

Automation in Mailing Management System Software Requirements Specification

Revision History

Date	Version	Description	Author
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1 Introduction

Sending the mail to more than thousand persons individually with Attachment, Cc, Bcc, subject and content will definitely take a long time. So we have decided to investigate the use of an Automation in Mailing Management System.

1.1 Purpose

The main purpose of **Software Requirements Specification (SRS)** document for the Automation in Mailing Management System is to automate the usual mailing method.

1.2 Scope

The Scope the system is sending mail to multiple person individually with short time.

1.3 Overview

- The product provides the user to Send mail to many persons individually with different attachment, Bcc, Cc, Subject, Body.
- The system provides user to upload the excel sheet can contain large amount of Data.
- The system provides the facility to edit the data.
- The system allows the user to select which mail to send and can also remove the mail which not to send.

2 Overall Description

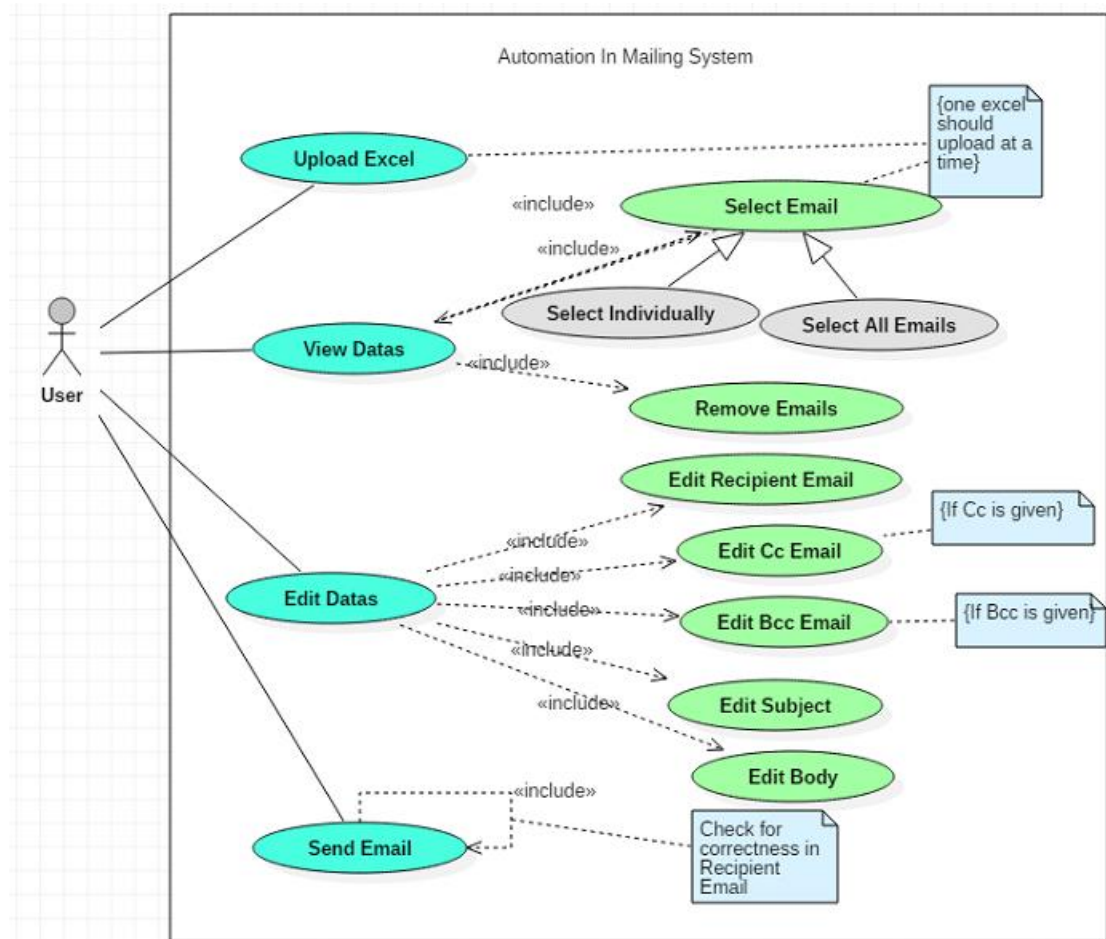
- **Product Functions**

1. Overall Function is when the end user Upload the Excel file it will show all data.
2. If any changes need user can edit the data.
3. Send the Email Automatically.

- **User characteristics**

1. The product automates sending email easier, faster and reduces the time of the end user.
2. The product is absolutely user friendly.
3. The product does not expect the user to possess any technical background.

- **Use case Diagram**



- **Assumptions and dependencies**

- The users have sufficient knowledge of computers.
- The computer should have Internet connection and Internet server capabilities.
- The users know the English language, as the user interface will be provided in English
- The product can access the Outlook.

