MASS MAIL DISPATCHER

A WEB DEVELOPMENT - MINI PROJECT REPORT

submitted by

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CHAPTER 1

ABSTRACT

In today's fast paced scenario, it is very common for people to hustle themselves for completing their daily tasks. Be it a trivial job to an effectively competitive one, people are so focused to achieve the solutions. There should be no interference in between the completion of work, else the work is either paused and resumed later. People focus on instantaneous solutions and in search of it, they get tied up in other discrepancies. One such example is the process of sending E-mails or electronic mails. Sending mail to a single person seems to be a piece of a cake but, when it comes to a group of people, it seems to be a monotonous task. People get bored and tired easily sending the same mail to each individual separately. Also the disrupting factor is that, there is no guarantee if the provided mail address are valid entries or not. So, in order to send proper mail, the sender has to verify the mail ID of the recipient first following which the mails can be sent. Invalid e-mails create a major threat towards safety and also the loss incurred will in turn be inevitable. Manual working on monotonous tasks like this is very much time consuming. The proposed project aims to create a website to verify if the mail IDs' from an uploaded CSV file is valid and send mass mail to all those valid IDs', all at once with a single click. This way, people can reduce the amount of time spent on mundane tasks like this and helps people to identify, analyse, complete the task that allows them to work in a peaceful environment.

CHAPTER 2

INTRODUCTION

2.1 Problem Statement

Mail is a powerful tool for communication easily with without the need to travel and convey the information unlike in ancient times. Starting from big company or industrial communication to an usual recreational chat, e-mail has always stood out in content delivery. People can interact with each other using their respective mail IDs' that are unique. The uniqueness in the user's mail indicates that no one can pretend to be someone else. So, it is mandatory to create a valid mail for further interactions. However, not all the mail IDs' being used today are valid. There are invalid entries too in one or the other form. Identifying invalid addresses is the need of the hour because, one can't afford their messages to be sent to a wrong recipient or even better, a non-existing user.

Once authorized and validated, the next problem would be to send several mails to a single or a group of recipients. As handy as it seems to be, the process can be quiet tiresome. Moreover, for a big institution or organization, sending mass mails is one of the tasks in their routine. On a routine basis, this process would incur huge loss of time and indeed requires more man power. Also, when the same task is being done on a recursive fashion, there are higher probabilities of errors to occur. While sharing valued information, the process must be occurring very spontaneously and there must be no room for errors.

2.2 Project Scope

The scope of the project is to address the above mentioned issue. At present there are various number of websites that have been developed and in development to educate people about the importance of secure and valid mails. However they don't provide an effective and interactive way of query and response. The proposed project overcomes these drawbacks and the users can interact effectively to get the desired task done.

2.3 Objective

The main objective is to help the users to save their time by developing an exclusive website that addresses mail dispatching at a mass or a bulk level. The user can get a clear view on the validity of the mail addresses. Also, the user can analyse the number of mails that are valid from the uploaded document. Then, the website allows the user to send mails altogether in a single click such that all the valid recipients receive the same. Moreover, a chat-bot is also being provided to answer the queries of the user regarding the website, through active interaction. A multi-language option has also been provided, which enables the user to use the website and interact with the chat-bot in their comfortable language.

CHAPTER 3

EXISTING METHOD

- The existing system accepts a text file as the input.
- It then makes use of the contents provided in the text file and segregates them as valid or invalid entries.
- It also ensures sending bulk mails to all the valid mails which is in fact the work of the mail dispatcher.

Fig.1. Existing mass mail dispatching system

CHAPTER 4

PROPOSED SYSTEM

The proposed system also performs the traditional task of a mail dispatcher. Additionally, the proposed project also has two other features as,

- Chat-bot
- Multi-language option

The chat-bot enables an interactive communication to all the first timers accessing the website. Also, it will be handy if there are any queries on the different features present in the website or how to access the same.

