MAIL

Minor Project Synopsis

Submitted in partial fulfillment of the requirements for the degree of

BACHELOR OF TECHNOLOGY (Information Technology)



Submitted By:

Kushal URN: 1905351

Rishav URN: 1905261

Sourabh URN: 1905270

Guide Name: Dr. kamaljeet kaur

GURU NANAK DEV ENGINEERING COLLEGE

Ludhiana -141006, India

Content

- 1. Introduction
- 2. Objectives
- 3. Feasibility study
- 4. Methodology
- 5. Facilities required
- 6. References

Introduction

Mail is an E-mail client that makes API calls to send and receive E-mails. It is a service in which you can get e-mails, send them and can reply to them. You can use any kind of e-mail address to register for this application. It is a secure way to send and receive information. The front-end of this project is made with the help of HTML, CSS and JavaScript. It gives the project a responsive user interface. The back-end of the project is made with the Python programming language. The framework used for the backend is Django. The database used to store the information is SQL which is Django's default and is lightweight and we have used our created API to send and receive e-mails. With the Mail service, all of your messages and e-mails are stored safely and your privacy is guaranteed. This application has four main features: Inbox, Sent, compose and Archive. In inbox we can see all the mails that we have received. In the sent section we can see all the mails that we have sent. In compose we can create a new email. In Archive section we can see all the mails which are archived, we have also an option of unarchiving it. This application uses four prime API routes to fetch the details from database.

Objectives

- To develop the software that can send and receive e-mails.
- It enhances the security of the conversation and makes ensure that the user privacy is maintained.
- It is a light-weight application; hence it is easy to use and sending and receiving of e-mails is efficient.

Feasibility study

- The main advantage of the project is its light weightiness, which make it easy to use, there by using less amount of internet and may even work in remote areas where the internet speed is not significantly high.
- This mail can be significantly made an official communication platform in any organization, because it is safe, secure and ensures privacy.
- You can use this mail service with any registered email address, which makes it less confusing and makes it easier to use.
- The API used in the project makes the process of sending and receiving e-mails fast and efficient.
- This mail service has an option to reply emails which makes it very easier to making replies faster and efficient.

Methodology

- Requirement Gathering and analysis: All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.
- System Design: The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- Implementation: With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- Integration and Testing: All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- Deployment of system: Once the functional and nonfunctional testing is done; the product is deployed in the customer environment or released into the market.
- Maintenance: There are some issues which come up in the client environment. To fix those issues, patches are released. Also, to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

Facilities required

- Python
- Django
- SQL
- Visual Studio code
- Git and GitHub
- Bootstrap
- CSS
- Java script

References

- • https://cs50.harvard.edu/web/2020/projects/3/mail/
- Ruvalcaba, Z., Boehm, A., "Introduction To The Web Development" in murach's HTML5 and CSS3, 1sted., Fresno, CA: Mike Murach and Associates, Inc., 2012, pp. 4—7.
- Mayer, "UnifiedModelingLanguage," in Professional PHP6,
 2nded., Indianapolis, from http://en.wikipedia.org