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PLANS AND WORKFLOW FOR THE PROJECT

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PROJECT ID :	11
PROJECT TITLE :	BULK MAIL BLOCKING/UNBLOCKING

1. INTRODUCTION

1.1 General Description

This document outlines the requirements for a web-based application designed to suspend(Block) Gmail accounts and Reactivate(Unblock)in bulk. The tool will utilize the Google Apps Script (GAS) and the Google Admin Management API (GAM) to automate the suspension and reactivate process.

1.2 Project Purpose

This application aims to provide administrators with a secure and efficient method for suspending multiple Gmail accounts within a Google Workspace domain.

2. FUNCTIONAL REQUIREMENTS

2.1 User Roles

- **Administrator:** The only user role with access to the application. Responsibilities include:
    - Login and authentication.
    - Uploading an Excel file containing a list of Gmail addresses to be suspended.
    - Initiating the bulk suspension process.
    - Viewing suspension logs .
    - Same as for reactivating process.

2.2 Core Functionalities

- **Secure Login:** The application shall implement a login mechanism to restrict access solely to authorized administrators.
- **Excel Upload:** The application shall enable administrators to upload an Excel file containing a list of Gmail addresses for suspension.
- **Bulk Suspension:** Upon initiating the process, the application shall utilize GAM to connect to the Google Admin console and suspend each Gmail address listed in the uploaded Excel file.
- **Error Handling:** The application shall handle potential errors during the suspension process, such as invalid email addresses or insufficient

permissions. Informative error messages should be displayed to the administrator.

- **(Optional) Logging:** The application may optionally record logs detailing the suspension process, including timestamps, usernames, and any encountered errors.
- **Unblocking:** Also reactivate(Unblock) the Blocked users emails option will be there.

3. INTERFACE REQUIREMENTS

3.1 User Interface (UI)

- The application shall provide a simple and user-friendly web interface.
- The login page shall require username and password credentials for administrator authentication.(or Google + Login Option)
- The interface shall offer functionality for uploading an Excel file containing Gmail addresses.
- A clear button shall be available to initiate the bulk suspension process.
- The interface may display progress indicators or confirmation messages upon successful execution.
- Error messages shall be informative and guide the administrator in resolving any issues.

4. PERFORMANCE REQUIREMENTS

- The application shall respond to user actions within a reasonable timeframe.
- The bulk suspension process should be optimized for efficiency, considering the number of accounts being suspended.

- The application should be designed to handle potential load from multiple administrator users (if applicable).

5. DESIGN CONSTRAINTS

- The application shall be developed using Google Apps Script (GAS) for server-side scripting.
- The application shall leverage the Google Admin Management API (GAM) for interacting with the Google Admin console.
- The application shall function within the limitations and security protocols set forth by Google Workspace.

6. NON-FUNCTIONAL ATTRIBUTES

- **Security:** User authentication and authorization mechanisms shall be implemented to ensure only authorized administrators can access the application and its functionalities.
- **Scalability:** The application should be designed to accommodate the suspension of a varying number of Gmail accounts efficiently.
- **Availability:** The application should be designed with high availability in mind, minimizing downtime and ensuring administrator access when needed.
- **Maintainability:** The codebase should be well-documented and follow coding best practices to facilitate future maintenance and updates.

7. APPENDICES

Google Apps Manager (GAM):

- **Data Model:** GAM interacts with Google Workspace through its Admin SDK APIs. These APIs provide programmatic access to various Google Workspace resources, including users, groups, drives, and email settings. You can find details about the data model for each API in the Google Workspace Admin SDK documentation https://developers.google.com/admin-sdk/reference-overview
- **Error Codes:** GAM returns specific error codes depending on the encountered issue. A list of error codes and their descriptions is available on the GAM Wiki page https://docs.github.com/en/get-started/using-github/troubleshooting-connectivity-problems
- **API References:** Since GAM is a wrapper around the Google Workspace Admin SDK APIs, referring to the official API documentation is recommended for in-depth information on available functionalities and parameters.

