

MINI PROJECT REPORT

on

"Automated Mail : Social Aid"

By

Sneha Sagar Baital – 120A3002

Parag Mahadev Dudhmal – 120A3009

Saloni Ajit Kharat – 120A3019

Shreya Sanjay Idate – 120A3051

UNDER THE GUIDANCE OF

**Prof. S Samundiswary**

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In

(Information Technology)



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**SIES GRADUATE SCHOOL OF TECHNOLOGY**

**NERUL, NAVI MUMBAI – 400706**

**ACADEMIC YEAR**

**2021– 2022**

# **CERTIFICATE**

This is to certify that this is a bonafide record of Mini Project of the project titled “**Automated Mail : Social Aid**” carried out by the following students of second year in Information Technology.

Sr. No.	Name	Roll No.
1.	Sneha Sagar Baital	120A3002
2.	Parag Mahadev Dudhmal	120A3009
3.	Saloni Ajit Kharat	120A3019
4.	Shreya Sanjay Idate	120A3051

The report is submitted in partial fulfillment of the degree course of Bachelor of Engineering in Information Technology, of University of Mumbai during the academic year 2021-22

**Internal Guide**

**Head of Department**

**Principal**

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We have examined this report as per University requirements at SIES Graduate School of Technology, Nerul (E), Navi Mumbai on \_\_\_\_\_.

**Name of External Examiner:** \_\_\_\_\_

**Signature with Date:** \_\_\_\_\_

**Name of Internal Examiner:** \_\_\_\_\_

**Signature with Date:** \_\_\_\_\_

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### **Project Team**

- 1.Sneha Sagar Baital
- 2.Parag Mahadev Dudhmal
- 3.Saloni Ajit Kharat
- 4.Shreya Sanjay Idate

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## **ABSTRACT**

There are many mail automation systems. These systems make sending information or messages very convenient and completes the work with ease without any need for input. Thus we decided to make such a system for social groups which help individuals in need. This project will send a happy birthday greeting to individuals on their birthday, asking them whether they wish to donate something for a social cause. Eg : one meal for a kid , donation of clothes etc.

### **Reasons why to Donate**

#### **1. A feeling of purpose**

Those who give to charity are also participating in a cause that is larger and more significant than themselves. People don't need to participate in volunteerism to give back – giving to a charitable cause is an equally significant way in helping an organisation make a difference and provide aid to the needy. Further, studies have shown that those who give to charity find themselves experiencing an overall improved sense of happiness.

#### **2. The ability to make a difference**

Even the smallest of donations can make a big impact. NGOs like Save the Children have highly cost-efficient programs, which are able to channelise the value of every single rupee towards helping the marginalised and impoverished across India. While India has seen rising incomes, this has also been matched with rising income inequality. In such times, making a difference enables people to feel a mutual sense of hope, fulfilment, and purpose.

#### **3. Donating gives you the opportunity to show gratitude.**

Life is busy, and it can sometimes be easy to forget to show your gratitude for all that you've been given. There are thousands of Canadian charities and causes doing vital work across the country and around the world. When you are ready to give and are researching a charity to support, this can remind us of all that we have, and the act of donating to charity is a way to express our feelings gratitude. Inspire others to give by posting your kind action on social media to inspire others to give generously.

## INTRODUCTION

Electronic mail (email or e-mail) is a method of exchanging messages ("mail") between people using electronic devices. Automation is a process in which a manually performed action is transformed into one that happens automatically. Automated mail is an Email automation is a way to create emails that reach the right people with the right message at the right moment—without doing the work every time. Automated email achieves the best of both worlds between timing and content to provide marketers with messages that have:

- **Relevance** – When a user receives an automated email, it's because they've taken an action which triggered a workflow. As a result, the message they receive is highly relevant to them and they're more likely to open and engage with the email.
- **Engaging content** – Automated email content is designed to increase user engagement with your app or website. This could mean teaching new customers how to use your product, encouraging users to give feedback, or providing a lapsed customer with an incentive to return.

Our project will help make the donation process in organizations like offices, colleges more easier and will help individuals give back to the world.

## MOTIVATION

We were researching on some ideas taking into consideration how our idea would benefit the world for the betterment of our country and its citizen, after which we came across such automated systems. Automated systems help make day to day tasks easier. So we thought to make a system which will help make the world a better place.

The advantages of our system are:

- Help the to make the donation process more convenient and easier
- Will make the donation process more organized.
- Will remind individuals to give back and extend a helping hand to the world on their special day.
- Will increase the number of donations which will lead to a better and more caring world.