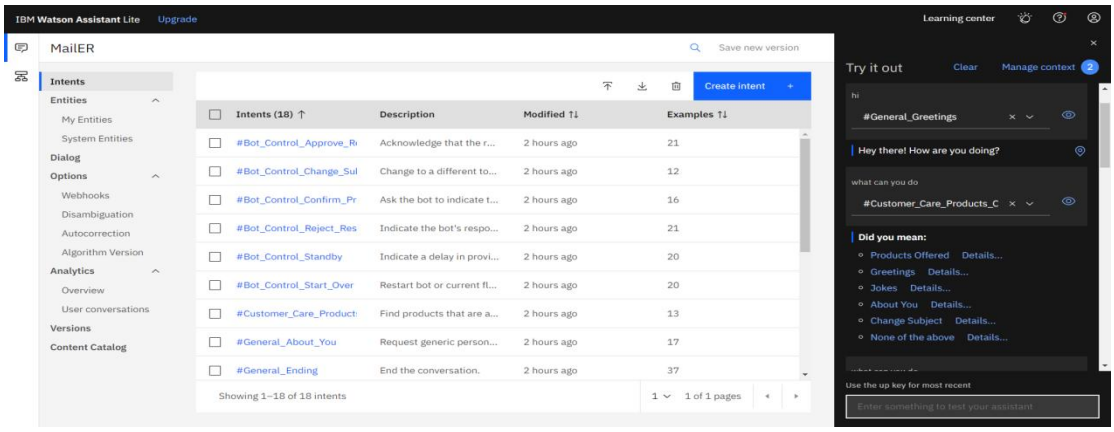

Fig.2. Testing out the chat-bot in IBM Cloud platform

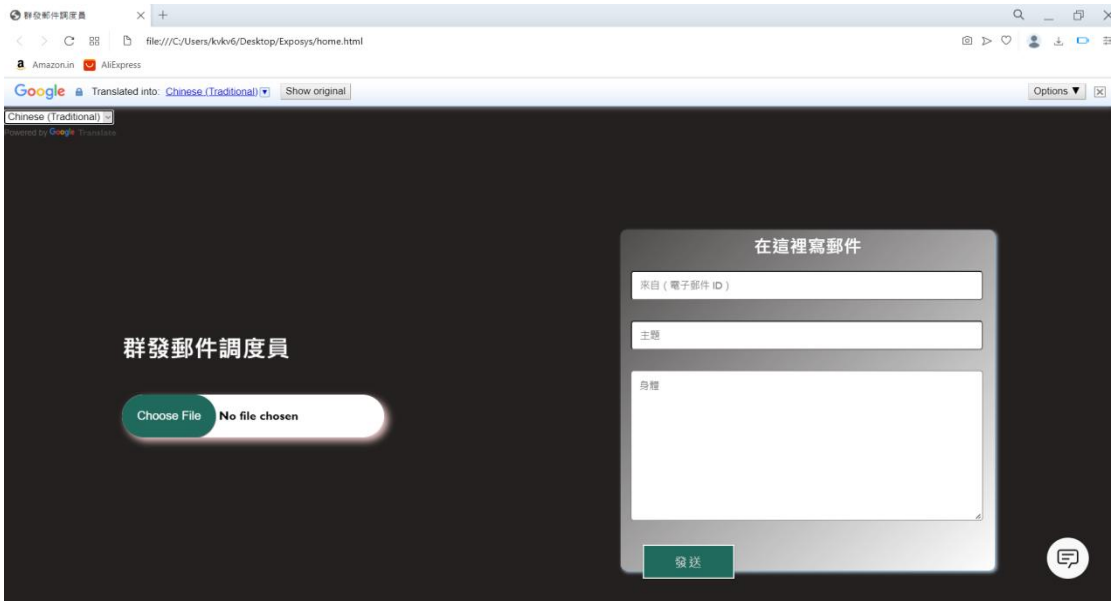

Fig.3. The content of the website being translated to the selected (her, Chinese) language

The multi-language option seems to prioritize the needs of the users, that allows them to access the website in their own regional language.

4.1 Architecture

The architecture diagram defines the fundamental structures of a software system and the discipline of creating such structures and the structured solution of the proposed idea. This project has a very simple system architecture that is depicted in (Figure.4.).

- There will be a sender (user) who will be able to access the website.
- Then the user will have to upload a text file holding the details of the e-mail addresses of the recipients.
- The website produces a filtered list of valid mail IDs from the invalid ones.
- The sender can then type the message to be sent and send it to all the recipients with valid mail address.
- If at any point of time, the user needs help, the chat-bot can be used to understand what and how the website works.
- The user can also use the website in their own preferable language by switching the different language options available in the language widget.

Fig.4. System Architecture

CHAPTER 5

PROJECT SPECIFICATION

5.1 Technology

The website is developed using
- ❖ HTML
- ❖ CSS
- ❖ JavaScript

The chat-bot was developed using IBM cloud.
The editor used is Visual Studio Code.