8. USES OF SRS DOCUMENT

This document serves as a blueprint for the development of the bulk Gmail suspension tool. It outlines the functionalities, user interface requirements, and design constraints to guide developers in building the application. Additionally, the document serves as a communication tool between stakeholders, ensuring a clear understanding of project goals and expectations.

9. FAQS ON SRS FORMAT

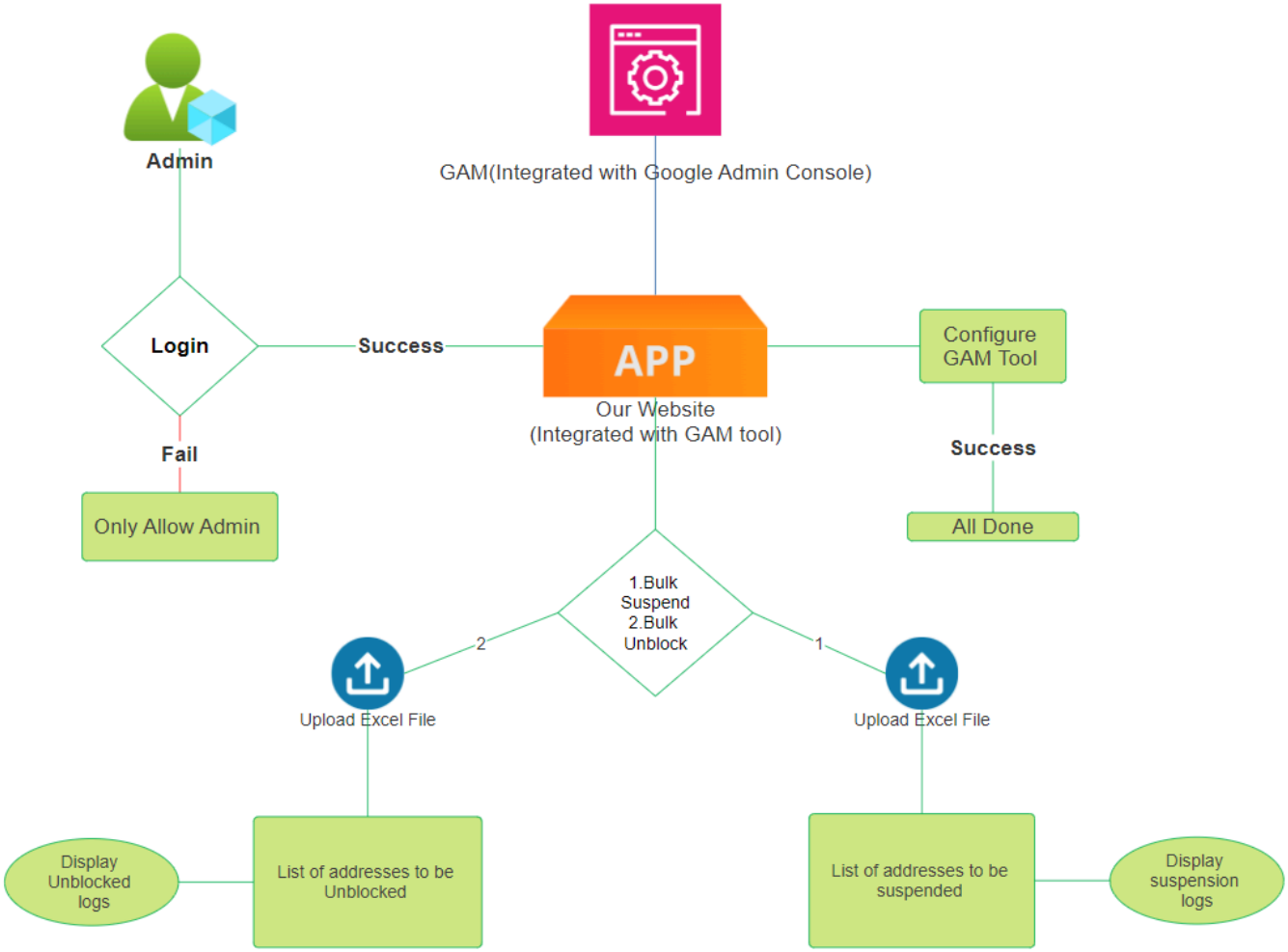
1. What is GAM Tool ?