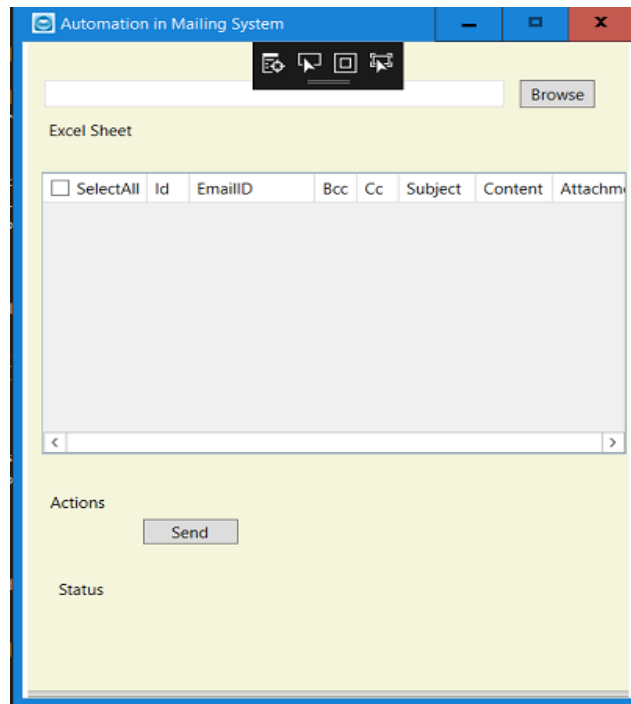
3 Specific Requirements

3.1 Functional Requirements

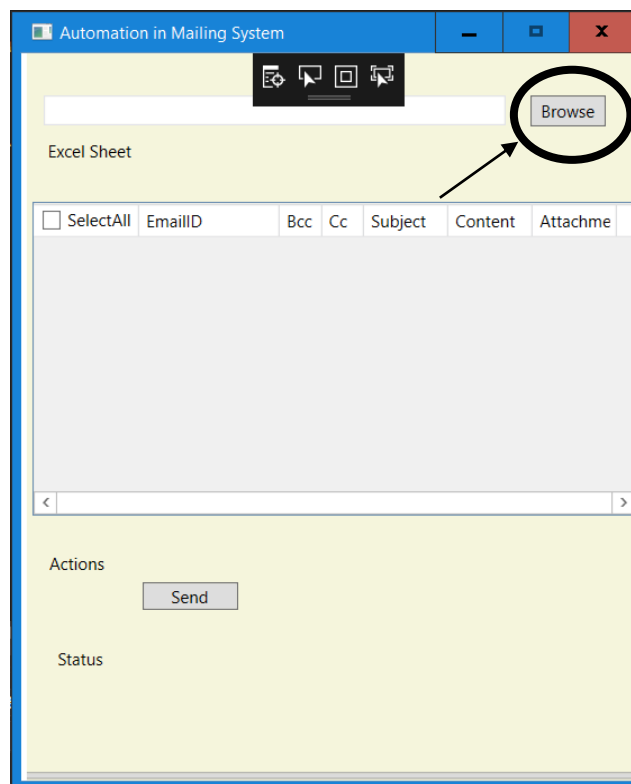
- This information is used to help the user understand why the requirement is needed and it contains a brief summary, and a rationale

