

Gmail.com

# System Require Specification Document

CSE<sub>320</sub>

SOFTWARE

ENGINEERING



**L** OVELY  
**P** ROFESSIONAL  
**U** NIVERSITY

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# Gmail

## Table of contents

1. Introduction
  - 1.1 Purpose
  - 1.2 Scope
  - 1.3 Overview
2. Over all Description
3. Functional Requirements
  - 3.1 Login or signup
  - 3.2 Compose
  - 3.3 Archive
  - 3.4 Spam mails
  - 3.5 Email Tabs
4. Non-Functional Requirements
  - 4.1 performance
  - 4.2 security
  - 4.3 user Interface
  - 4.4 Reliability
  - 4.5 Availability
5. Data Flow Diagram

## System Requirements Specification

### 1. Introduction:-

The Introduction of the Software Requirement Specifications (SRS) Provides an overview of the entire SRS with Purpose, Scope, definitions, acronyms, abbreviations, references and overview of the SRS.

The aim of this document is to gather and analyze and give in-depth the complete Gmail.com software system by defining the problem statement detail.

The detailed information of Gmail.com provided in this document.

### 1.1 Purpose:-

The Purpose of the document is to collect and analyze all assorted ideas that have come up to define the system, its requirements with respect to users. Also, we shall predict and sort out how we hope this Product will be used to gain a better understanding of the project.

This document describes the project's target audience and its user interface, hardware and Software requirements. It helps of any designer and developer to assist in "Software delivery life cycle" (SDLC) Processes

1.2 Scope:- primarily, the scope pertains to the E-mail Product features for making G-mail.com Project live. It focuses on the company, the users and applications, which allows the users to send and receive mails to each other and allows company to keep check on the user activities.

This SRS is also aimed at specifying require of software to be developed but it can also be applied to assist in the selection of in-house and commercial software products. It does not identify any specific method, nomenclature or tool for Preparing an SRS.



1.3 Overview:- The remaining sections of this document provide a general description, including characteristics of the users of this project, the product's hardware, and the functional and data requirements of Product. General description of the project is discussed in section 2 of this document. Section 3 gives the functional requirements, data requirements and constraints and assumptions made while designing the Gmail.com.

2. Overall Description:- This document contains the Problem Statement that the current system is facing which is facing which is hampering the growth opportunities of the company. It further contains a list of the stakeholders and users of the proposed solution. It also illustrates the needs and wants of the workshop. It provides the detailed information functionalities of Gmail with user characteristics permitted constraints, assumption and dependencies and requirements subsets.

### 3. Functional Requirements :-

This section of document contains the different kind of features used in making Gmail.com. It includes the features like signup, delete, login, compose, drafts etc;

#### 3.1 Login or Signup:-

This functionality is required to create an account or if you have one then, you can enter the Gmail by logging in.

- 3.1.1 The user must make an account by giving some of their personal details.
- 3.1.2 Input the details like name, gender, password, mobile no., location to create an account.
- 3.1.3 The details will be stored in the database with other users.
- 3.1.4 After creating the account or if user already have an account, the user should login to the Gmail by giving email id & password signing up.
- 3.1.5 The user is now entered in Gmail and can send and receive mails.

### 3.2 Compose:-

This functionality is used to send the email to the other users.

- 3.2.1 click on the compose button.
- 3.2.2 A dialog box will POPUP on the screen.
- 3.2.3 Enter the email id of the user to whom you want to send the mail, enter the subject of mail if you want to, and enter the text.
- 3.2.4 users can also attach any kind of file like pictures, videos, zip etc.
- 3.2.5 click on the send button to send the email to other users.

### 3.3 Archive:-

This functionality is used to hide the emails from the inbox section of the Gmail.

- 3.3.1 user should move the cursor to the mail they want to archive.
- 3.3.2 The archive button will appear, then click on the archive button.



3.3.3 The mail will be removed from the inbox.

3.3.4 The user can view the mail in the All mails section.

3.4 SPam mails :-

This functionality is used to mark some suspicious mail as SPam.

