COLLEGE ADMISSION FORM AUTOMATION

A PROJECT REPORT

Submitted by

ASHWIN V(220701518)

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RAJALAKSHMI NAGAR

THANDALAM

CHENNAI – 602 105

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RAJALAKSHMI ENGINEERING COLLEGE

CHENNAI - 602105

BONAFIDE CERTIFICATE

Certified that this project report **"COLLEGE ADMISSION FORM AUTOMATION"** is the Bonafide work of **"ASHWIN.V (220701518)"** who carried out the project work for the subject OAI1903-Introduction to Robotic Process Automation under my supervision.

SIGNATURE

Mrs. J. JINU SOPHIA,

SUPERVISOR

Assistant Professor(SG),

Computer Science & Engineering,

Rajalakshmi Engineering College

Thandalam , Chennai 602105

Submitted to Project and Viva Voce Examination for the subject OAI1903-Introduction to Robotic Process Automation held on _____.

INTERNAL EXAMINER **EXTERNAL EXAMINER**

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ASHWIN.V(220701518)

ABSTRACT :

The "College Admission Form Automation" project aims to simplify and enhance the efficiency of the student admission process through automation. This project leverages UiPath Studio to automatically fill out admission forms using data sourced from an Excel sheet. The information includes essential details such as full name, email, date of birth, course preferences, and address.

By automating the data entry process, this project minimizes human effort, reduces errors, and ensures accuracy in form submissions. The solution is especially useful for educational institutions handling large volumes of applications, streamlining the workflow and saving time for both applicants and administrators. This innovative approach highlights the practical application of robotic process automation (RPA) in the educational domain, demonstrating its potential to transform administrative processes effectively.

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LIST OF ABBREVIATIONS:

Abbreviation	Full Form
SMTP	Simple Mail Transfer Protocol
ERD	Entity Relationship Diagram
DFD	Data Flow Diagram
HR	Human Resources
API	Application Programming Interface
RE	Robotic Enterprise
RPA	Robotics Process Automation

CHAPTER-1

INTRODUCTION

This project addresses the challenges of manual data entry in college admissions by automating the process using UiPath Studio. It extracts data from an Excel sheet to fill forms accurately and quickly, saving time and ensuring error-free submissions. The system streamlines the admission workflow, showcasing the effective application of RPA in administrative tasks**.**

1. 1 GENERAL

The "College Admission Form Automation" project simplifies the process of filling out admission forms by leveraging UiPath Studio. It automates the extraction of applicant details like full name, email, date of birth, course, and address from an Excel sheet and populates them into the required fields. This automation eliminates manual effort, reduces errors, and speeds up the admission process.

1.2 OBJECTIVE

The objective of the "College Admission Form Automation" project is to streamline the admission process by automating the form-filling task using UiPath Studio. It aims to extract applicant details such as full name, email, date of birth, course, and address from an Excel sheet and populate them into admission forms accurately. This reduces manual effort, minimizes errors, and saves time, ensuring a more efficient and reliable process for educational institutions.

1.3 EXISTING SYSTEM

In the existing system, the college admission process is predominantly manual. Applicants or administrative staff manually fill out forms, which is time-consuming and prone to errors such as incomplete or incorrect entries. Managing large volumes of data becomes challenging, leading to inefficiencies in handling applications. Furthermore, the manual process often results in delays, increased workload for staff, and a lack of uniformity in data entry, making it difficult to streamline the overall admission workflow.

1.4 PROPOSED SYSTEM

The proposed system automates the admission form-filling process using UiPath Studio, significantly improving efficiency and accuracy. It extracts applicant details such as full name, email, date of birth, course, and address from an Excel sheet and populates the admission forms automatically. This eliminates manual effort, reduces errors, and saves time. The system ensures consistent and reliable data entry, streamlining the admission process for educational institutions and allowing staff to focus on more critical tasks.

CHAPTER-2

LITERATURE_REVIEW

The integration of automation in administrative tasks has been widely explored to enhance efficiency and reduce human errors. Robotic Process Automation (RPA) tools like UiPath have proven effective in automating repetitive processes, such as data entry and form filling, across various industries. Previous studies have highlighted the benefits of RPA in improving accuracy, reducing workload, and saving time in data-intensive operations.

2.1 GENERAL

Automation in administrative tasks, particularly in college admissions, has gained significant attention due to its potential to improve efficiency and reduce errors. Manual processes like data entry are time-consuming and prone to mistakes. Research shows that Robotic Process Automation (RPA) can reduce processing time by up to 70%, improving speed and accuracy in form handling.

Tools like UiPath, Blue Prism, and Automation Anywhere provide effective solutions for automating repetitive tasks. UiPath's RE Framework, known for its modular development and exception handling, is well-suited for structured automation projects such as college admission form filling.