3.1.1 Process Explanation

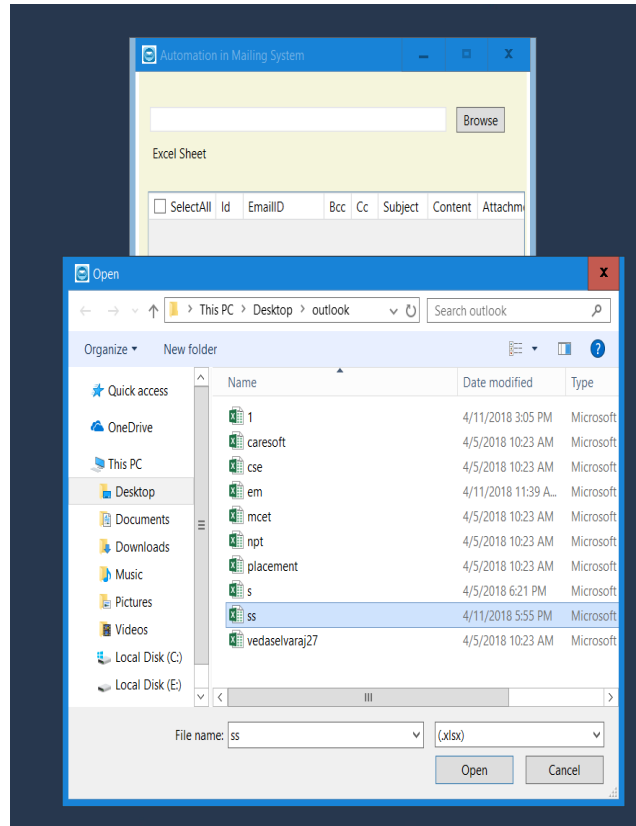
1 The User starts the application



2 The User can upload the file by clicking the browse button at the top right



3 The User should choose the Excel file only with extension .xlsx,.xls

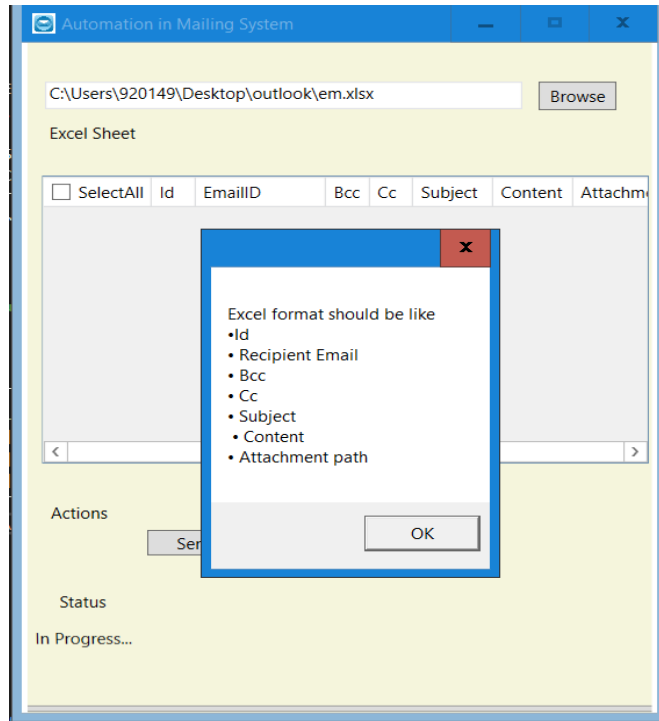


4 Uploading Excel file should be in correct order like

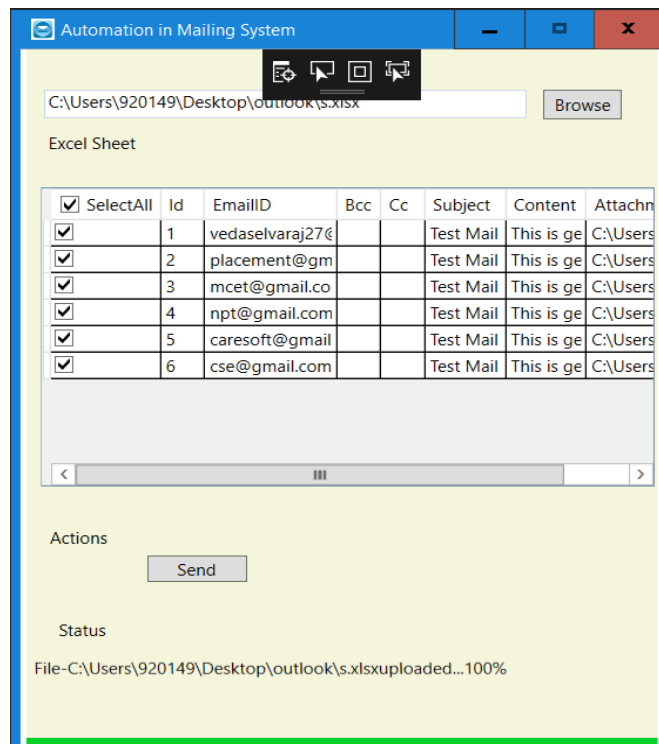
	A	B	C	D	E	F	G
1	ID	EMAILID	BCC	CC	SUBJECT	CONTENT	ATTACHMENT
2	1	vedaselvaraj27@gmail.com			Test Mail	This is generated mail	C:\Users\920149\Desktop\outlook\vedaselvaraj27.xlsx
3	2	placement@gmail.com			Test Mail	This is generated mail	C:\Users\920149\Desktop\outlook\placement.xlsx
4	3	mcet@gmail.com			Test Mail	This is generated mail	C:\Users\920149\Desktop\outlook\mcet.xlsx
5	4	npt@gmail.com			Test Mail	This is generated mail	C:\Users\920149\Desktop\outlook\npt.xlsx
6	5	caresoft@gmail.com			Test Mail	This is generated mail	C:\Users\920149\Desktop\outlook\caresoft.xlsx
7	6	cse@gmail.com			Test Mail	This is generated mail	C:\Users\920149\Desktop\outlook\cse.xlsx

- Recipient Email
- Bcc
- Cc
- Subject
- Content
- Attachment

- 5 If the Uploading Excel is not in the format it will notify the user to upload the correct formatted file like



- 6 If the Uploading file is correct then it will show the progress as 100% and the user can view the details .



7 The User can Edit the datas

- Edit Email Id
- Bcc
- Cc
- Subject
- Content
- Attachment

The screenshot shows a web application window titled "Automation in Mailing System". It features a file upload section with a text box containing "C:\Users\920149\Desktop\outlook\s.xlsx" and a "Browse" button. Below this is an "Excel Sheet" section containing a table with 8 columns: "SelectAll", "Id", "EmailID", "Bcc", "Cc", "Subject", "Content", and "Attachn". There are 6 rows of data, all of which have the "SelectAll" checkbox checked. Below the table is a "Send" button. At the bottom, a "Status" section displays the message "File-C:\Users\920149\Desktop\outlook\s.xlsxuploaded...100%".

