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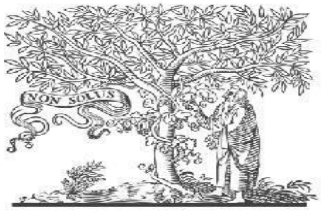

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Title **EMAIL NOTIFICATIONS ON WHATSAPP**

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EMAIL NOTIFICATIONS ON WHATSAPP

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Abstract
Emails have come one of the mosthabituated digital communication mediums. But, the sad verity, that since they are so aggressively used, it's relatively delicate to keep up with them. also, people keep on subscribing to new newsletters every now and, which also adds to this cause. So, in order to make our life a little bit easier, we can make a tool which will cost us the colourful details from our correspondence box on query. We will be creating a workflow in Twilio which queries the requested dispatch data, according to a given hunt criteria, and sends their details to WhatsApp. Twilio is an effective platform which provides us with the features demanded to negotiate this. It's a communication, dispatch, call, and announcement robotization tool/ platform. We will be exercising some of its featuresthrough this design.
Keywords: Twilio, WhatsApp, Automation.

Introduction

Emails is one of the most habituated digital communication media. As people subscribe to numerous newsletters and signup for colourful websites, we admit several emails. This becomes a problem when we want to keep up with the important emails up- to- date. To avoid this problem, we can use WhatsApp as a platform to shoot dispatch announcements or to checke mails by developing a tool that integrates both WhatsApp and a third- party API(Twilio) toenable dispatch announcements. Twilio is an effective platform which provides us with the features demanded to negotiate this. It's a Programmable messaging, dispatch, call and announcement robotization tool/ platform. We'll be exercising some of its features. The mainmotive is to design an robotization converse botanalogous to WhatsApp where we can get through our matters and also can shoot matters conforming of textbook. Reading matters in WhatsApp is much easier because we spend utmost of the time on WhatsApp and it also through emails is more complex task than reading them through WhatsApp with the help of a single query.

Twilio WhatsApp sandbox is used to configure the incoming dispatches from the WhatsApp bot and we will emplace our law on the web garçon and it sends the calls to the sandbox with proper replies.

The Coming section gives us the detailed information of the Literature Survey done. Section III summarizes about the proposed system and its main goals. Exploration platforms and strategies in Section IV. Section V explains the Limitations and we explain the results and discussions with Section VI. Section VII ends with the conclusion. With References we close the paper. With the Twilio Sandbox for WhatsApp, you can develop a prototype with WhatsApp

Literature Survey
Author: Shirazi et al.

Shiraz et al. carried out a complete survey of cellnotifications(alerts) and observed that individuals rated notifications from messaging packages because the maximum essential, out of 4.43 outof five (five being the maximum essential).[1]

Author: Phielot et al.

Phielot et al. investigates person reaction time for numerous styles of notifications and located huge variation. Specifically, the common reaction time ranged from 3.5 mins on messengers on weekends to 27.7 mins in line with electronic mail on weekends.[2]

Author: Martin Pielot,Karen Church and Rodrigo de

Martin Pielot,Karen Church and Rodrigo deproposed an In-Situ Study of Mobile Phone Notifications. Notifications on mobile phones alert users about new messages, emails, social network updates, and other events. We found that our participants had to deal with 63.5notifications on average per day, mostly from messengers and email. Whether the phone is in silent mode or not, notifications were typically viewed within minutes. Social pressure in personal communication was amongst the main reasons given.[3]

Author: Alireza Sahami Shirazi, Niels Henze, Tilman Dingler, Martin Pielot†, Dominik Weber, Albrecht Schmidt

Alireza Sahami Shirazi, Niels Henze, Tilman Dingler, Martin Pielot†, Dominik Weber, Albrecht proposed the use of Mobile notifications. Notifications are a core feature of mobile phones. They in-form users about a variety of events. Users may take immediate action or ignore them depending on the importance of a notification as well as their current context. The nature of notifications is manifold, applications use them both sparsely and frequently. We derive a holistic picture of notifications on mobile phones by collecting close to 200 million notifications from morethan 40,000 users.[4]algorithms.

Author: Ahmad Sanmorino and Ricky Maulana Fajri

Ahmad Sanmorino and Ricky Maulana Fajri Proposed the design of Notification System on Android Smartphone for Academic announcement. This notification will be used for the academic announcements in the campus environment. The current announcement system only depends on the web portal, phones, groups in social media or short message system. The use of web portals and phones still has many limitations.[5]

Proposed System

We'll be creating a workflow in Twilio which queries the requested dispatch data, according to a given hunt criteria, and sends their details to WhatsApp. Twilio is an effective platform which provides us with the features demanded to negotiate this. It's a communication, dispatch, call and announcement tool/ platform. We 'll be exercising some of its features through this design. The Twilio sandbox for WhatsApp is a pre-configured terrain available through the Twilio Console in which you can proto type transferring outbound dispatches, replying to in coming dispatches, and configuring effects like communication delivery calls. IMAP is a dispatch reclamation protocol which doesn't download the emails. It just reads them and displays them. This is veritably useful in low bandwidth condition. Python's customer- side library called imaplib is used for penetrating mails over imap protocol. At last, we integrate the IMAP function into Twilio Functions.