By automating form data entry, this project aims to streamline the admission process, ensuring faster, error-free submissions

CHAPTER-3

SYSTEM DESIGN

3.1.1 SYSTEM FLOW DIAGRAM

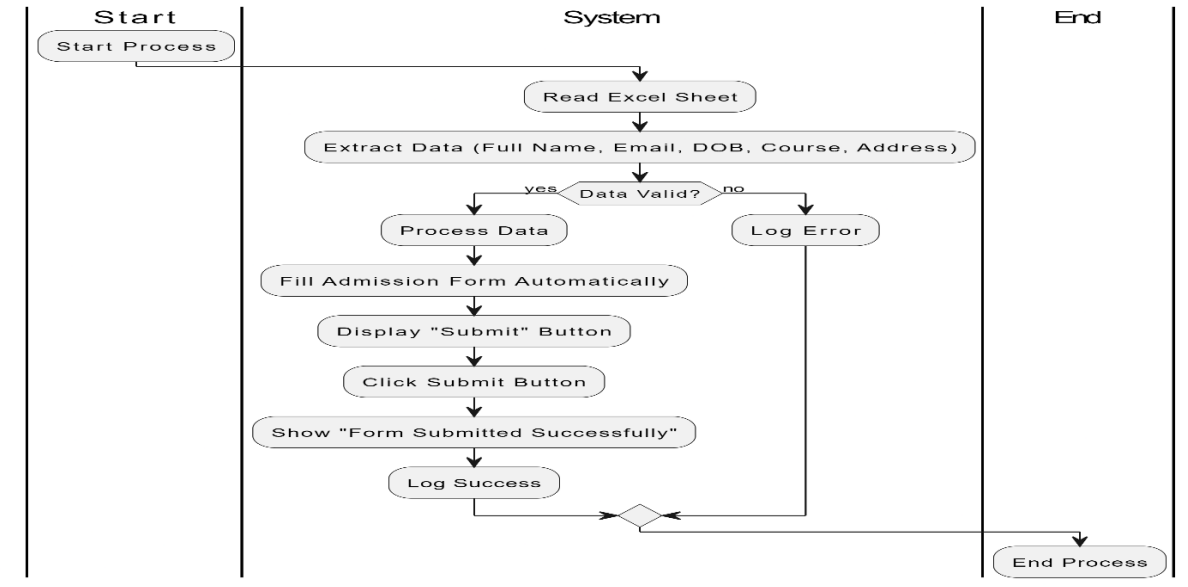
The **System Flow Diagram** outlines the overall flow of data and processes in the system. It demonstrates how user inputs, system processing, and outputs interact.

Description:

1. **Input**: The input for this process is candidate data stored in an Excel sheet, which includes details like full name, email, date of birth, course, address, and other relevant information.

2.Process: The system reads the Excel sheet to extract necessary candidate details

3. Output: The output confirms that the college admission forms have been successfully filled and submitted. Additionally, logs are generated for error handling, tracking any issues such as missing data, incorrect entries, or automation failures. These logs help in ensuring the process runs smoothly and errors are addressed promptly.



3.1.2 ARCHITECTURE DIAGRAM

The **Architecture Diagram** provides a high-level view of the system's structure and its components.

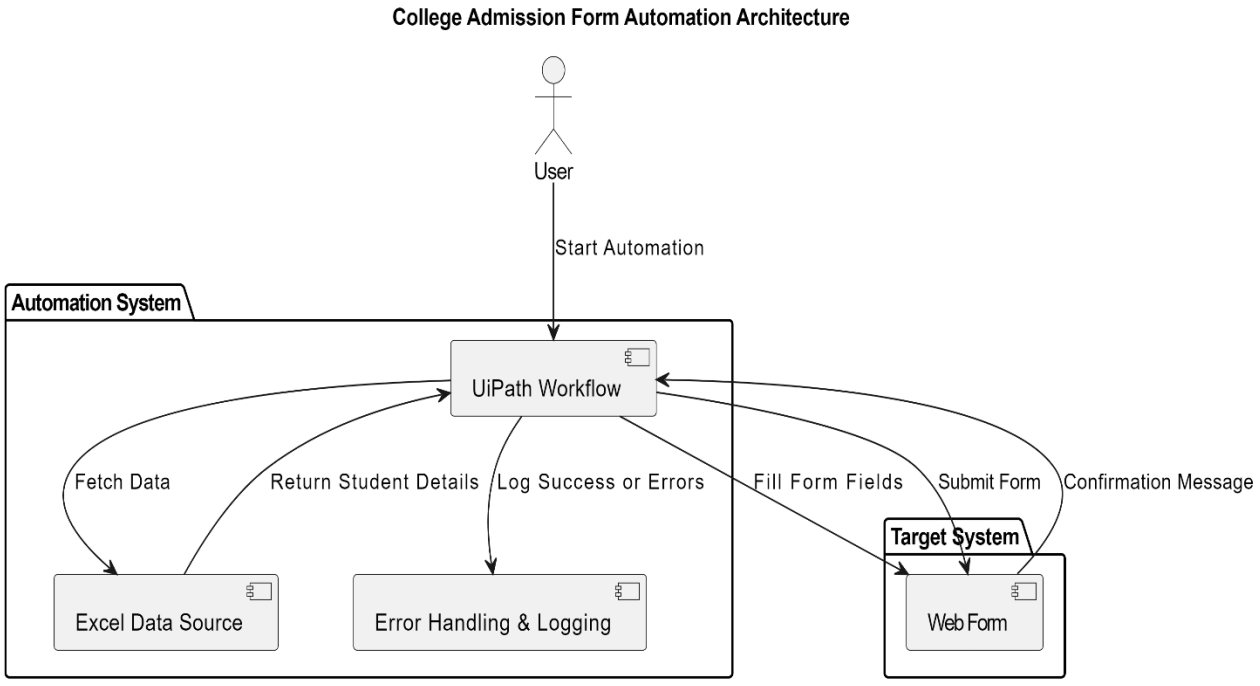
Components:

