

While initially we wrote the notifications scripts in bash, we also added them in Python to take advantage of the unittest testing framework in Python. We didn't find anything similar for bash, and hence we could not develop unit tests for the scripts there.

The following files are used for sending Notifications. We also wrote a unittest framework, and added a test. We will try to add more before the presentation

- **Notifications.py:** defines the Notifications class that contains the below methods
 - **read_file:** Reads the contents of a given file. It is used to read the user ids and tokens for all recipients who should receive notifications.
 - **create_arguments_dictionary:** It creates a Python dictionary of all the arguments that are to be passed to the message. In particular, it contains the following keys
 - User
 - Token
 - Title
 - Message
 - **send_notifications:** Sends a POST request to the pushover server, which in turn sends out notifications to the users, based on the user and token information provided in the dictionary.
- **test_notifications.py:** Creates a Unit test environment for testing the Notifications class. As of now, we have added a unit test only for the `read_file()` function.
- **user_list_for_notification:** A text file that contains the user ids and tokens registered with the pushover website. This is read by the wrapper script to send notifications. Since this will reside in clear text format on the server, the access to this needs to be controlled. Ideally, this file should reside as a file that can be read only by the user.