



AUTOMATED LETTER SYSTEM



USER MANUAL

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INTRODUCTION

The Automated Letter System is a web-based application designed to generate official letters quickly and accurately using predefined templates. The system automates letter creation for general correspondence, viva sessions, and viva results. It also includes tools for managing templates, uploading data, and interacting with a help chatbot.



PURPOSE

The Automated Letter System streamlines the creation of official documents by automatically generating letters using templates and uploaded data. It saves time, reduces errors, and ensures consistent, professional letters for administrative and academic use.

This manual provides simple instructions to help users understand and operate the Automated Letter System. It guides users through each feature so they can generate letters and manage data easily and correctly.

BENEFITS

The system saves time, reduces errors, ensures consistent formatting, and makes it easy to generate single or batch letters. It keeps templates and data organized in one place and is simple for anyone to use.

USER

The system is designed mainly for administrative staff, coordinators, and academic officers who need to prepare official letters quickly and accurately. However, it can also be used by anyone, since users can create and upload their own templates for any type of letter or document.

SYSTEM OVERVIEW

THIS PAGE PROVIDES AN OVERVIEW OF THE SYSTEM, INCLUDING ITS REQUIREMENTS, MAIN FEATURES, AND NAVIGATION GUIDE.

SYSTEM REQUIREMENTS

Internet connection
Modern web browser (Chrome, Edge, Firefox)
Access to the HuggingFace Space
Word and Excel document applications

MAIN FEATURES

- Generate personalized letters using templates
- Manage student data
- Manage and store templates
- Generate Viva Results Letters in bulk
- Integrated chatbot for user assistance
- Secure storage using Supabase

SYSTEM NAVIGATION



The system contains several main tabs. Each tab serves a specific function, explained in the next pages.

- Tutorial
- Generate Letters
- Generate Viva Results Letter
- Manage Data
- Manage Templates
- Chatbot

TEMPLATES AND DATA

Templates and data for the letters can be created in word and excel applications and then, it is uploaded into the system. This way, there is no need for extensive debugging or reprogramming of the system if adjustments to the templates or data are needed.

TEMPLATES AND DATA

TEMPLATES

Templates are Word documents with placeholders that define the layout and content of each letter.

How to use:

1. Open word app and create a new blank document.
2. Write the full letter as you want it to appear. Include headings, paragraphs, and signature as needed.
3. Replace variable information with **placeholders** using **curly brackets**. Example: {name}, {student_id}, {program}, {date}
4. Save the file as .DOCX format. Use a clear name (e.g., Viva_Result_Template.docx).

2



3



DATA

Templates are Word documents with placeholders that define the layout and content of each letter.

How to use:

1. Open excel app and create a new blank document.
2. In the first row, add column names that **match the template placeholders**. Example: {name}, {student_id}, {program}, {date}
3. Fill in one row per person. Each row represents **one letter**.
4. Save the file as .XLSX format. Use a clear filename (e.g., Viva_Results_Data.xlsx).

2

	A	B	C	D
1	name	student_id	program	date
2				
3				

3

	A	B	C	D
1	name	student_id	program	date
2	Ali	1234	CS259	15/12/2025
3	Nabila	5678	CS259	15/12/2025

INSTRUCTIONS

INSTRUCTIONS FOR EACH OF THE SYSTEM'S FEATURES OR TABS

The screenshot shows the 'Automated Letter System' interface. At the top, there is a navigation bar with tabs: Tutorial, Generate Letters, Generate Viva Result Letters, Manage Data, Manage Templates, and Chatbot. The 'Chatbot' tab is highlighted with an orange underline. Below the navigation bar, the main content area has a dark background with white text. On the left, there is a small icon of a document and the text 'Automated Letter System'. To the right of the icon, there is some placeholder text: 'Click the button below to download the complete user manual (ZIP)' followed by a download button labeled 'ALS - User Manual.zip' and '8.1 MB'. A green hand cursor is shown pointing at the 'Tutorial' tab.

TUTORIAL TAB

Provides basic instructions and guidance on how to use the system. The system opens the tutorial tab by default.

How to use:

1. Open the Tutorial tab.
2. Download the user manual if needed.
3. Read through the quick overview of each feature.

The image contains two screenshots of the 'Automated Letter System' interface. The top screenshot shows the navigation bar with the 'Chatbot' tab highlighted by a green hand cursor. The bottom screenshot shows a larger view of the interface. It includes a search bar with the placeholder 'Ask something...', a text input field containing 'how to create a template', and a scroll-down arrow labeled '3'. Below the scroll-down arrow, there is a list of steps:

1. Open Microsoft Word
2. Write your letter normally
3. Use placeholders like {name}, {student_id}, {date}, {program}
- Example: Dear {name}, your viva is on {date}_viva
4. Save as .docx -- go to 'Manage Templates' -- Upload

A green hand cursor is also present over the scroll-down arrow in the bottom screenshot.