   Google Apps Manager (GAM): This is a free, open-source command line tool that allows administrators to manage various aspects of their Google Workspace (formerly G Suite) account. It lets you automate tasks that would otherwise be time-consuming to do manually, such as adding or deleting users, managing groups, and changing account settings. GAM is particularly useful for organizations with a large number of Google Workspace users.

10. CONCLUSION

This Software Requirements Specification (SRS) provides a comprehensive overview of the functionalities, user interface, and design considerations for the bulk Gmail suspension and reactivation tool. By adhering to these requirements, the development team can create a secure, efficient, and user-friendly application that fulfills the needs of Google Workspace administrators.

11.WORKFLOW (diagrammatic):

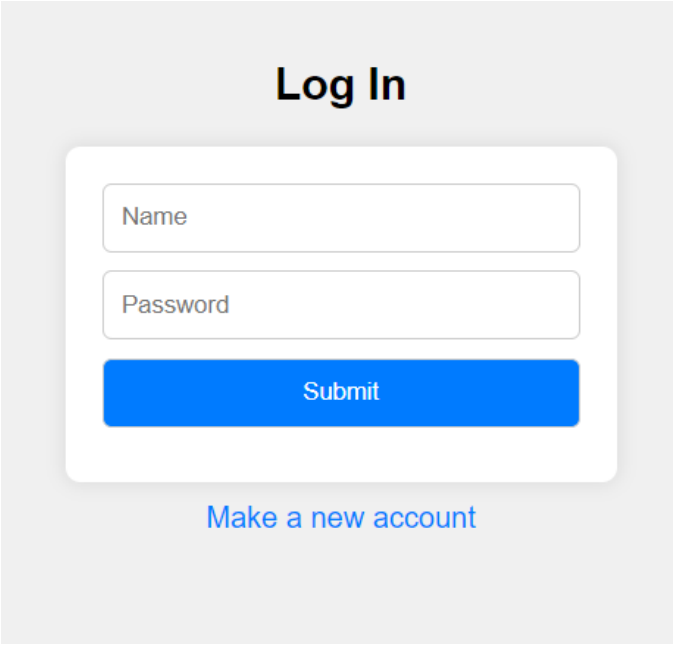


12.STACK:

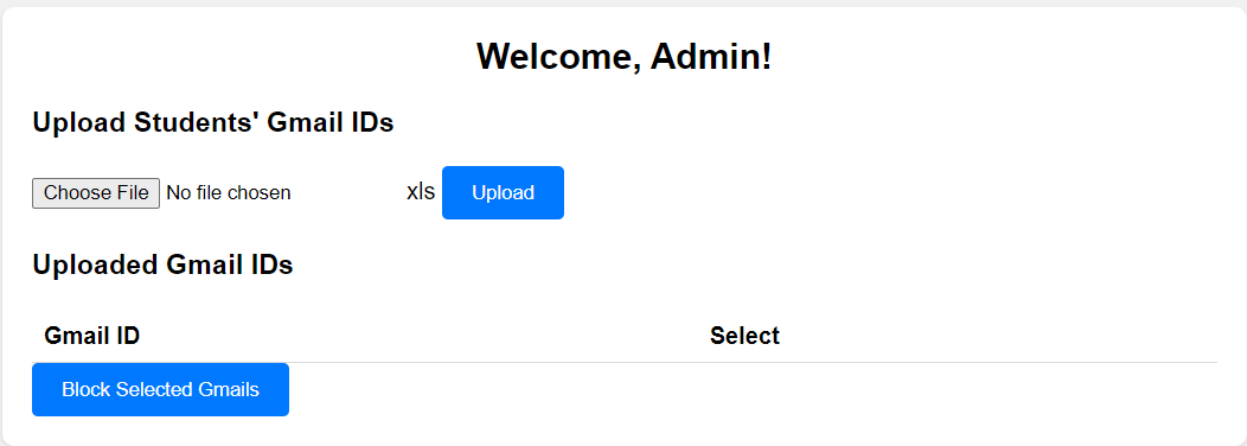
Front End	Angular
Back End	Node js,Express
DataBase	MongoDb