5.1.1 HTML

HTML stands for Hyper Text Markup Language. It is a standard markup language for creating web pages. It describes the structure of a web page. It consists of a series of elements. HTML elements tell the browser how to display the content. It is the language used to tell your web browser what each part of a website is. Using HTML, we can define headers, paragraphs, links, images, and more, so your browser knows how to structure the web page you're looking at.

5.1.2 CSS

Cascading Style Sheets (CSS) is a style-sheet language used to describe the presentation of a document written in HTML or XML. CSS describes how elements should be rendered on screen, on paper, in speech, or on other media. It is used to add style to a web page by dictating how a site is displayed on a browser. CSS is unique in a way that it doesn't create any new elements, like HTML or JavaScript. Instead, it's a language used to style HTML elements.

5.1.3 JAVASCRIPT

JavaScript is used by programmers across the world to create dynamic and interactive web content like applications and browsers. It is so popular that it's the most used programming language in the world, used as a client-side programming language by 97.0% of all websites. It is a scripting language that enables you to create dynamically updating content, control multimedia, animate images, and pretty much everything else.

5.1.4 IBM CLOUD

IBM Cloud is a suite of cloud computing services from IBM that offers both platform as a service (PaaS) and infrastructure as a service (IaaS). It is a set of cloud computing services for business offered by IBM. The services support several programming languages and services as well as integrated DevOps to build, run, deploy and manage applications on the cloud. It provides solutions that enable higher levels of compliance, security, and management, with proven architecture patterns and methods for rapid delivery for running mission-critical workloads.

5.1.5 VISUAL STUDIO CODE

Visual Studio Code is a streamlined code editor with support for development operations like debugging, task running, and version control. It aims to provide just the tools a developer needs for a quick code-build-debug cycle and leaves more complex workflows to fuller featured IDE, such as Visual Studio IDE. It can be used with a variety of programming languages, including C#, Java, JavaScript, Go, Node.js, Python, C++, C, Rust and FORTRAN. It is based on the Electron framework, which is used to develop Node.js web applications that run on the Blink layout engine.

5.2 User Interface

Any popular OS that will allow the use of a browser to view and access the website.

5.3 Hardware Interface

Any kind of internet connection like WIFI, modem data etc, to allow the browser interfaces to connect to the website. The website can be accessed through any devices like mobile, computer, laptop, tablet, etc.

5.4 Software Interface

Some of the software interfaces which you can use to access our website are

* Opera for Windows 10 PC - Version 82.0.4227.43
* Google chrome for Windows - Version 96.0.4664.110
* Google chrome for macOS - Version 96.0.4664.110
* Google chrome for Linux - Version 96.0.4664.110
* Google chrome for Android - Version 96.0.4664.104
* Google chrome for iOS - Version 96.0.4664.116
* Mozilla Firefox for iOS - Version 40.2
* Mozilla Firefox for Android - Version 95.0
* Microsoft Edge for Windows 10 - Version 96.0.1054.62
* Microsoft Edge for macOS - Version 96.0.1054.62
* Microsoft Edge for iOS - Version 96.1054.49
* Microsoft Edge for Android - Version 96.0.1054.53

CHAPTER 6

METHODOLOGY

- Firstly, we open the website in any of the browsers listed in software interfaces.
- Secondly, upload the text/CSV (comma separated file) in the menu provided on the website.
- Ensure that the file being uploaded should not be empty.
- After being done, the list of valid and invalid mails will be listed below after being compared with the rules specified in the scripting platform.
- The rules ensure that the uploaded file isn't empty and is of the correct syntax of that of a mail ID.
- After sorting the mails, the user can then type the message to be sent to all the valid mails.
- After clicking the "Send" button, a popup will be received confirming that the mails are sent along with the count of the valid mails.
- All through the process, if any doubt arises, the chat-bot button can be clicked for further interaction.
- Select the language of the many languages listed above in the drop-down menu.

CHAPTER 7

IMPLEMENTATION

CSV FILE

The mail IDs are entered into a comma separated file (CSV) to be uploaded into the website.