1. **Frontend**: User interface for admin (forms/dashboard) to initiate the automation and view results (e.g., form submission success).

2. **Backend**: **Excel Processing:** Reads candidate data (name, email, DOB, course, address) from the Excel sheet.

Form Automation: Automatically fills out the college admission form using UiPath.

Form Submission: Submits the filled form and logs success or failure.



3.1.3 SEQUENCE DIAGRAM

The Sequence diagram give the flow of the automation

1. **Triggering the Process:**

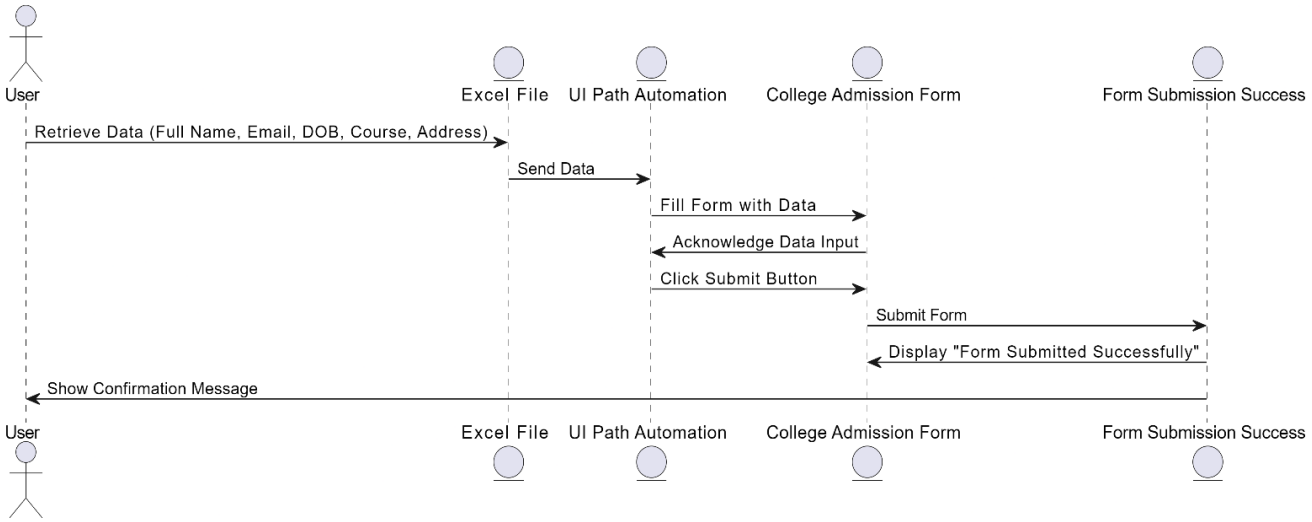
The process in "College Admission Form Automation" project can be triggered manually by the user clicking a start button or automatically through event-based triggers like file changes, scheduled tasks, or by using UiPath Orchestrator to trigger the process based on time or other conditions.

2. **Monitoring the Process:**

Monitoring the process in "College Admission Form Automation" project involves tracking the execution of the workflow to ensure that the data is being processed correctly, the form is being filled, and the form submission is successful.

3. **Reviewing Submission Logs:**

Reviewing submission logs is a critical step to ensure that the "College Admission Form Automation" process is running correctly and to identify any issues or areas for improvement.



CHAPTER-4

PROJECT DESCRIPTION

The "College Admission Form Automation" project is designed to automate the process of filling and submitting college admission forms. Using UiPath Studio, the system reads candidate data from an Excel sheet, including details like full name, email, date of birth, course, and address. The extracted data is then used to automatically populate the admission form. Once the form is filled, it is submitted electronically, eliminating the need for manual data entry. The system also logs the status of each submission, ensuring that any errors or successful submissions are tracked, which enhances efficiency and reduces the risk of human error.

4.1 METHODOLOGY

The development of the followed an agile methodology, ensuring iterative progress and flexibility in meeting project requirements. The system was built using UiPath's Robotic Process Automation (RPA) platform, utilizing its RE Framework to ensure structured execution, error handling, and scalability. The key steps in the methodology include the following:

- **Requirements Gathering:**
    - Identify the key fields required in the admission form (Full Name, Email, Date of Birth, Course, Address).
    - Determine the format and structure of the Excel sheet that stores the student data.
    - Analyse the form's structure (web or desktop) to locate the input fields and submission button.