The screenshot shows the 'Automated Letter System' interface with the 'Tutorial' tab selected. A green hand cursor is pointing at the 'Tutorial' tab. Below it, a download dialog box is open, showing a file named 'ALS - User Manual.zip' with a size of '8.1 MB'. A second green hand cursor is pointing at the download button labeled '8.1 MB'.

CHATBOT TAB

Provide quick help and troubleshooting.

Steps:

1. Click the chatbot tab
2. **Scroll down** to type your question in the chat box.
3. Ask anything about how to use the system or fix errors.
4. Read the chatbot's explanation or instructions.

INSTRUCTIONS

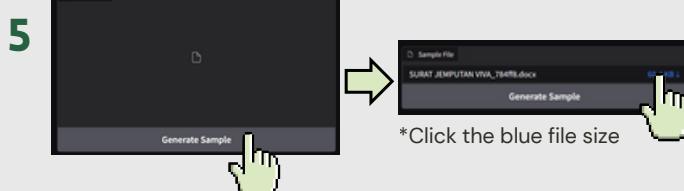
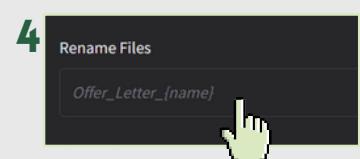
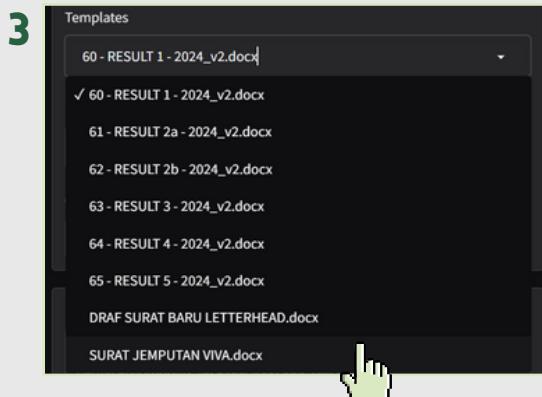
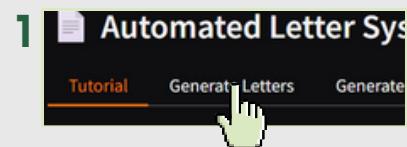
INSTRUCTIONS FOR EACH
OF THE SYSTEM'S
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GENERATE LETTERS TAB

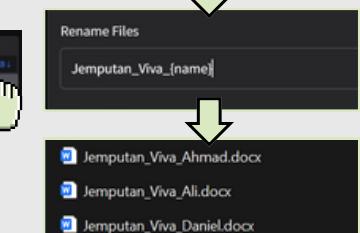
Create letters individually or in bulk using a template + uploaded data.

How to use:

1. Click on generate letters tab
2. Click and select a template from the dropdown.
3. Upload or choose a data file (Excel/CSV).
4. (Optional) Enter a rename pattern for file names.
5. Click Generate Sample to preview one letter.
6. Click Generate All to create all letters.
7. Download the generated .docx file or ZIP.



*Click the blue file size



*Click the blue file size

INSTRUCTIONS

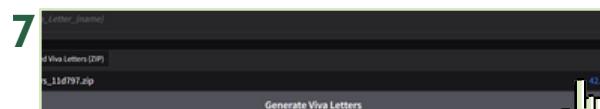
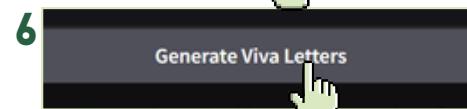
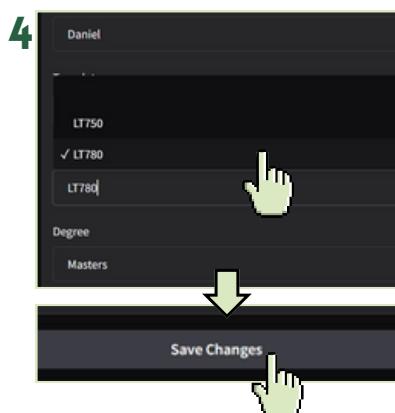
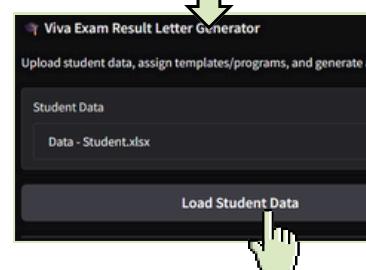
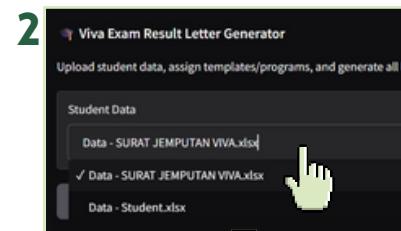
INSTRUCTIONS FOR EACH
OF THE SYSTEM'S
FEATURES OR TABS

GENERATE VIVA RESULT LETTERS TAB

Automatically generate student viva result letters in bulk.

