you are logged in



.	via CAS.
Click/tap the hamburger button in the upper right.	<p>A dropdown navigation bar menu should appear listing all of the available pages you can go to, such as <b>Dashboard</b> or <b>Activity</b>.</p> 
Click/tap anywhere outside of the dropdown navigation bar menu.	The navigation bar menu should collapse.
Click/tap <b>Skip to Dashboard/Course</b> .	The page should automatically scroll down to the main dashboard pane (your netID should be shown).
	
Click/tap <b>search</b> , the text to the right of your netID.	The page should automatically scroll up to the search panel.
	
In the search bar, enter <b>COS126</b> . Tap/click on the shown search hit.	The page should automatically scroll down to the tapped course page (the course title should be shown).
Click/tap <b>search again</b> , the text to the right of the course code.	The page should automatically scroll up to the search panel.

#### Comments

- Similar mobile responsiveness is implemented on the **Admin, Activity, About, Tutorial**, and **Landing** pages.



- If you are Subscribed to one or more sections (this can be achieved by completing Use Case 2), and if your mobile device/browser window is narrow enough, the sections table on the **Dashboard** and on any course page becomes both horizontally and vertically scrollable. Further, clicking on a direct course link from the Dashboard table or the Trades Tracker will automatically scroll down once the course page loads.

## Use Case 12: Additional user features

### Pre-requisites

- You have completed Use Case 1.

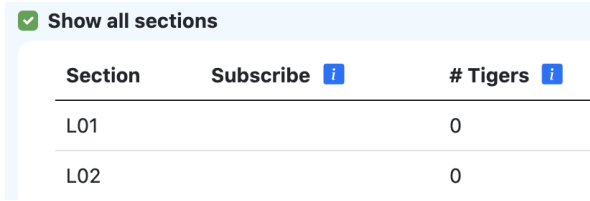
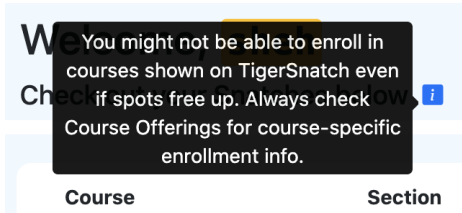
### Features demonstrated

- Show All Sections checkbox on Course Page
- Quick Links on Course Page
- Disclaimer tooltip
- About page
- Logout button

Steps	Intended Behaviors
Go to <b>Dashboard</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/dashboard">https://tigersnatch.herokuapp.com/dashboard</a> ). Search for <b>COS126</b> on the search bar, and click on the search result for <b>COS126/EGR126</b> .	The Course page for COS126 is shown.
In the bottom left, click on the three links under <b>Quick Links for COS126/EGR126</b> .	Three new tabs should open: 1. the Registrar's Course Offerings page for COS126 (for official course details) 2. the Princeton Courses page for COS126 (for course evaluations & ratings) 3. your TigerHub portal (for enrolling in courses) These are three pages that Princeton students frequently visit during the course enrollment period, so we have provided them under Quick Links for your convenience.  <b>Quick Links for COS126/EGR126</b> <a href="#">🔗 Official Course Offerings</a> <a href="#">🔗 Princeton Courses</a> <a href="#">🔗 TigerHub Portal</a>
On top of the course table, check <b>Show All Sections</b> .	The table displays all sections, full or non-full, in COS126. Non-full sections do not





	<p>have a switch under the Subscribe column.</p> 
Return to <b>Dashboard</b> . Hover over the info icon next to "Check out your Snatches below".	<p>A tooltip should appear that warns TigerSnatch users to check Course Offerings to verify they can enroll in their Subscribed sections.</p> 
Go to <b>About</b> (via the nav bar or <a href="https://tigersnatch.herokuapp.com/about">https://tigersnatch.herokuapp.com/about</a> ).	Read the <b>About</b> page to read TigerSnatch's mission and meet the TigerSnatch team.
Click on the <b>Logout</b> button on the top right.	You are taken back to the <b>Landing</b> page. In the nav bar, you see the general <b>About</b> and <b>Tutorial</b> pages and the <b>Login</b> button. You no longer see any personalized TigerSnatch data.