1	Email Address
2	placement@nitengg.edu.in
3	vcetbundi08@yahoo.com
4	anil.11928@lpu.co.in
5	rinkulrajitc@yaho.com
6	info@pace.edu.in
7	admission@sddgpi.com
8	admissions@pes.edu
9	titscontrolroom@gmail.comm
10	admissionaryans@gmail.com
11	maasaraswatiitc7@gmail.com
12	contact@oders.in
13	info@adwaitamission.com
14	koelitc@gmail.com
15	jsson.ongole@gmail.com
16	rls.principal@gmail.com
17	rkdfist.95@rediffmail.com
18	udaycollege@yahoo.co.in
19	contactus@dbec.org
20	info@sce.org.in
21	ait.mgmtw@apj.edu
22	info@gdcollege.org
23	arjun_acts05@yahoo.co.in
24	uit@uttaranchaluniversity.ac.in
25	director@sit.ac.in
26	info.mp09@gmail.com
27	info@prabhatengg.co.in
28	dean.spsiter@soauniversity.ac.in
29	chancellor@dypatil.com
30	registrar.sjom@sinhgad.ed

Fig.5. CSV file entries

WEBSITE

The look and feel of the website when being opened in a browser. The website was dealt with different scripting and styling option to have all the features put together.

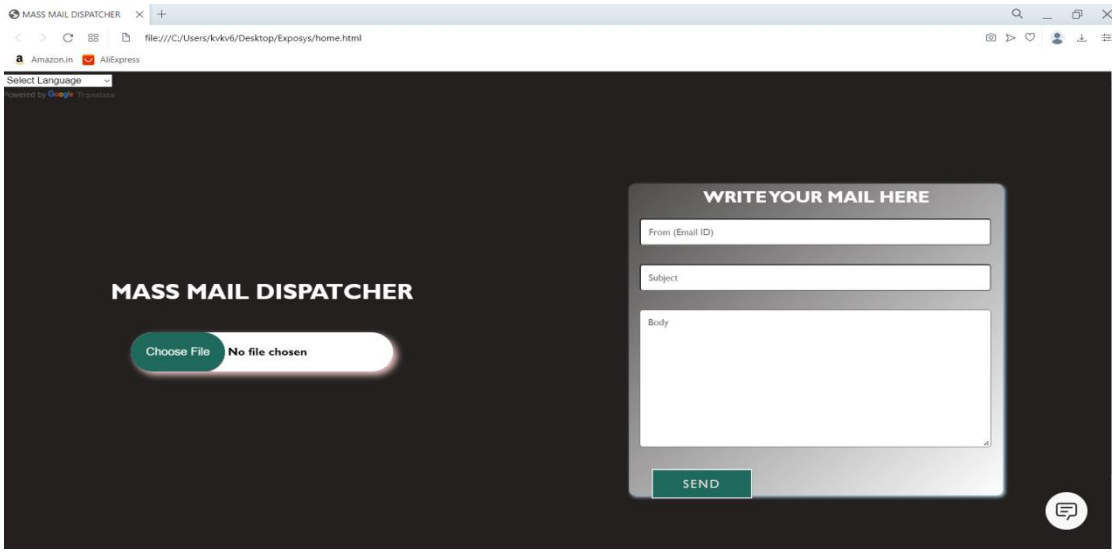

Fig.6. Website First look

UPLOADING CSV FILE

The text/CSV file is uploaded using the “Choose File” option in the website.