Beyond the seemingly universal inclination we have towards donating to charity — or, more generally, to doing the right thing — why should we donate? What are some specific reasons why charity should be an important part of our lives? Merely thinking that charity is important is one thing, but it is crucial to bridge the gap between intention and action if we are to help those who are in need. we provide three key reasons why charity is a necessary ingredient for making the world a better place: it is effective at helping people in need, it can improve our own wellbeing, and it can make the world a much fairer place overall.

## **PROBLEM STATEMENT**

We have planned to create a automated mail system which will send individuals emails on their birthdays, wishing them Happy Birthday and asking them if they wish to donate something on their special day. The system will contain a database containing the names, birthdays and emails of individuals. The system will have an admin form where the admin can add/delete/modify the database, the form will also have a dashboard where the requests will be shown as notifications. Every day when the admin logs in, the system will automatically check whose birthday is today and sent happy birthday mail with the donation link. When the recipient clicks on that link, they will be redirected to the google forms which will contain all the options asking what they want to donate. The request will then be displayed on the dashboard. Then upon completion of the donation process the admin will tick the request signifying the completion of the donation process.



## LITERATURE SURVEY

Sr.no	Author	Title	Description
1	Soya Park Amy X. Zhang Luke S. Murray David R. Karger	Opportunities for Automating Email Processing : a Need- Finding Study	Email management consumes significant effort from senders and recipients. Some of this work might be automatable.  The authors have performed a mixed-methods need-finding study to learn: (i) what sort of automatic email handling users want, and (ii) what kinds of information and computation are needed to support that automation [1].
2	Vangala Rama Vyshnavi Amit Malik	Efficient Way of Web Development Using Python and Flask	Web is the most frequently and rapidly used networking aid which satisfies the requirements of all type of users and which provides a solution for any type of problem. For designing and developing such well-defined and well structured, we have to choose a proper technology. Therefore, a dynamic web application or portal can be developed by using flask and python [2].
3	Akansha Sharma Dr. Sunil Gupta	Python: The Programming Language of Future	This paper features important information and tools with reference to the python programming language [3].

## **Survey of existing System**

### **Welcome emails**

Not only do automated email campaigns net nearly 70% higher open rates than the typical email, when that email is an automated welcome message to new subscribers, your open rates only continue to grow. Welcome emails are opened up 10 times more often than most other emails, so, if you aren't taking the time to welcome your new email subscribers properly, then you're missing out on some significant engagement opportunities.

Welcome emails are triggered emails that are sent automatically after a new subscriber has finished the opt-in process.

### **Transactional emails**

Transactional emails come in a variety of different forms. However, the most common transactional email is one that's triggered by a purchase. Once someone makes a purchase from your ecommerce store, a digital receipt is sent to their email address on file or one that they provided at checkout.

### **Product inventory updates**

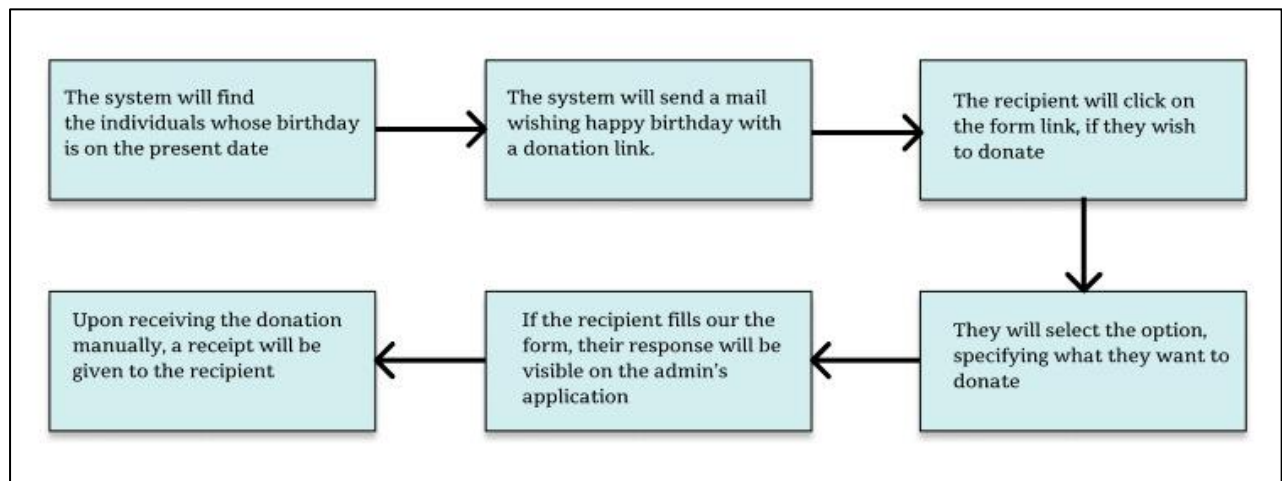
For those with an ecommerce store, product inventory updates are an excellent automated campaign that can be sent out to customers. If you've been carefully tracking user behavior through the use of website cookies or email pixel tracking, then you can be sending out automated messages that are triggered by certain customer behaviors.