<input checked="" type="checkbox"/>	SelectAll	Id	EmailID	Bcc	Cc	Subject	Content	Attachn
<input checked="" type="checkbox"/>		1	vedaselvaraj27@			Test Mail	This is ge	C:\Users
<input checked="" type="checkbox"/>		2	placement@gm			Test Mail	This is ge	C:\Users
<input checked="" type="checkbox"/>		3	mcet@gmail.co			Test Mail	This is ge	C:\Users
<input checked="" type="checkbox"/>		4	npt@gmail.com			Test Mail	This is ge	C:\Users
<input checked="" type="checkbox"/>		5	caresoft@gmail			Test Mail	This is ge	C:\Users
<input checked="" type="checkbox"/>		6	cse@gmail.com			Test Mail	This is ge	C:\Users

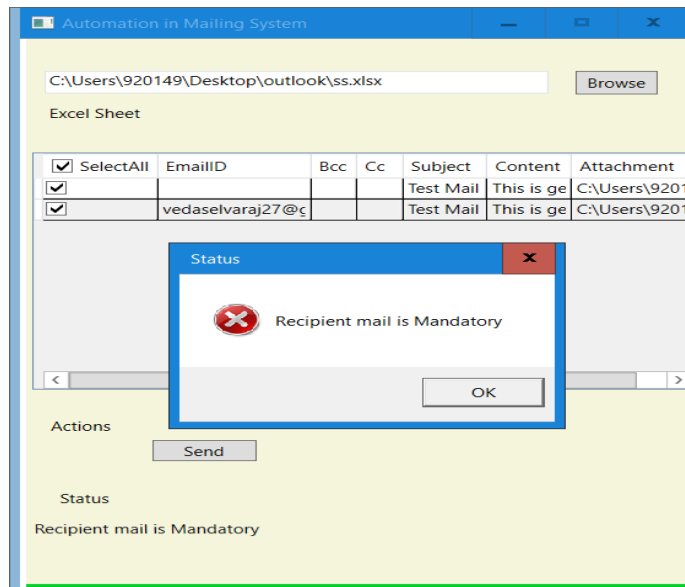
8 After Editing the user can select which email to select and which email to deselect, by default all are selected.

This screenshot shows the same interface as the previous one, but with the "SelectAll" checkboxes for rows 1, 2, 4, 5, and 6 unchecked. Only the checkbox for row 3 (EmailID: mcet@gmail.co) is checked. The "Send" button and the status message remain the same.

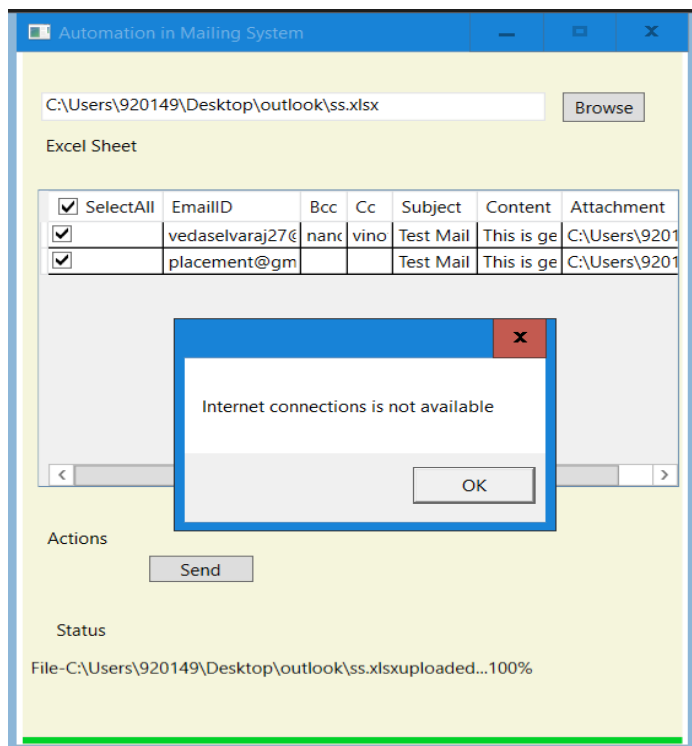
<input checked="" type="checkbox"/>	SelectAll	Id	EmailID	Bcc	Cc	Subject	Content	Attachn
<input type="checkbox"/>		1	vedaselvaraj27@			Test Mail	This is ge	C:\Users
<input type="checkbox"/>		2	placement@gm			Test Mail	This is ge	C:\Users
<input checked="" type="checkbox"/>		3	mcet@gmail.co			Test Mail	This is ge	C:\Users
<input type="checkbox"/>		4	npt@gmail.com			Test Mail	This is ge	C:\Users
<input type="checkbox"/>		5	caresoft@gmail			Test Mail	This is ge	C:\Users
<input type="checkbox"/>		6	cse@gmail.com			Test Mail	This is ge	C:\Users