## Use Case 13: Additional administrator features

*This Use Case exists solely to demonstrate the "Clear All User Logs" and "Clear All Trades" functionalities on the admin panel.*

### Pre-requisites

- You have completed Use Case 1.
- **[t]** You have completed Use Case 4 and Use Case 6.
  - As a result of completing these Use Cases, you will have specified COS126 B03A as your current enrollment in COS126. You will also have an entry in the **Subscriptions** column on the **Activity** page, as well as an entry in the **Trades** column on the **Activity** page.
  - These use cases normally need not be completed, but for grading purposes, we want to demonstrate that the TigerSnatch admin panel is able to clear all user logs and all Trades.



- You must have access to the administrator panel.


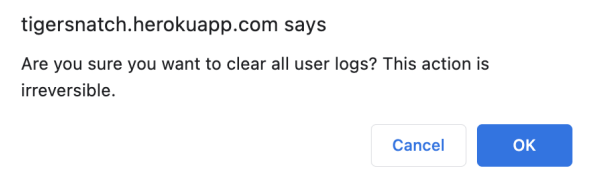
#### Features demonstrated

- Administrator panel
  - Clear All User Logs
  - Clear All Trades\*


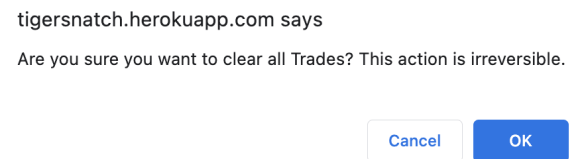


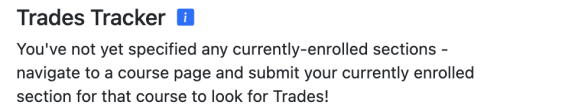
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**\* The TigerSnatch team respectfully requests that the grader does NOT interact with the Clear All Trades feature. This feature is present mainly if the database becomes severely corrupted, which is an unlikely event. Additionally, interacting with the Clear All Trades will cause Use Case 6 to produce wrong results for the next grader. If a grader would like to see the feature in action, please wait until all graders have finished testing the other Use Cases, or arrange a time with the TigerSnatch team (sheh@princeton.edu).**

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Steps	Intended Behaviors
Go to <a href="https://tigersnatch.herokuapp.com/admin">https://tigersnatch.herokuapp.com/admin</a> .	You should be directed immediately to the administrator panel, provided that you are logged in via CAS and are an administrator.
Scroll down on the table with columns "Descriptions," "Inputs," "Action" and locate the row with description <b>Clear All User Logs</b> .	This is what the table will look like: 
On the <b>Clear All User Logs</b> row, click <b>Clear</b> .	A popup with text "Are you sure you want to clear all user logs? This action is irreversible." shows up.  
Click <b>OK</b> on the popup.	A green toast with text "cleared successfully"



	<p>shows up on the right.</p> 
<b>[†] DO NOT PERFORM ANY OF THE BELOW STEPS. SEE THE * WARNING ABOVE THIS TABLE.</b>	
On the <b>Clear All Trades</b> row, click <b>Clear</b> .*	<p>A popup with text “Are you sure you want to clear all Trades? This action is irreversible.” shows up.</p> 
Click <b>OK</b> on the popup.	<p>A green toast with text “cleared successfully” shows up on the right.</p> 
<b>[†] Go to Activity.</b>	<p><b>[†] Both the <b>Subscriptions</b> and <b>Trades</b> columns on <b>Activity</b> should now be empty, instead showing placeholder messages (which do not have timestamps).</b></p> 
<b>[†] Go to Dashboard.</b>	<p><b>[†] The “Trades Tracker” panel on the bottom right displays the message “You've not yet specified any currently-enrolled sections - navigate to a course page and submit your currently enrolled section for that course to look for Trades.”</b></p> 



#### Comments

- These two administrator features should be used only in the event of a major database corruption, since they impact all users.

### Use Case 14: Update course term (Admin)

#### Pre-requisites

- You have completed Use Case 1.
- [†] You have completed Use Case 2, Use Case 4, and Use Case 6
  - As a result of completing these Use Cases, you will be subscribed to COS126 B03B and have an entry for that section on **Dashboard**. You will have specified COS126 B03A as your current enrollment in COS126. You will also have an entry in the **Subscriptions** column on the **Activity** page, as well as an entry in the **Trades** column on the **Activity** page.
  - These use cases normally need not be completed, but for grading purposes, we want to demonstrate that TigerSnatch has executed a full reset of non user-profile (e.g. email address, netID) data.
- You must have access to the administrator panel.