The main ideal of this design is to make anrobotization tool using python for reading and writing matters from WhatsApp. We'll be creating a workflow in Twilio which queries the requested dispatch data, according to a given hunt

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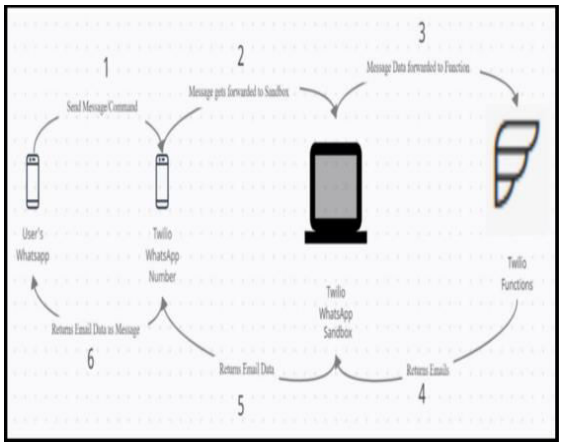
criteria and sends their details to WhatsApp. Primary pretensions to be achieved

1) produce a server less REST API the operation of Twilio Functions.

2) Configure Twilio WhatsApp Sandbox.

3) Keep trying and remedying the operation ofTwilio Functions Debugger.



Initially, we configure the Twilio WhatsApp Sandbox by which we can provide our WhatsApp number. Based on the queries we provide through the mobile WhatsApp; it analyses the queries with the help of Twilio functions. The message we send through the mobile is redirected to the Twilio WhatsApp and this message gets forwarded to the Twilios and box. the data is further forwarded to the Twilio functions where it analyses the data and retrieves the required emails from the server.

This workflow and retrieval of emails is possible by using IMAP (Internet Message Access Protocol) library to fetch emails. IMAPis an email retrieval protocol which does not load the mails. It only reads and displays them which saves us a lot of memory space. IMAPlibrary is very useful under low bandwidth situations.

Research Method

This Research involves several activities such as reviewing the primary studies related to the project for developing a Systematic Literature Review. The Review include the research of Predicting human interruptibility for the Mobile Notifications.

A. Data Resources:

- IEEEXplore(www.ieeexplore.ieee.org/Xplore/)
- ACM Digital library(www.portal.acm.org/dl.cfm)
- Google Scholar(http://scholar.google.com.au/)
- AIS e-Library (www.aisel.aisnet.org/)
- Twilio Docs for WhatsApp Automation(https://www.twilio.com/docs/whatsapp/tutorial/send-whatsapp-notificationmessages-templates)
- CompendexEI(www.engineeringvillage2.org/)

Results and Discussion:

The Proposed system was tested on a small scale, and the results were promising. The system was able to deliver email alerts to Whats App accounts in real-time. The email alert configuration module was easy to use, and users were able to configure the alerts they wanted toreceive without any difficulty.

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The Final result of the workflow is to display emails on WhatsApp. When we use the chat bot of WhatsApp for sending a query it displays us the required emails based on our message command. We can compose new emails, check for emails according to a label or a keyword (E.g.:Mails from Amazon, here we can use amazon asa keyword). Below are the results occurred afterdeploying the code on the web server.

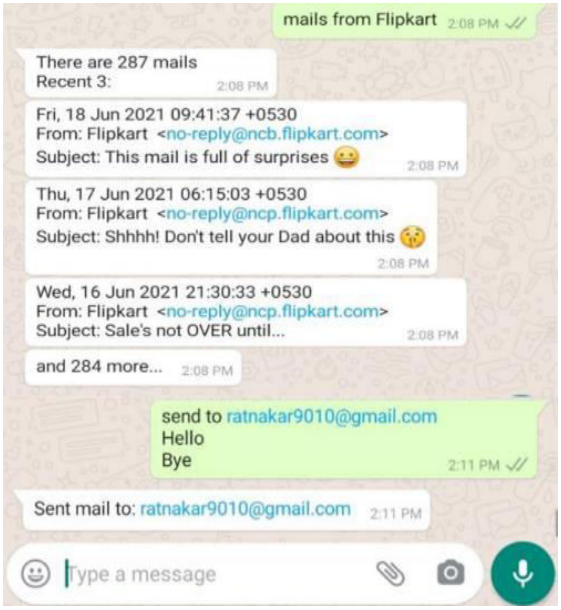

Fig: Output of the Query

Limitations

Observing limitations from the technological aspect, the proposed system can fetch and display only the working emails. It cannot display emails which are new or unsubscribed apart from the old ones which are subscribed and known to the server. Further research and study are required to overcome this problem. To use Twilio more effectively including extra features into the chatbot we must pay and own a Twilio account which becomes expensive.

Conclusion

In this paper, we have got an evolved way forgetting through our emails using Twilio WhatsApp Sandbox from our Mobile Whats App in a much effective way. We are integrating Twilio Functions with the IMAP functions to achieve this. By doing so, it will reduce users interference with the Mobile from searching through a tons of emails. As we are using WhatsApp as a medium of communication which is commonly used by most of the people it makes user more interactive with the tool we created.

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