13.SOME PROTOTYPE IMAGES OF THE WEBPAGE:

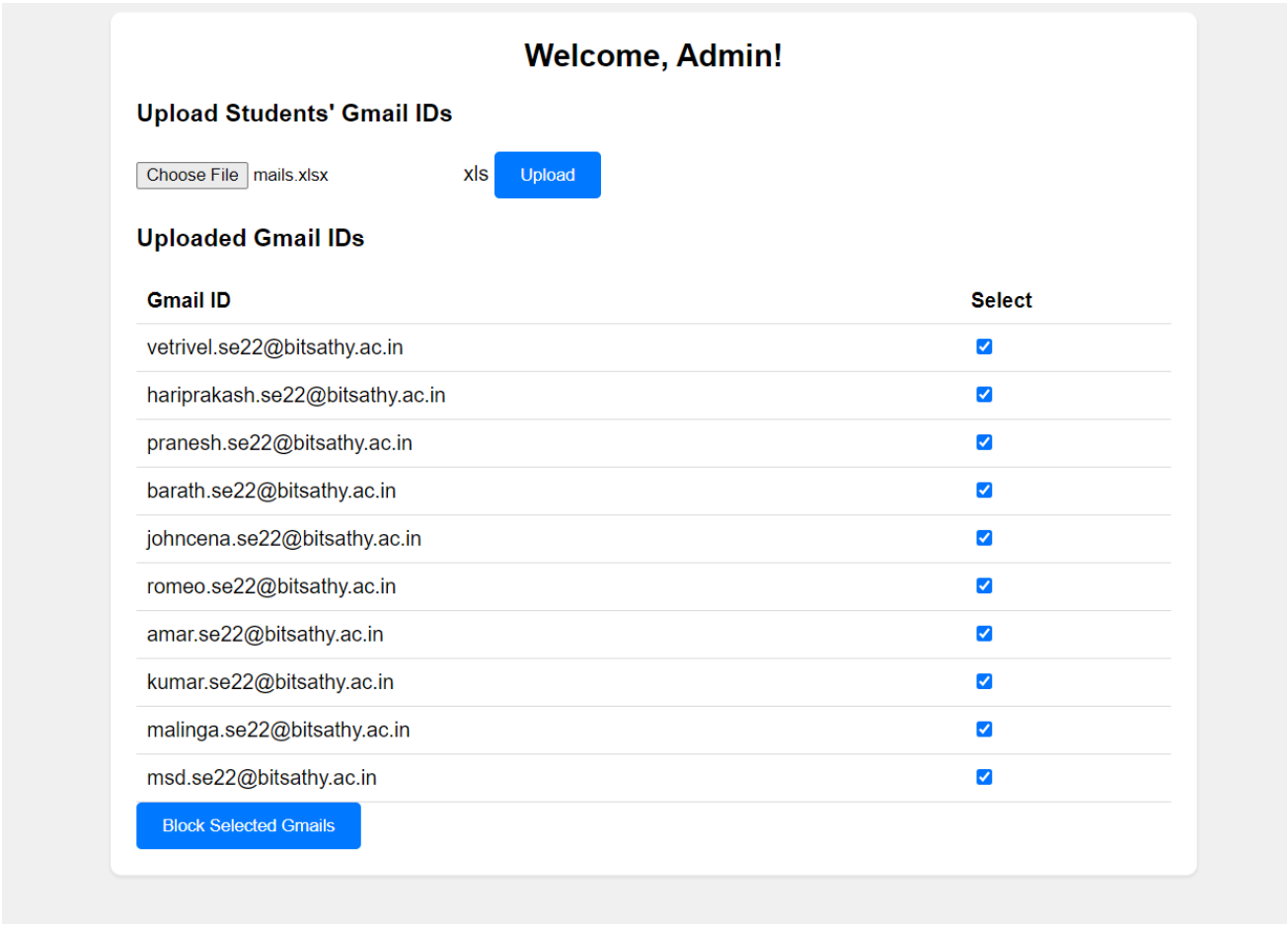
1. Sample Login Page (Google + will be added in future)