3.4.1 User should have to click on the mail which they want to mark SPam.

3.4.2 Click the SPam button on the toolbar of the Gmail.

3.4.3 The mail will be shifted to the SPam folder in the Gmail.

3.4.4 The software will sometimes automatically mark some emails as SPam.

3.4.5 The software will also sometimes block the user who sends the SPam messages.

3.5 Email Tabs :-

This functionality is used to differentiate between Primary, Social and Promotional emails.

3.5.1 Emails like promotions, ads etc; are considered as promotional emails.



3.5.2 Emails from different social media platforms, or notifications from different companies are considered as social emails.

3.5.3 Emails from different users or from the website in which you are signed in, are considered as primary emails and considered as most important emails.

3.5.4 The software will first analyze the emails and then it will automatically decide that in which category the email should be considered.

#### 4. Non-Functional Requirements:-

These are the requirements that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors.

#### 4.1 Performance:-

4.1.1 The product shall be based on web and must be run from a web server.

4.1.2 The product shall take initial load time depending on internet connection strength which

also depends on the media from which the product is run.

4.1.3 The performance shall depend upon hardware components of the client/customer.

#### 4.2 Security :-

4.2.1 The customer's web browser shall never display a customer's password. It shall always be echoed with special characters representing typed characters.

4.2.2 The customer's web browser shall never display a customer's credit card number after retrieving from the database. It shall always be shown with just the last 4 digits of the credit card number.

4.2.3 The system's back-end servers shall never display a customer's password. The customer's password may be reset but never shown.

4.2.4 The system's back-end servers shall only be accessible to authenticated administrators.

4.2.5 The system's back-end database shall be encrypted.

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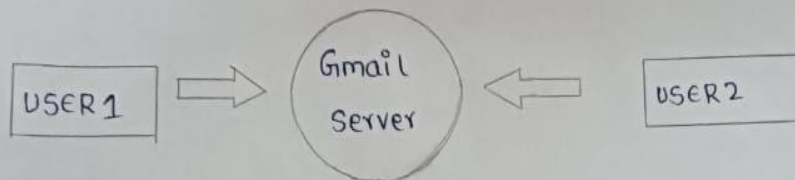
#### 4.5 Availability:-

- 4.5.1 The system should always be available, meaning the user can access it using a web browser, only restricted by the downtime of the server on which the system runs.
- 4.5.2 In case of a hardware failure or database corruption, a replacement page will be shown.
- 4.5.3 Also, in case of a hardware failure or database corruption, backups of a database should be retrieved from the server and saved by the administrator.
- 4.5.4 Then the service will be restarted. It means 24x7 availability.