#### Features demonstrated

- Administrator panel
- Updating TigerSnatch to the latest course term\*

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**\* The TigerSnatch team respectfully requests that the grader does NOT interact with the Update to Latest Term feature due to the fact that it performs a reset of all non-user data. Doing so will cause nearly all use cases to produce wrong results for the next grader. If a grader would like to see the feature in action, please wait until all graders have finished testing the other Use Cases, or arrange a time with the TigerSnatch team (sheh@princeton.edu).**


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Steps	Intended Behaviors
[†] DO NOT PERFORM ANY OF THE BELOW STEPS. SEE THE * WARNING ABOVE THIS TABLE.	
Go to <a href="https://tigersnatch.herokuapp.com/admin">https://tigersnatch.herokuapp.com/admin</a> .	You should be directed immediately to the administrator panel, provided that you are



	logged in via CAS and are an administrator.						
Observe the first row of the administrator functions table, titled <b>Update to Latest Term (current: xxxx)</b> .	<div><div>[+]</div> In this case, xxxx will be 1214, i.e. the term code for Spring '21.</div> <div><table><thead><tr><th>Description</th><th>Inputs</th><th>Action</th></tr></thead><tbody><tr><td>Update to Latest Term (current: 1214)</td><td>-</td><td><div>Update</div></td></tr></tbody></table></div>	Description	Inputs	Action	Update to Latest Term (current: 1214)	-	<div>Update</div>
Description	Inputs	Action					
Update to Latest Term (current: 1214)	-	<div>Update</div>					
<div>Click the red <b>Update</b> button. Read the description message in the popup and click <b>OK</b>. Read the description message in the second popup and click <b>OK</b>.</div> <div><div>tigersnatch.herokuapp.com says</div><div>Are you sure you want to update TigerSnatch to the latest term? This action will clear ALL term-specific data (including user logs, Trades, subscriptions, and curent sections) and is irreversible. TigerSnatch will go into maintenance mode for 2-3 minutes while updating.</div><div><div>Cancel</div><div>OK</div></div><div>tigersnatch.herokuapp.com says</div><div>Are you ABSOLUTELY sure you want to update TigerSnatch to the latest term?</div><div><div>Cancel</div><div>OK</div></div></div>	<div>The message "TigerSnatch will update to the latest term and go offline for 2-3 minutes. Reloading in a few seconds..." should appear in the upper-right corner. The site will reload into the default Heroku maintenance mode page. The course update process will take 2-3 minutes, after which TigerSnatch will be automatically taken out of maintenance mode. Email notifications will automatically be enabled if they were enabled before the term code update.</div>						
<div>[+] After TigerSnatch has exited maintenance mode, visit the <b>Dashboard</b> and <b>Activity</b> pages.</div>	<div><div>[+] The Subscriptions table on <b>Dashboard</b> should now be empty, showing instead a placeholder message telling you to "Search to get started!" Both the <b>Subscriptions</b> and <b>Trades</b> columns on <b>Activity</b> should now be empty, instead showing placeholder messages.</div><div><div>Your subscribed sections are displayed here.</div><div>Search to get started!</div><div><div><div>Subscriptions</div><div>Once a spot is available in your subscribed sections, a message will appear here!</div></div><div><div>Trades</div><div>Once you've contacted a Tiger to trade sections, a message will appear here!</div></div></div></div></div>						
<div>[+] Go to <b>Dashboard</b>. In the search panel, type <b>COS126</b> and click on the search hit for that</div>	<div>[+] The sections table for COS126 should no longer reflect that you are subscribed to any</div>						



course.	section in COS126 (i.e. all <b>Subscribe</b> switches should be in the off position).
<b>[+]</b> Return to <b>Dashboard</b> .	<b>[+]</b> The “Trades Tracker” panel on the bottom right displays the message “You've not yet specified any currently-enrolled sections - navigate to a course page and submit your currently enrolled section for that course to look for Trades.”  <b>Trades Tracker</b>  You've not yet specified any currently-enrolled sections - navigate to a course page and submit your currently enrolled section for that course to look for Trades!