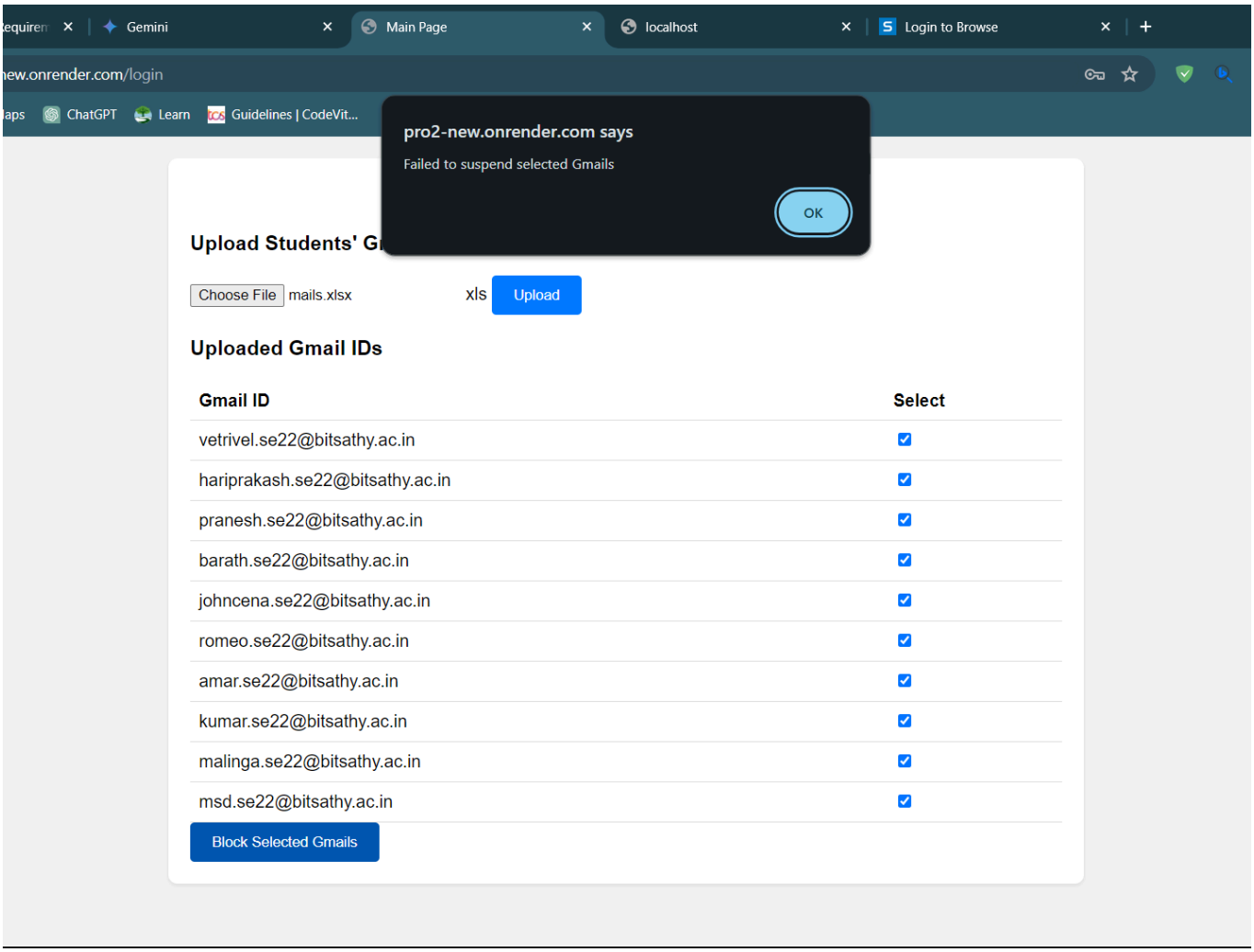
2. Main Page



3.After Uploaded



4.The Response Shown in Popup



NOTE: The above are temporary UI.After finishing the backend properly, some additional features are added to this main page(like,Suspended logs with timestamp,Search options,..ect)