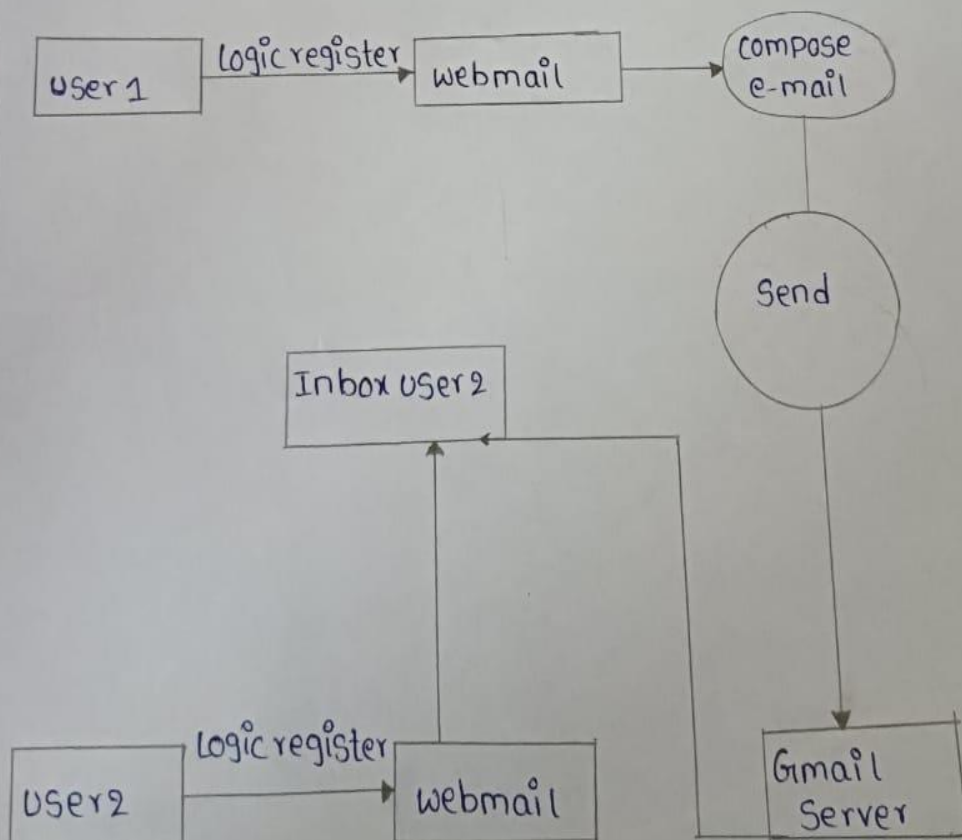


## 5. DATA FLOW DIAGRAMS:-

### Level 0



### Level 1



Project Name: Gmail.Com

### Test Case Template

Test Case ID:RC-01

Test Priority (Low/Medium/High): Med

Module Name: Google login screen

Test Title: Verify login with valid username and password

Description: Test the Google login page

Test Designed by: B V V S G BulliRaju

Test Designed date: 31/03/23

Test Executed by: B V V S G BulliRaju

Test Execution date: 31/03/23

Pre-conditions: User has valid Gmail account and internet connectivity

Dependencies:

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to login page	Saib7078@gmail.com	User logged in to their Gmail account	User is logged in	Pass	N/A
2	Provide valid username	BSai	User is logged in to their	To their gmail account	Pass	N/A
3	Provide valid password	Vini1234	Gmail account	login	Pass	N/A
4	Click on Login button		Logined	success	Pass	N/A
						N/A

Post-conditions:

User Can access their Gmail account

Project Name: Gmail.Com

### Test Case Template

Test Case ID:RC-02

Test Priority (Low/Medium/High): Med

Module Name:Gmail

Test Title: Compose&Reply Email

Description: check and reply message

Test Designed by: B V V S G BulliRaju

Test Designed date: 31/03/23

Test Executed by: B V V S G BulliRaju

Test Execution date: 31/03/23

Pre-conditions: User has valid Gmail account and internet connectivity

Dependencies:

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Compose&reply	Valid recipient email.	Email I sent successfully to the	Email is sent successfully	Pass	N/A
2	Subject& send	Subject , and message	Recipient	To the recipient	Pass	N/A
3	Reply	Valid message	Email reply is sent	Email reply is sent	Pass	N/A
4	send		Successfully to the sender	Successfully to the sender	Pass	N/A
						N/A

Post-conditions:

Recipient receives the email

Sender receives the reply

Project Name: Gmail.Com

Test Case Template

Test Case ID:RC-03

Test Priority (Low/Medium/High): Med

Module Name:Gmail

Test Title: Delete&Search Email

Description: Delete and search message

Test Designed by: B V V S G BulliRaju

Test Designed date: 31/03/23

Test Executed by: B V V S G BulliRaju

Test Execution date: 31/03/23

Pre-conditions: User is logged in to their Gmail account and has an active internet cconnection

Dependencies:

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Delete&Search		Selected emails deleted successfully	Selected emails deleted successfully	Pass	N/A
2	Emails&search	Subject , and message	Emails matching the search criteria displayed	Emails matching the search criteria displayed	Pass	N/A
3	Delete	Email deleted	successfully	successfully	Pass	N/A
4	Enter	Valid search criteria	matched	matched	Pass	N/A
						N/A

Post-conditions:

Deleted emails are moved to “trash” folder

User can view the matching emails