In this example, from the beauty brand Sephora, they were likely tracking their customer's behavior and noticed that they were paying particular attention to this sold-out product. That said, once the product's available again, an automated trigger email was sent out to those who were paying particular attention to this one product. Those who showed no interest or never visited this product's page wouldn't receive this product update because their user data wasn't on file.

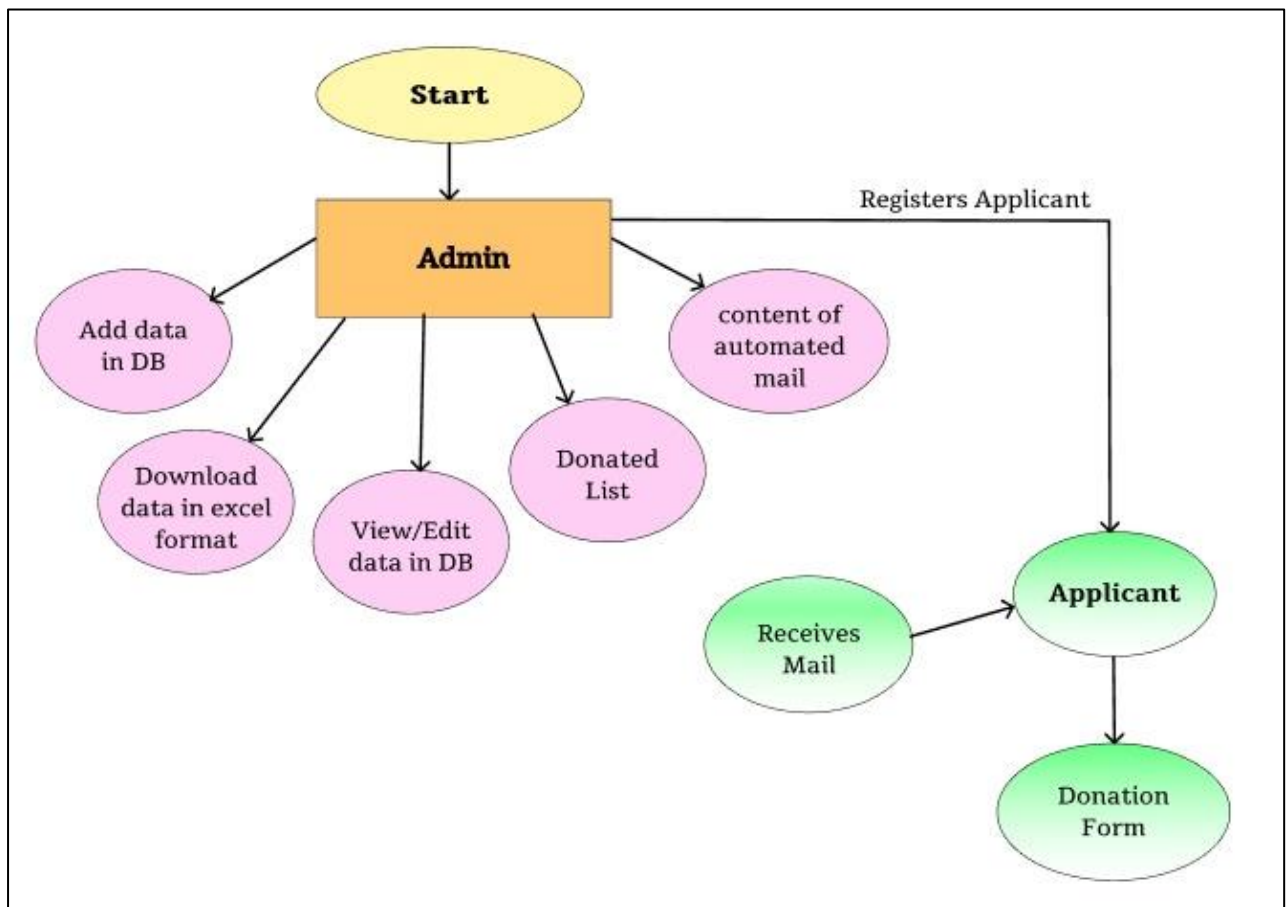
## PROPOSED SYSTEM

We have planned to create a automated mail system which will send individuals emails on their birthdays, wishing them Happy Birthday and asking them if they wish to donate something on their special day. The system will contain a database containing the names, birthdays and emails of individuals. The system will have a admin form where the admin can add/delete/modify the database, the form will also have a dashboard where the requests will be shown as notifications. Every day when the admin logs in, the system will automatically check whose birthday is today and sent happy birthday mail with the donation link. When the recipient clicks on that link, they will be redirected to the google forms which will contain all the options asking what they want to donate. The request will then be displayed on the dashboard. Then upon completion of the donation process the admin will tick the request signifying the completion of the donation process.

### Flowchart



## Process Design



The Admin has the following features : Add or delete Database , View Database, Change the content of the automated mail .

The Applicant will receive the mail and fill the Donation form.

## Details of hardware and software

### HARDWARE REQUIREMENT:

Processor: Intel Core Duo 5.0 GHz or more

RAM: 1 GB or More

Hard disk: 80GB or more

Monitor: 15” CRT, or LCD monitor

Keyboard: Any keyboard

Mouse: Compatible Mouse

### SOFTWARE REQUIREMENTS:

**Postgres SQL:** PostgreSQL also known as **Postgres**, is a free and open-source relational database management systems (RDBMS) emphasizing extensibility and SQL compliance. PostgreSQL features transactions with Atomicity, Consistency, Isolation, Durability (ACID) properties, automatically updatable views, materialized views, triggers, foreign keys, and stored procedures. It is designed to handle a range of workloads, from single machines to data warehouses or Web services with many concurrent users.