9 The user can click the send button, before sending it check for the

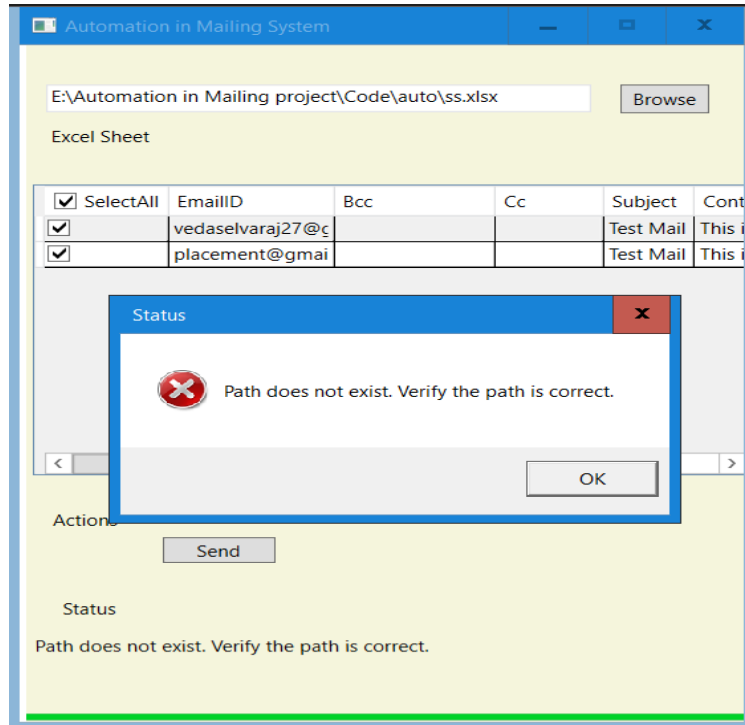
- Email correctness



- Internet connectivity

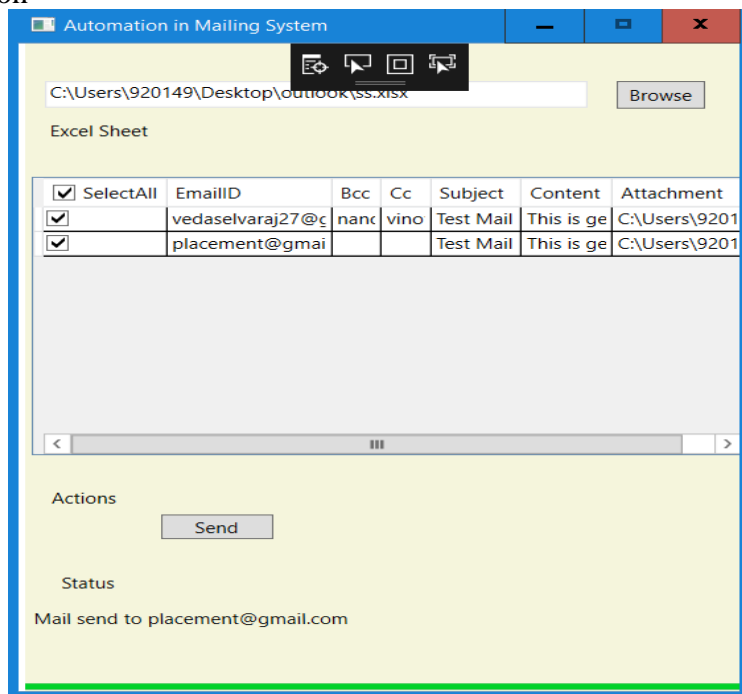


- Attachment path correctness



- The user check the Outlook Existence in system
- Check for the Bcc,Cc if the user enters it ,this part is optional

10 Finally, if there is no error then the mail will send to the selected recipients and show notification



3.2 Non-Functional Requirements

3.2.1 Usability

- 11 The system uses Internet to send mail.
- 12 Since all users are familiar with the general sending of mail, no specific training is required.
- 13 The system is user friendly and self-explanatory.

1.1.1 Reliability

The system is Reliable.

1.1.2 Availability

The system is available 100% for the user and is used 24 hours a day and 365 days a year.
The system shall be operational 24 hours a day and 7 days a week.

3.2.2 Accuracy

The accuracy of the system is limited by the accuracy of the speed.

3.2.3 Maximum Bugs or Defect Rate

Specified.

3.2.4 Access Reliability

The system shall provide 100% access reliability.

3.3 Performance

3.3.1 Response Time

The system is fast and it response faster. The system shall be allowed to take more time when error occurs during the Sending.

3.3.2 Throughput

It will produce good throughput. At the given time it will send the mail if it is correct.

3.3.3 Capacity

The system is capable of handling one user at a time.

3.4 Design Constraints

3.4.1 Software Language used:

- 1.C#
- 2.XAML.

3.4.2 Development Tools:

The developer environment used:

- 1.Microsoft Visual Studio 2017.
- 2..NET Environment 4.6.1.