4.1.1 MODULES:

1. Excel Data Extraction Module:

- Objective: This module handles the extraction of data from the provided Excel sheet.
- Details: It will read columns from the Excel file, such as full name, email, date of birth, course, and address. UiPath's Excel activities like Read Range or Read Cell can be used here.

2. Form Filling Module:

- Objective: This module automatically populates the college admission form with the extracted data.
- Details: Using UiPath's web automation features, this module will open the admission form (either a web-based or offline form) and input the candidate's details. It can use activities like Type Into, Set Text, and Click to interact with form fields.

3. Form Submission Module:

- Objective: This module automates the submission of the filled-out forms.
- Details: After filling in the admission form, the system will submit it, either by simulating clicks on the "Submit" button on a webpage or submitting a file to a database. UiPath's Click activity will be essential here for clicking the submission button.

4. Error Handling & Logging Module:

- Objective: This module captures any errors or issues that occur during form filling or submission.
- Details: The system will log every submission attempt, including whether the form was successfully submitted or if there were any issues (like missing data or incorrect entries). UiPath's Log Message and Write Line activities will be used for logging errors.

5. Confirmation/Notification Module:

- Objective: This module notifies the user or HR personnel once the forms have been successfully submitted or if there were errors.
- Details: Once the process is completed, the system will notify HR via an alert or email notification (using UiPath's Send Outlook Mail Message activity, for example). This will include confirmation of successful form submissions or details about encountered errors.

CHAPTER-5

OUTPUT SCREENSHOT

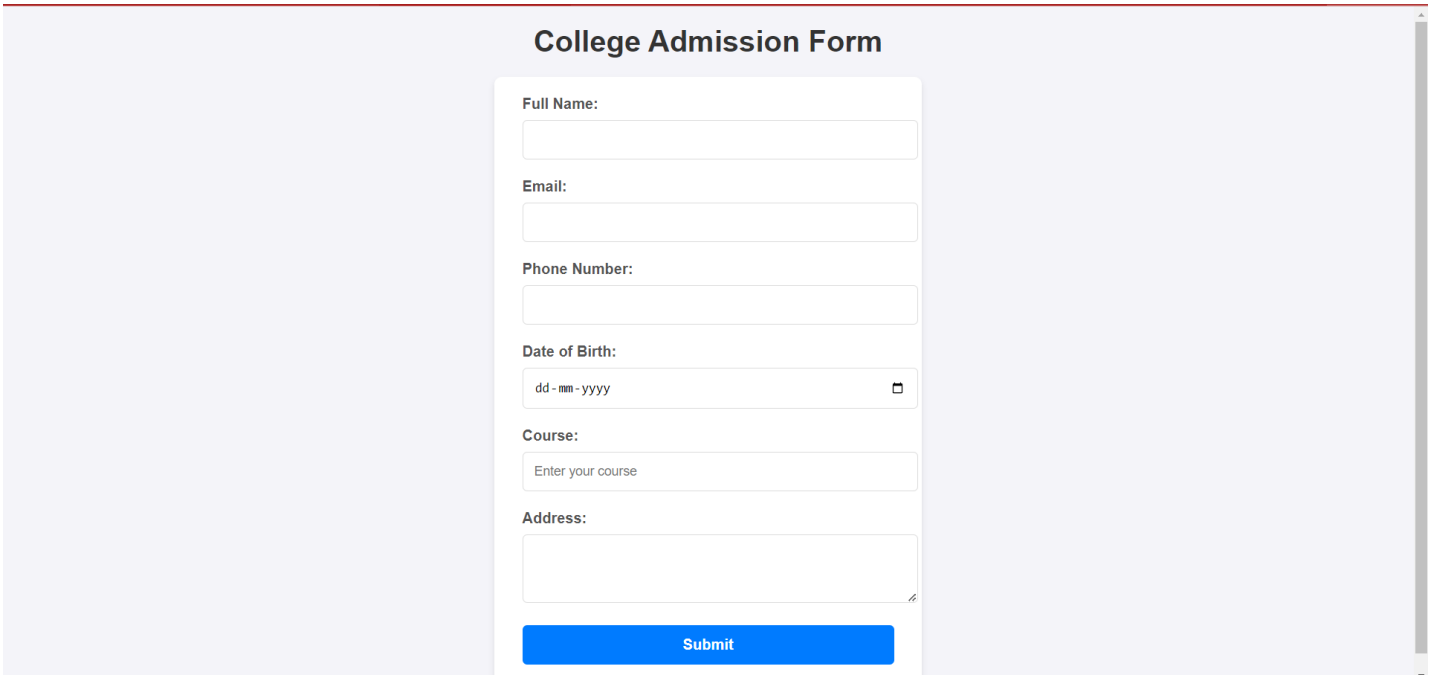


Fig. 5.1. SAMPLE FORM

From this above figure shows sample form.