How to use:

1. Click on the Generate Viva Result Letter tab.
2. Choose student data from dropdown menu.
Choose the data and click Load Student Data
3. Select a student to edit details.
4. Choose Template, Program, Degree, and Date for the selected student. Then, click Save Changes.
5. (Optional) Enter a rename pattern for output files.
6. Click Generate Viva Letters.
7. Download the ZIP containing all result letters.



*Click the blue file size

INSTRUCTIONS

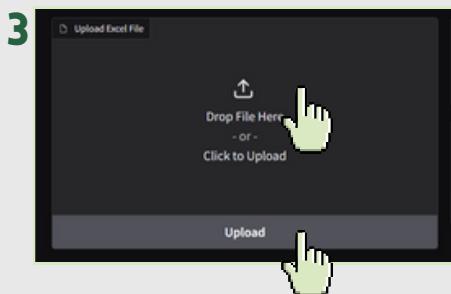
INSTRUCTIONS FOR EACH
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FEATURES OR TABS

MANAGE DATA TAB

Upload, store, and reuse Excel/CSV data files.

How to use:

1. Click on the Manage Data tab.
2. View the list of saved data files in the dropdown.
3. Upload a new Excel/CSV file then click Upload.
4. Select a file to delete in the Delete Data section then click delete.

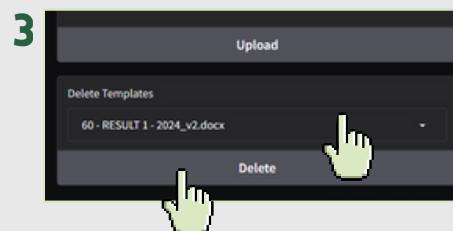
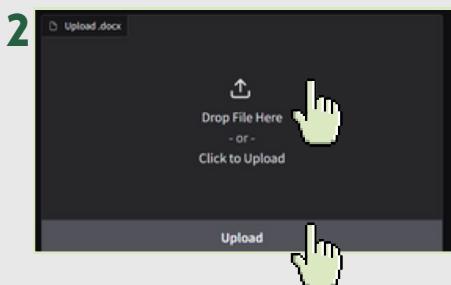


MANAGE TEMPLATES TAB

Upload, store, and reuse Excel/CSV data files.

How to use:

1. Click on the Manage Templates tab.
2. View the list of saved data files in the dropdown.
3. Upload a .docx template then click Upload.
4. Select a file to delete in the Delete Templates section then click Delete.



TIPS & TROUBLESHOOTING

THIS PAGE PROVIDES QUICK TIPS AND SOLUTIONS TO COMMON ISSUES TO HELP USERS USE THE SYSTEM SMOOTHLY AND EFFICIENTLY.

TIPS

- Match template placeholders with Excel column names exactly.
- Use {} for all placeholders.
- Save templates as .DOCX and data files as .XLSX.
- Preview a sample before generating all letters.
- Download files immediately after generation.

TROUBLESHOOTING

- Template Not Working
 - Check that placeholders use curly brackets {}.
 - Ensure there are no extra spaces inside placeholder names.
 - Confirm the file is saved as .DOCX.

TROUBLESHOOTING

- Data Not Appearing in Letters
 - Make sure Excel column headers match the placeholders exactly.
 - Check that all required fields are filled in the Excel file.
 - Re-load the data file if changes were made.
- Dropdown List Not Updating
 - Refresh the page to reload templates and data.
 - Ensure the file upload was successful.
- Letters Not Generated
 - Verify that both a template and data file are selected.
 - Check that the uploaded Excel file contains valid rows.
 - Try generating a sample letter first.

MEET THE CREATOR



DELIENA TASHA BINTI ABDUL RAHIM
System Designer & Developer

This system was independently designed, developed, and implemented by Deliena Tasha during an internship at MITRANS. The work includes system planning, programming, interface design, testing, user manual, and documentation.

 XDELIENA

 DELIENA.TASHA1@GMAIL.COM



**PROF. MADYA TS GS DR. ABDUL RAUF
ABDUL RASAM**
Project Supervisor

The supervisor provided the opportunity for this project through internship placement and conducted periodic reviews of the system's progress.

 RAUF@UITM.EDU.MY

ACADEMIC DEPARTMENT STAFF

User & Requirement Contributors

Academic staff contributed by providing system requirements, feedback on workflows, and official letter samples used for template creation.