The end user need the following to run the software:-

- 1..NET Environment 4.6.1 or above

3.4.3 Dynamic Linking Libraries used:

1. Microsoft.Office.Interop.Outlook.dll
2. EPPlus.dll

3.5 Interfaces

3.5.1 User Interfaces

Start page of the Application:

The screenshot shows a web application window titled "Automation in Mailing System". The interface is divided into several sections:

- Header:** A blue bar with the title "Automation in Mailing System" and standard window control buttons (minimize, maximize, close).
- Toolbar:** A black bar containing four icons: a document with a gear, a document with a magnifying glass, a document with a square, and a document with a double arrow.
- File Selection:** A white text input field followed by a "Browse" button.
- Excel Sheet:** A section with a yellow background. It contains a table with the following headers: "SelectAll", "EmailID", "Bcc", "Cc", "Subject", "Content", and "Attachme". The "SelectAll" header has a checkbox next to it. Below the headers is a large, empty grey rectangular area representing the data rows.
- Actions:** A section with a yellow background containing a "Send" button.
- Status:** A section with a yellow background, currently empty.

User uploading the Excel file:

Automation in Mailing System

E:\outlook\1.xlsx

Browse

Excel Sheet

<input checked="" type="checkbox"/> SelectAll	EmailID	Bcc	Cc	Subject	Content	Attachm
<input checked="" type="checkbox"/>	vedaselvaraj27@c			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	placement@gmai			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	mcet@gmail.com			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	npt@gmail.com			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	caresoft@gmail.c			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	cse@gmail.com			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	vedaselvaraj27@c			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	placement@gmai			Test Mail	This is ger	C:\Users\
<input checked="" type="checkbox"/>	mcet@gmail.com			Test Mail	This is ger	C:\Users\

Actions

Send

Status

File=E:\outlook\1.xlsxattachment uploaded...100%

Editing the Content:

Automation in Mailing System

E:\outlook\s.xlsx

Browse

Excel Sheet

<input checked="" type="checkbox"/> SelectAll	EmailID	Bcc	Cc	Subject	Content	Attachme
<input checked="" type="checkbox"/>	vedaselvaraj27@ç			CGS Mail	This is ger	C:\Users\9
<input checked="" type="checkbox"/>	placement@gmai			Test Mail	This is ger	C:\Users\9
<input checked="" type="checkbox"/>	mcet@gmail.com			Test Mail	This is ger	C:\Users\9
<input checked="" type="checkbox"/>	npt@gmail.com			Test Mail	This is ger	C:\Users\9
<input checked="" type="checkbox"/>	caresoft@gmail.c			Test Mail	This is ger	C:\Users\9
<input checked="" type="checkbox"/>	cse@gmail.com			Test Mail	This is ger	C:\Users\9

< >

Actions

Send

Status

File=E:\outlook\s.xlsxattachment uploaded...100%

Sending the Email:

Automation in Mailing System

C:\Users\920149\Desktop\outlook\ss.xlsx

Browse

Excel Sheet

<input checked="" type="checkbox"/> SelectAll	EmailID	Bcc	Cc	Subject	Content	Attachment
<input checked="" type="checkbox"/>	vedaselvaraj27@ç	nanc	vino	Test Mail	This is ge	C:\Users\9201
<input checked="" type="checkbox"/>	placement@mai			Test Mail	This is ge	C:\Users\9201

<

>

Actions

Send

Status

Mail send to placement@gmail.com

3.5.2 Hardware Interfaces

The existing Local Area Network (LAN) or Wireless Fidelity (Wi-Fi) will be used for Sending Email.

3.5.3 Software Interfaces

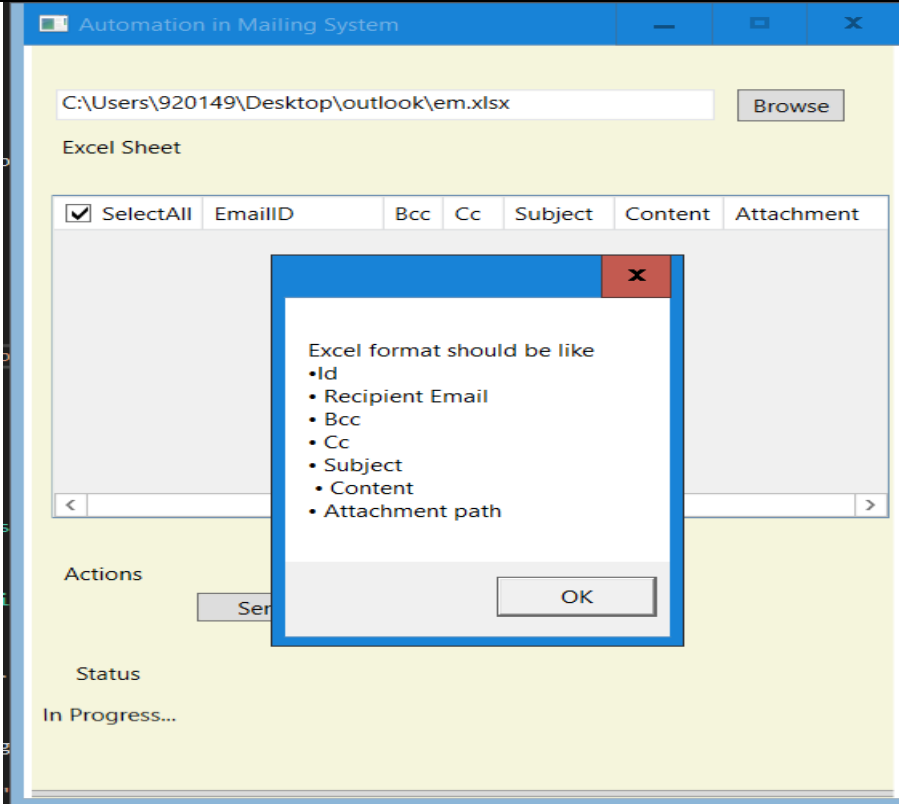
The Microsoft Outlook is used to send the mail.