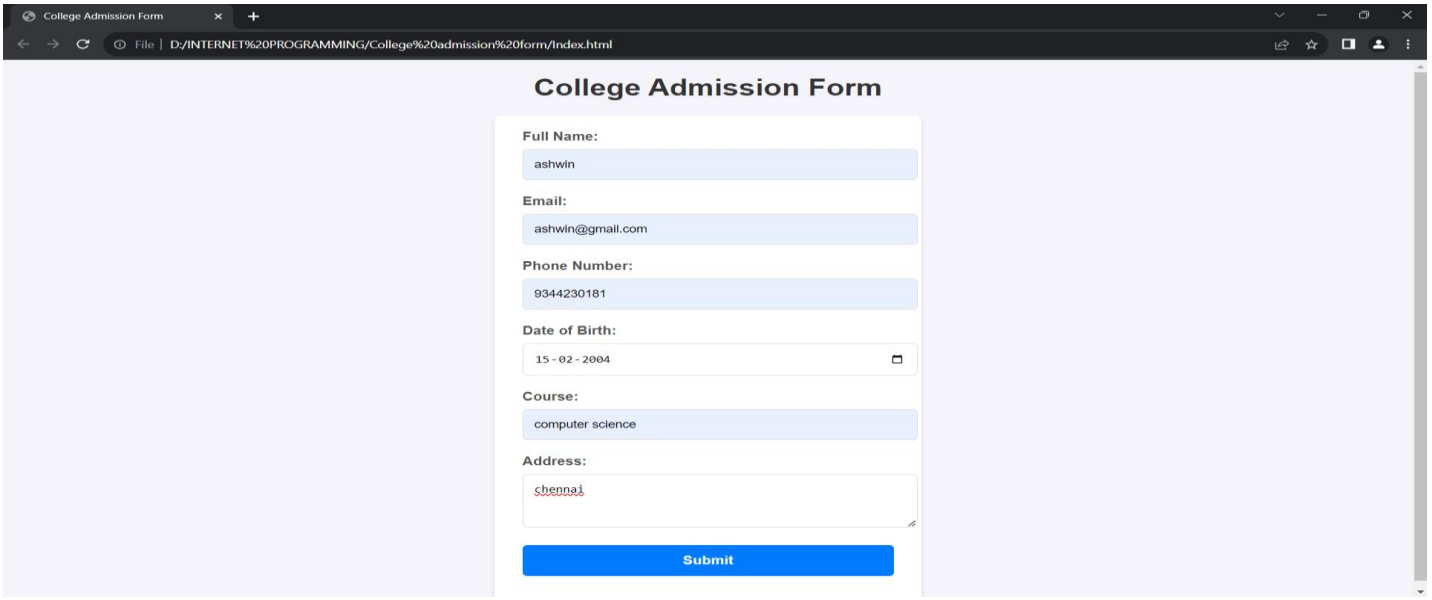


Fig. 5.2. FORM AUTOMATION

From this above figure Contains the automation of form.

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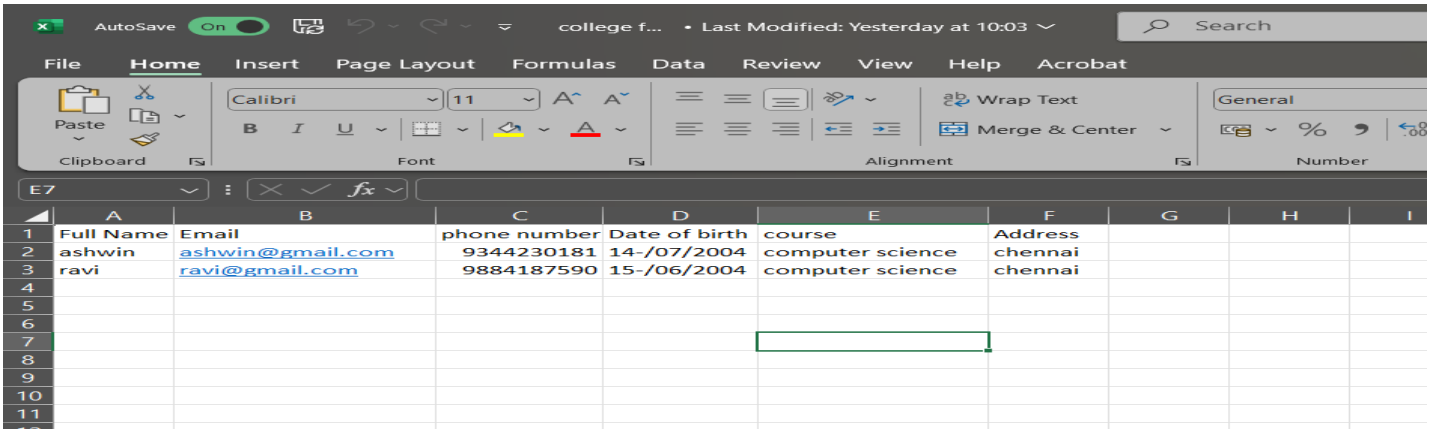


	A	B	C	D	E	F
1	Full Name	Email	phone number	Date of birth	course	Address
2	ashwin	ashwin@gmail.com	9344230181	14-/07/2004	computer science	chennai
3	ravi	ravi@gmail.com	9884187590	15-/06/2004	computer science	chennai

Fig. 5.3. SAMPLE EXCEL SHEET

From this above figure Contains the Sample Excel sheet.