**Libraries used:** Flask, pandas, psycopg2, csv, xlwt, datetime, sqlalchemy

#### Flask:

Flask is a Python web framework built with a small core and easy-to-extend philosophy. Flask is considered more Pythonic than the Django web framework because in common situations the equivalent Flask web application is more explicit. Flask is also easy to get started with as a beginner because there is little boilerplate code for getting a simple app up and running [4].

**Psycopg2:** Psycopg is the most popular PostgreSQL database adapter for the Python programming language. Its main features are the complete implementation of the Python DB API 2.0 specification and the thread safety (several threads can share the same connection). It was designed for heavily multi-threaded applications that create and destroy lots of cursors and make a large number of concurrent “INSERT”s or “UPDATE”s.

**Pandas:** Python Pandas is defined as an open-source library that provides high-performance data manipulation in Python. This tutorial is designed for both beginners and professionals.

It is used for data analysis in Python and developed by **Wes McKinney** in 2008. Our Tutorial provides all the basic and advanced concepts of Python Pandas, such as Numpy, Data operation and Time Series.

**xlwt:** This is a library for developers to use to generate spreadsheet files compatible with Microsoft Excel versions 95 to 2003. The package itself is pure Python with no dependencies on modules or packages outside the standard Python distribution.

**csv:** The csv module implements classes to read and write tabular data in CSV format. It allows programmers to say, “write this data in the format preferred by Excel,” or “read data from this file which was generated by Excel,” without knowing the precise details of the CSV format used by Excel.

**datetime:** Python Datetime module supplies classes to work with date and time. These classes provide a number of functions to deal with dates, times and time intervals.

**sqlalchemy:** SQLAlchemy is a library that facilitates the communication between Python programs and databases. Most of the times, this library is used as an Object Relational Mapper (ORM) tool that translates Python classes to tables on relational databases and automatically converts function calls to SQL statements

**Languages used:** Python, mysql

**MySQL:** MySQL is an open-source relational database management system (RDBMS). SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