3.5.4 Communications Interfaces

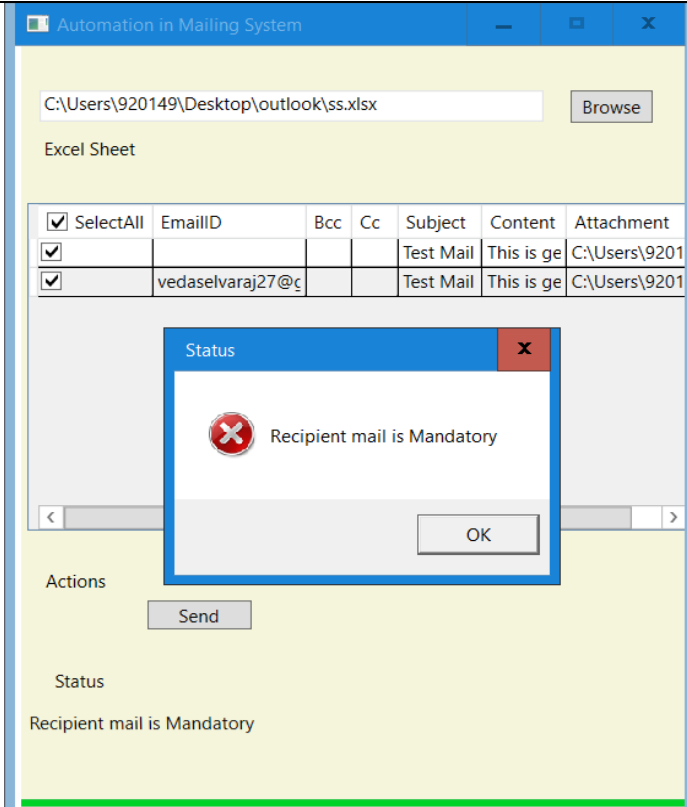
The Automation in Mailing Management System will work as the Desktop Application in User System.

4 Test Cases

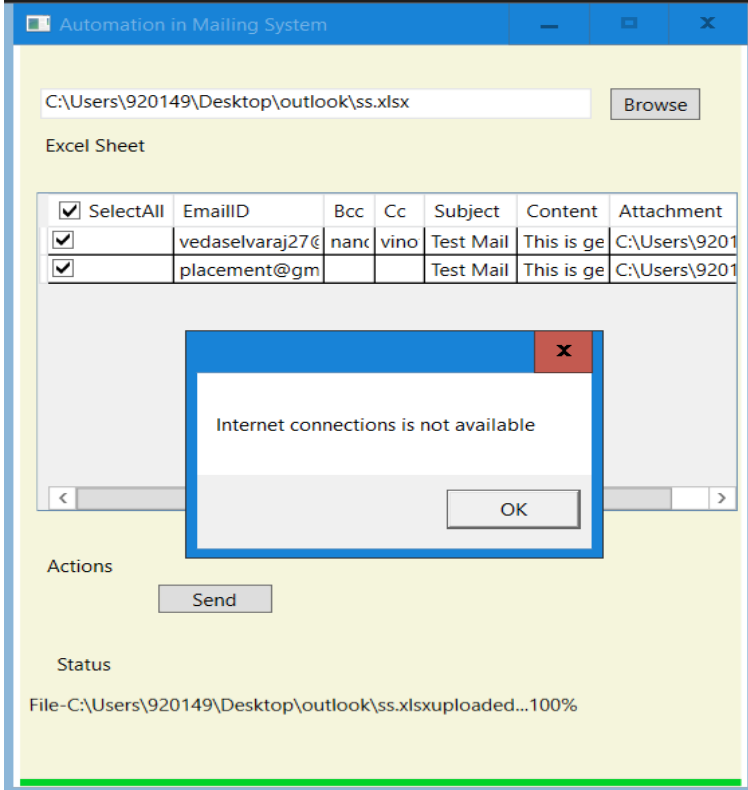
4.1 Unformatted Excel File Upload

TEST CASE	01
TITLE	Unformatted Excel File Upload
DESCRIPTION	The system needs the correct formatted excel file
POSITIVE TEST CASE	It will check the correctness in format and notify if it is wrong.
SCREEN SHOT	