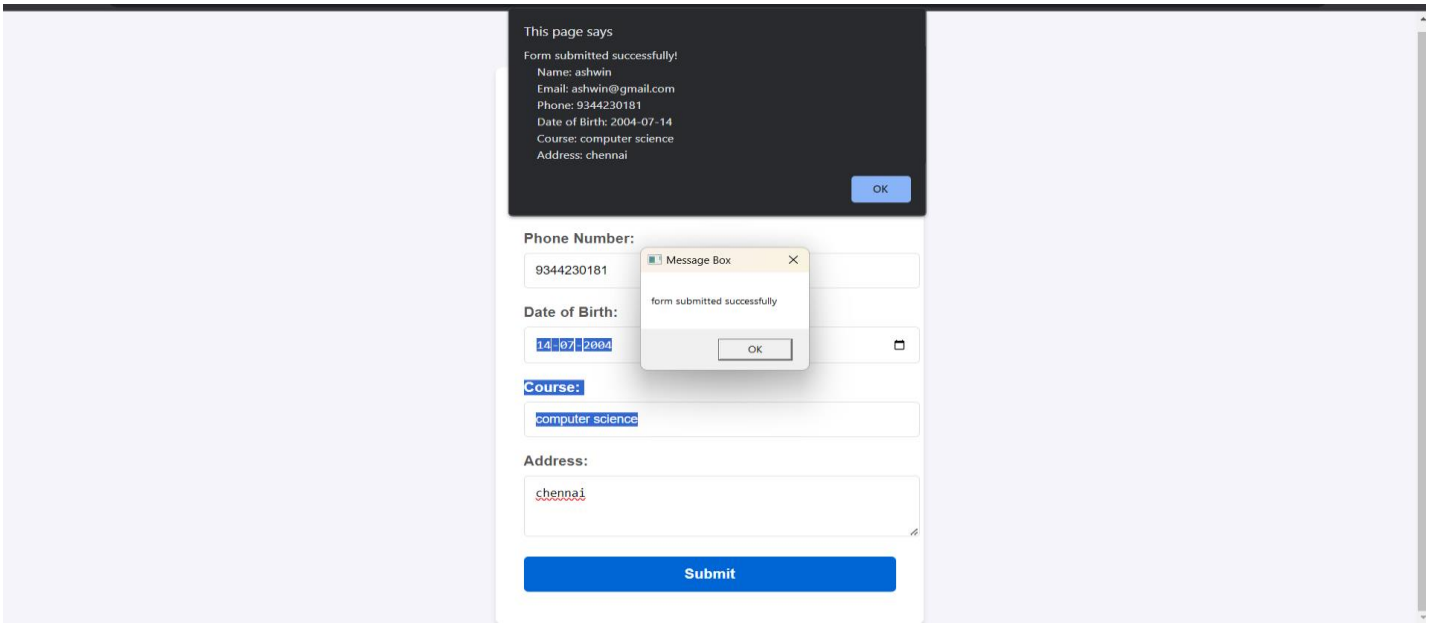


Fig. 5.4. FORM SUBMISSION

From this above figure Contains the form submission.