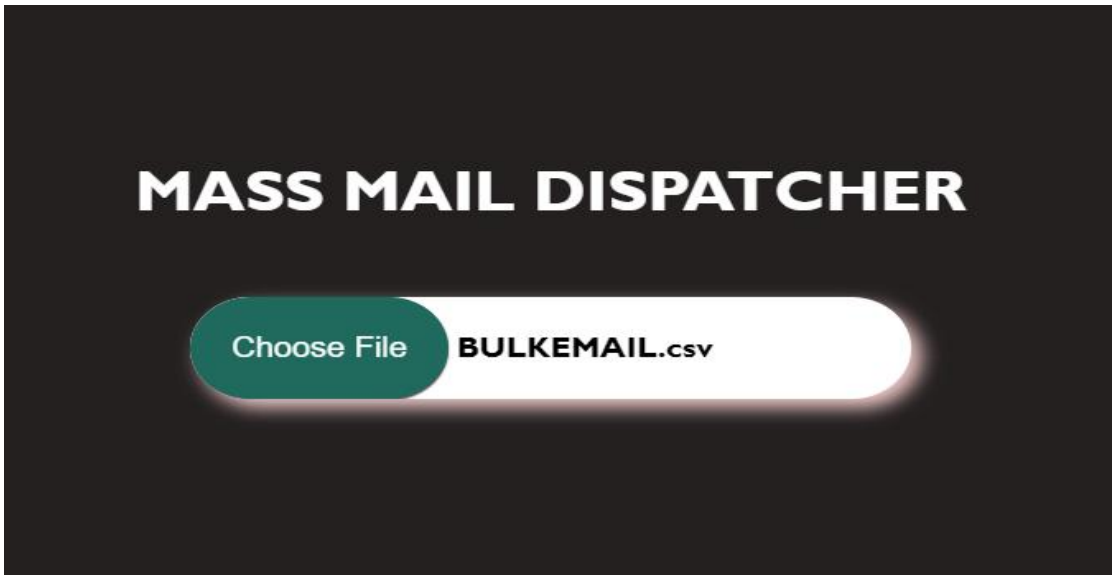

Fig.7. Uploading the file

SORTING MAILS

The data (mail IDs) from the text/CSV file is being verified if it is of the form of a standard mail ID and if found so, the corresponding mail is valid. Else, the mail is invalid. A structured list of valid and invalid mails is being displayed on the website.

Fig.8. Structured list of valid and invalid mails

SENDING MAILS

To send mails altogether to all the valid mails, type the From address, Subject and Message body in the space provided and click “SEND”.

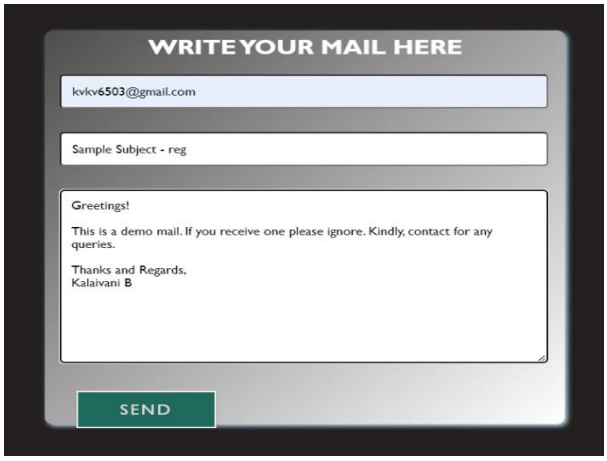

Fig.9. Message to be sent in bulk

CONFIRMATION

Once the mails are sent, a popup message will be received confirming that the mail has been sent to all the identified valid mails.

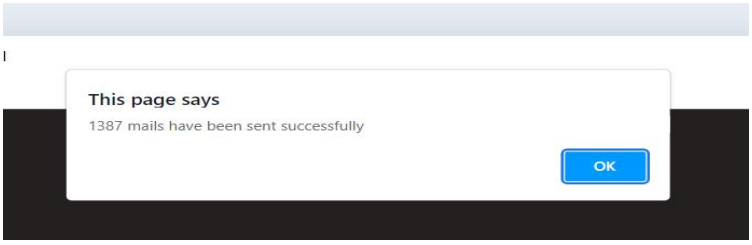

Fig.10. Confirmation pop up message

CHATBOT

If while accessing the website, any query arises the chat-bot button can be clicked which will connect to “MailER”, the chat-bot. The chat-bot is trained with all the possible user queries using the assistant provided in IBM Cloud.

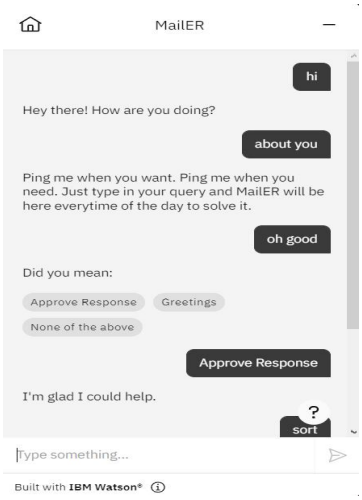

Fig.11. Chat-bot interaction in the website

MULTILANGUAGE

The drop-down present at the top left corner can be used to select the preferable language. The user can easily access the contents of the website in their preferable language to ensure better understanding, using the “Multi-language” option.

Fig.12. Available languages in the Multi-language drop-down menu

CHAPTER 8

CONCLUSION

In today's times, when most of the businesses are on the go, there is only a lesser time to be in touch with the customers and the tasks assigned. So, it is necessary that whatever the user is trying to convey should reach the customer instantaneously. This will ensure the attention of the customers is never getting deflected. In conclusion, the Mass Mail Dispatcher grabs the customer's attention by helping the user to identify which are valid mails and which are not from a list of provided mail addresses. It helps to send the same message to all the valid mails all at once saving time. Also, this seems to be a productive and a low cost affordable option for all the busy workers out there. It also has a chat-bot to ensure an effective way of interaction. Furthermore, it has got the multi-language option to translate the contents of the website into different languages as per the priorities of the user.