4.2 Wrong Recipient Email

TEST CASE	02
TITLE	Wrong Recipient Email
DESCRIPTION	The system should check for the correctness of the recipient email
POSITIVE TEST CASE	It will notify the when there is no recipient mail .
SCREEN SHOT	 <p>The screenshot shows a web application titled "Automation in Mailing System". At the top, there is a file path input field containing "C:\Users\920149\Desktop\outlook\ss.xlsx" and a "Browse" button. Below this is an "Excel Sheet" section with a table. The table has columns: "SelectAll", "EmailID", "Bcc", "Cc", "Subject", "Content", and "Attachment". There are three rows of data, all with the "SelectAll" checkbox checked. The first two rows have empty "EmailID" fields, while the third row contains "vedaselvaraj27@cs". The "Subject" and "Content" columns contain "Test Mail" and "This is ge" respectively. The "Attachment" column contains "C:\Users\920149\Desktop\outlook\ss.xlsx". Below the table is a "Status" section with a red error message: "Recipient mail is Mandatory". At the bottom, there is an "Actions" section with a "Send" button and a "Status" section with the text "Recipient mail is Mandatory".</p>

4.3 Internet Connection

TEST CASE	03
TITLE	Internet Connection
DESCRIPTION	The system will check for the internet connectivity if not it will notify
POSITIVE TEST CASE	It will notify when there is no internet in the system
SCREEN SHOT	 <p>The screenshot shows a window titled 'Automation in Mailing System'. At the top, there is a text field containing 'C:\Users\920149\Desktop\outlook\ss.xlsx' and a 'Browse' button. Below this is an 'Excel Sheet' section containing a table with columns: SelectAll, EmailID, Bcc, Cc, Subject, Content, and Attachment. The table has two data rows. Below the table is a large error dialog box with a blue border and a red 'X' icon, displaying the message 'Internet connections is not available' and an 'OK' button. At the bottom of the application window, there is an 'Actions' section with a 'Send' button and a 'Status' section showing 'File-C:\Users\920149\Desktop\outlook\ss.xlsxuploaded...100%'.</p>

4.4 Outlook Existence

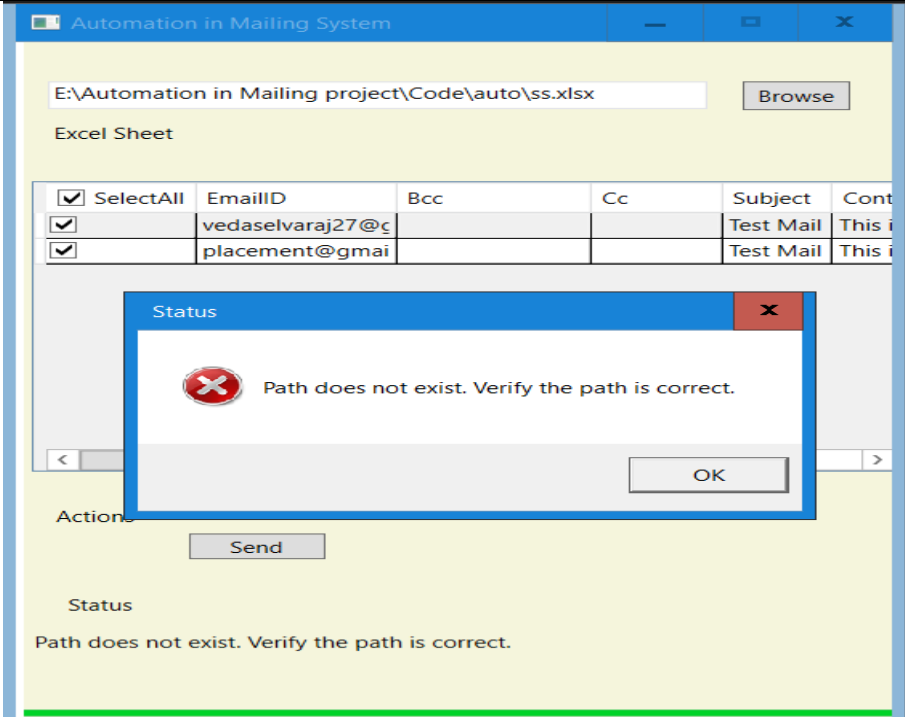
TEST CASE	04
TITLE	Outlook Existence
DESCRIPTION	The application will check for Outlook in the system
POSITIVE TEST CASE	It will notify the when there is no Outlook in the system
NEGATIVE TEST CASE	If Outlook not present it will not send mail.

4.5 Bcc and Cc

TEST CASE	05
TITLE	Bcc and Cc
DESCRIPTION	The application gives Bcc and Cc as optional one
POSITIVE TEST CASE	The system will send Bcc, Cc and it also check for the correctness if it is given, else it will not send.

4.6 Attachment path

TEST CASE	06
TITLE	Attachment
DESCRIPTION	The application check for the attachment path if it is wrong it will not send the attachment
POSITIVE TEST CASE	When the path found it will send else it will not send the attachment.
NEGATIVE TEST CASE	The path should be in the system where the application found.

SCREENSHOT	
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