CHAPTER-6

CONCLUSIONS

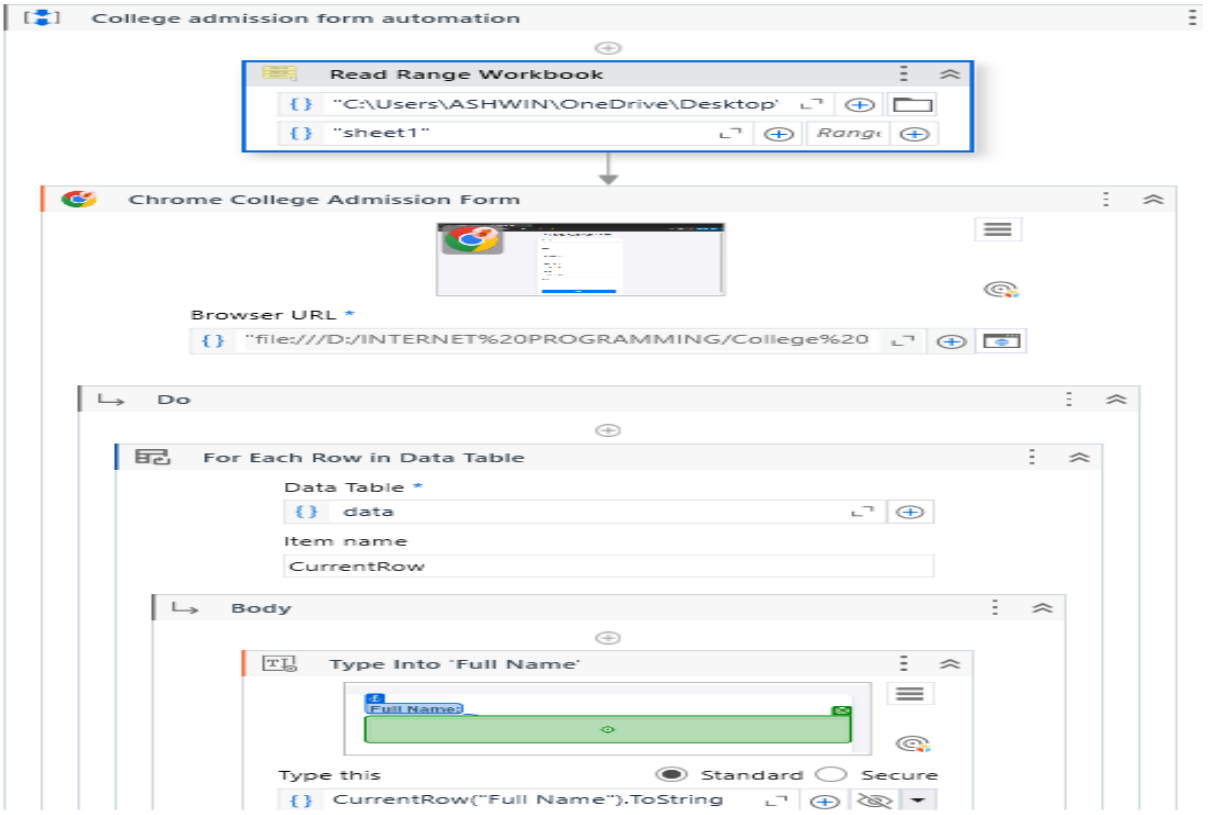
The College Admission Form Automation project successfully demonstrates the power and efficiency of robotic process automation (RPA) in streamlining administrative tasks. By automating the process of filling and submitting admission forms, the system reduces manual effort, eliminates errors, and ensures a faster and more accurate workflow. Utilizing UiPath Studio, the project effectively integrates data from Excel, interacts with the form interface, and manages submission confirmations with robust error-handling and logging mechanisms. This automation not only enhances productivity but also provides a scalable and reliable solution for managing large volumes of data, making it an invaluable tool for educational institutions aiming to optimize their admission process

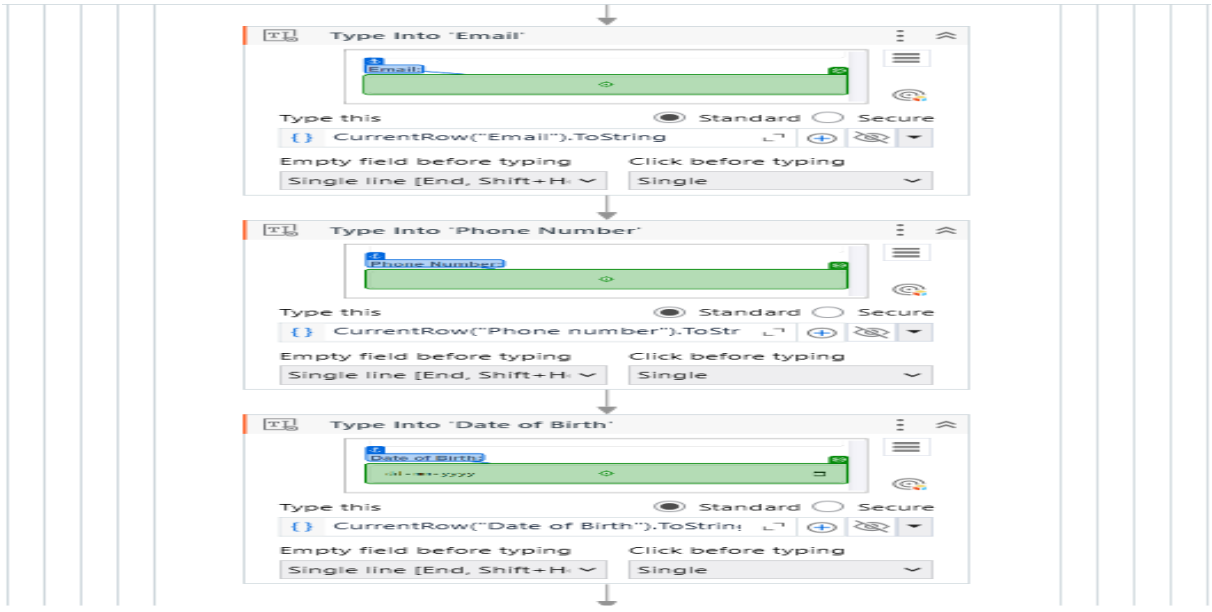
6.1 GENERAL:

