Notifications Creations Dashboard

This document contains 3 sections:

- Frontend Part
- Backend Structure of Code
- Test Cases

Code is placed at path:
https://github.com/mkumar9009/NotificationCreations-Queue.git

Frontend

To enqueue or send the notification in the system, User is asked to do below tasks:

- Select the usertype ADMIN,INDIVIDUAL or OPERATIONS to whom the notifications need to be send.
- Type the content of notification.
- Enter the time when it has to be delivered.
- Click on Enqueue Notification Button.
- Message will be given to user whether the notification has been enqueued in the system.

Backend Structure:

Models.py:
It contains below models in the system

- Users
  Users Model stores Firstname,Lastname, Password, username, email_address, Phoneno, LastVisitDate, Address and Usertype information.
- UserType
  UserType Model stores the type of Information of User which here is Admin,Individual or Operations.
- Notifications
  Notifications model store all the notifications which are going to users in the system. It contains fields like Notification Type, Deliver time, Content and Usertype.This model can be further enhanced by adding status states like pending, delivered and read

Users Table contains some already pre-defined users whom we are sending the notifications.

Tasks.py
It contains the dummy send_notification(self,user_id, notification_payload) function which will contain the code to push notification to users.

Views.py
It contains two functions *index()* and *send_notification_to_users(users_to_send_notification, base_notification_payload) .*

Index() is the wrapper function which validates the form to get Notification Content from the user and provides the appropriate data to *send_notification_to_users()* function.

send_notification_to_users(users_to_send_notification, base_notification_payload) function make the notification payload and enqueue the notification asynchronously in the system at a time specified by user in the frontend.

forms.py
It contains the fields to be shown in the frontend while taking the information from the user.

Test Cases:

S.No.	Test Case	Expected Result	Results
1	Make a notification for ADMIN TYPE Users and Click Enqueue Notification.	No of queued notifications in Celery shall match with the no of ADMIN TYPE USERS in the database.	
2	Make a notification for Operations TYPE Users and Click Enqueue Notification.	No of queued notifications in Celery shall match with the no of Operations TYPE USERS in the database.	
3	Make a notification for Individual TYPE Users and Click Enqueue Notification.	No of queued notifications in Celery shall match with the no of Individual TYPE USERS in the database.	
4	Deliver Time of user shall match with the notification Enqueued time in the celery.		
5.	Make a notification for ADMIN TYPE Users and add deliver time as current time of system +1 min. Click Enqueue Notification.	After 1 min of enqueue all the enqueued notifications shall get succeded as per celery results.	
6.	Make a notification for Operations TYPE Users and add deliver time as current time of system +1 .Click Enqueue Notification.	After 1 min of enqueue all the enqueued notifications shall get succeded as per celery results.	
7.	Make a notification for Individual TYPE Users and add deliver time as current time of system +1 .Click Enqueue Notification.	After 1 min of enqueue all the enqueued notifications shall get succeded as per celery results.	