**Python:** Python is a high-level, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small- and large-scale projects.

## Experiment Results

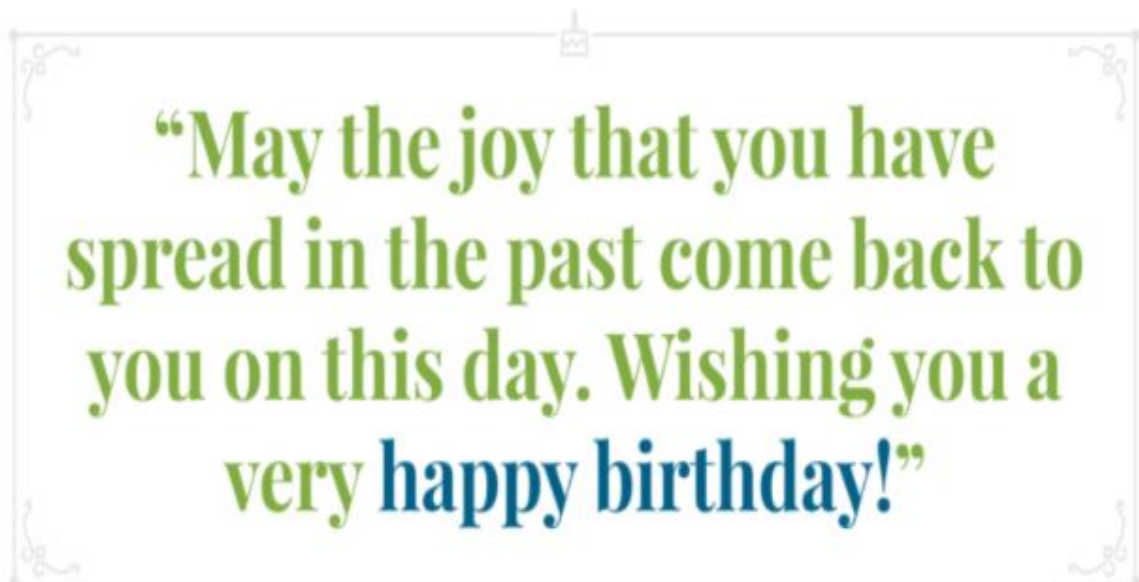
### Automated Mail

pythonproj123456@gmail.com

to me ▾



**Happy Birthday !**



On behalf of the NSS unit i would like to wish you a very Happy Birthday!


On such a special day help us to make someone's day better by extending your helping hand.

**Believe That You Are A Blessing!**

Link for donation :

; link

## LOGIN Page





 Login

Only admin login is permitted


Login

admin@gmail.com

Automated Mail  
Social Aid



## Dashboard

 Helping Hands

Dashboard



Download Database

Donations

Logout

Dashboard

Search



Automated Mail - Social Aid

Not all of us can do great things, but we can do small things with great love.  
We are here to help you in making the world a better place. Reach out to us if you wish to donate something.

Add Members  
(New Registered Members)

Donated List  
(Members list done with their donations)

Contents of mail  
(Birthday wishes)


MEMBERS


View All


PRN	Name	Birth Date	Birth Month	Birth Year	Email		
1	aaa	23	9	2009	aaa@gmail.com	Modify	Delete
2	Rayan	10	2	2000	ryanbranwen4572@gmail.com	Modify	Delete
3	Sneha	2	3	2002	baifalsneha@gmail.com	Modify	Delete
4	Shreya	24	3	2002	shreya.idate2002@gmail.com	Modify	Delete
5	Dany	22	3	2000	dany@gmail.com	Modify	Delete
67	Harry	22	2	2000	harry@gmail.com	Modify	Delete





## Update


**Helping Hands**


 Dashboard



 Download Database

 Donations

 Logout

**Dashboard**

Search.. 



PRN

Name


Birth Date


Birth Month


Birth Year


Email


## Donated List


**Helping Hands**


 Dashboard



 Download Database

 Donations

 Logout

**Dashboard**

Search.. 



## **CONCLUSION**

We have successfully created an Automated Mail system for the noble cause of charity, this project will help to make the donation process easier and more systematic. It will also motivate people to donate on their special day i.e., their birthday.

In this way we have implemented our system.

The advantages of our system are:

- ☐ Help the to make the donation process more convenient and easier
- ☐ Will make the donation process more organized.
- ☐ Will remind individuals to give back and extend a helping hand to the world on their special day.
- ☐ Will increase the number of donations which will lead to a more better and more caring world.

## **FUTURE SCOPE**

This project in future has the scope to be used for different social groups and NGOs to help raise donations for social benefits for the less fortunate people. There is also a wide scope to include transaction gateways to encourage monetary donations as well.

## REFERENCES

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- [4] R. Degges, "Flask Tutorial: Simple User Registration and Login," *Okta Developer*, pp. 1-12, 12 July 2018.