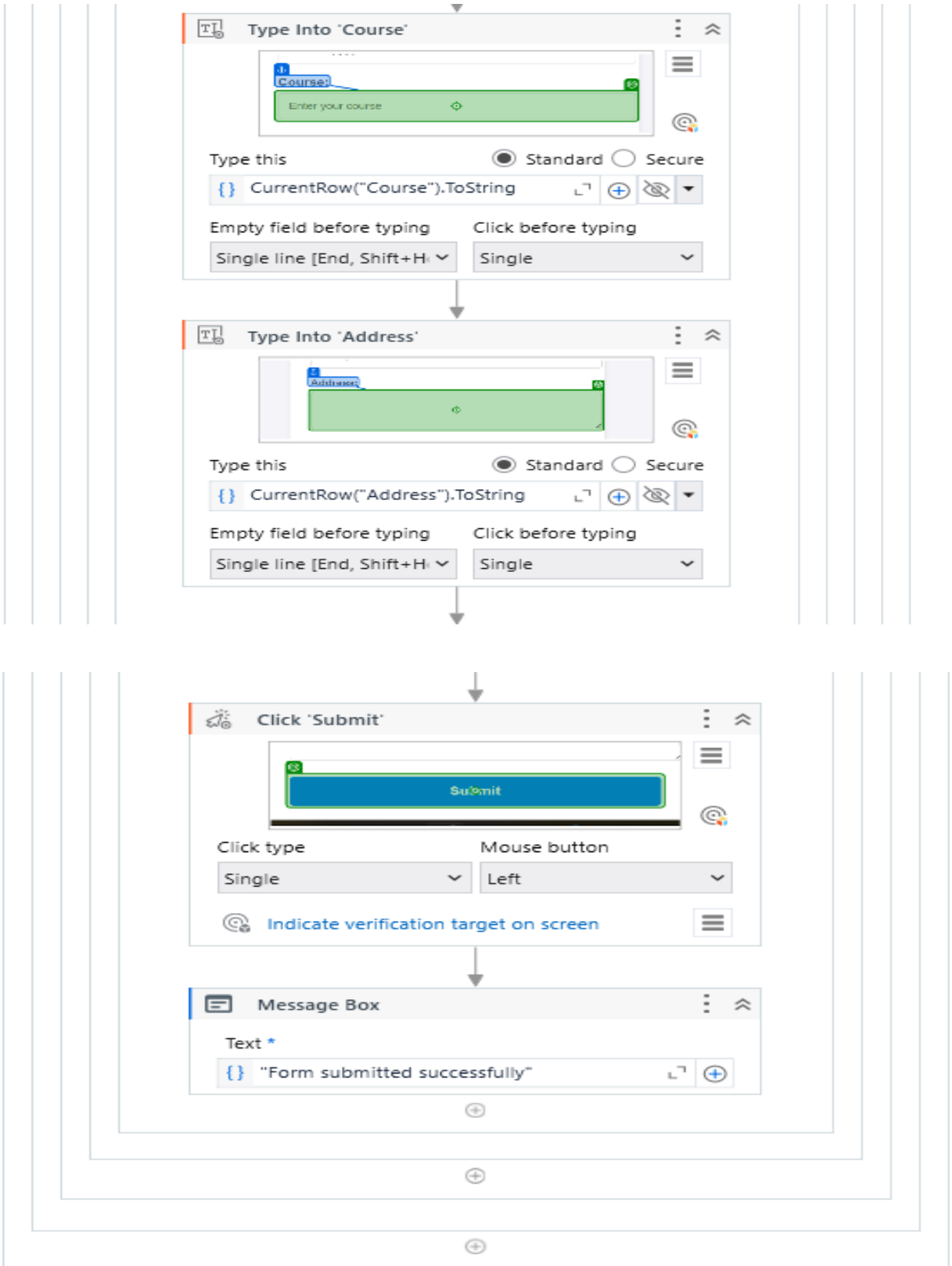
The College Admission Form Automation project highlights the transformative impact of automation in streamlining repetitive and time-consuming tasks. By leveraging UiPath's capabilities, the project simplifies the admission process, ensuring efficiency, accuracy, and scalability. This automation not only reduces human intervention but also minimizes errors and accelerates processing times. With robust error-handling, logging, and monitoring features, the system ensures reliability and adaptability to future needs. Overall, the project exemplifies how automation can revolutionize administrative workflows, offering a practical and innovative solution for modern institutions.

APPENDIX

PROCESS WORK FLOW






Type Into 'Course'
Course:
Enter your course
Type this
Standard
Secure
CurrentRow("Course").ToString
Empty field before typing
Click before typing
Single line [End, Shift+H
Single
Type Into 'Address'
Address:
Type this
Standard
Secure
CurrentRow("Address").ToString
Empty field before typing
Click before typing
Single line [End, Shift+H
Single
Click 'Submit'
Submit
Click type
Mouse button
Single
Left
Indicate verification target on screen
Message Box
Text *
"Form submitted successfully"

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This work provides insights into using automation tools to streamline admission workflows, particularly through RPA platforms.