

# **GENERATION OF EMPLOYEE\_ID AND EMAIL**

**A PROJECT REPORT**

*Submitted by*

**KIRUTHIGA M (220701132)**

*in partial fulfillment for the course*

**OAI1903 - INTRODUCTION TO ROBOTIC PROCESS AUTOMATION**

*for the degree of*

**BACHELOR OF ENGINEERING**

**in**

**COMPUTER SCIENCE AND ENGINEERING**

**RAJALAKSHMI ENGINEERING COLLEGE**

**RAJALAKSHMI NAGAR**

**THANDALAM**

**CHENNAI – 602 105**

**NOVEMBER 2023**

# **RAJALAKSHMI ENGINEERING COLLEGE**

**CHENNAI - 602105**

## **BONAFIDE CERTIFICATE**

Certified that this project report “Generation of employee id and email” is the bonafide work of “**KIRUTHIGA M(220701132)**” who carried out the project work for the subject OAI1903- Introduction to Robotic Process Automation under my supervision.

**Mrs. J. Jinu Sophia, M.E., (Ph.D.),**

**SUPERVISOR**

Assistant Professor (SG)

Department of

Computer Science and Engineering

Rajalakshmi Engineering College

Rajalakshmi Nagar

Thandalam

Chennai - 602105

Submitted to Project and Viva Voce Examination for the subject OAI1903-

Introduction to Robotic Process Automation held on\_\_\_\_\_.

## ACKNOWLEDGEMENT

Initially we thank the Almighty for being with us through every walk of our life and showering his blessings through the endeavour to put forth this report. Our sincere thanks to our Chairman **Thiru. S.Meganathan, B.E, F.I.E.**, our Vice Chairman **Mr. Abhay Shankar Meganathan, B.E., M.S.**, and our respected Chairperson **Dr. (Mrs.) Thangam Meganathan, Ph.D.**, for providing us with the requisite infrastructure and sincere endeavouring in educating us in their premier institution.

Our sincere thanks to **Dr. S.N.Murugesan, M.E., Ph.D.**, our beloved Principal for his kind support and facilities provided to complete our work in time. We express our sincere thanks to **Dr. P.Kumar, M.E., Ph.D.**, Professor and Head of the Department of Computer Science and Engineering for his guidance and encouragement throughout the project work. We convey our sincere and deepest gratitude to our internal guides, **Mrs. J. Jinu Sophia, M.E., (Ph.D.)**, Assistant Professor (SG), Department of Computer Science and Engineering for their valuable guidance throughout the course of the project. We are very glad to thank our Project Coordinators, **Dr. N. Durai Murugan, M.E., Ph.D.**, Associate Professor, and **Mr. B.Bhuvaneswaran, M.E.**, Assistant Professor (SG), Department of Computer Science and Engineering for their useful tips during our review to build our project.

**KIRUTHIGA M(220701132)**

## ABSTRACT

In modern enterprises, managing employee data efficiently and securely is crucial for organizational growth. One of the key aspects of this process involves generating unique employee IDs and corresponding email IDs for new hires. Traditionally, these tasks have been manual, involving repetitive data entry and prone to human error. This project proposes an automated solution to generate employee IDs and email IDs using UiPath Studio, a leading Robotic Process Automation (RPA) tool.

The primary goal of the project is to streamline the onboarding process by creating an automated workflow that generates employee-specific IDs and emails with minimal human intervention. The solution utilizes UiPath Studio to design and deploy a seamless automation process, integrating with existing databases or spreadsheets to retrieve essential employee details (such as name, department, and role).

The workflow begins by extracting the employee's first and last names, department, and other relevant information from a predefined data source (such as an Excel file, CSV, or a database). Based on this data, the system automatically generates a unique Employee ID, adhering to organizational standards for employee identification. The Employee ID may be a sequential number or may follow a structured format combining initials, department codes, and a numeric sequence.

Simultaneously, the workflow generates an email ID using a standard format such as <first name>.<last name>@<company domain>.com. The system then validates the email ID for uniqueness, ensuring that the generated address is not already in use. If a conflict is detected, the automation will append a numeric suffix to create a unique identifier.

Once the IDs are generated, the workflow proceeds to update the company's employee database or HR management system, creating an entry for the new employee with the corresponding ID and email address. Additionally, the generated email IDs can be automatically configured within the company's email system (e.g., Microsoft Exchange or Google Workspace), ensuring that employees can access their accounts immediately upon onboarding.

This automation not only eliminates the potential for manual errors but also speeds up the onboarding process, ensuring that new employees have their ID and email setup in a timely manner. Furthermore, the project aims to enhance data integrity and reduce administrative workload, leading to improved productivity and streamlined HR operations.

In conclusion, the UiPath Studio-based automation for generating employee IDs and email addresses provides a robust and scalable solution for businesses to improve their HR operations and ensure a seamless onboarding experience for new employees. The project highlights the power of RPA in transforming traditional, manual processes into highly efficient, automated workflows, thereby contributing to greater operational efficiency and accuracy.

## TABLE OF CONTENTS

CHAPTER NO.	TITLE	PAGE NO.
	<b>ABSTRACT</b>	<b>iii</b>
	<b>LIST OF FIGURES</b>	<b>vi</b>
	<b>LIST OF ABBREVIATIONS</b>	<b>vii</b>
<b>1.</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.1 INTRODUCTION	1
	1.2 OBJECTIVE	3
	1.3 EXISTING SYSTEM	3
	1.4 PROPOSED SYSTEM	4
<b>2.</b>	<b>LITERATURE REVIEW</b>	<b>5</b>
<b>3.</b>	<b>SYSTEM DESIGN</b>	<b>11</b>
	3.1 SYSTEM FLOW DIAGRAM	11
	3.2 ARCHITECTURE DIAGRAM	12
	3.3 SEQUENCE DIAGRAM	13
<b>4.</b>	<b>PROJECT DESCRIPTION</b>	<b>14</b>
	4.1 MODULES	14
	4.1.1 CREATING PROJECT	14
	4.1.2 DATA MANIPULATION	14
	4.1.3 FOR EACH ACTIVITY	15
<b>5.</b>	<b>OUTPUT SCREENSHOTS</b>	<b>17</b>
<b>6.</b>	<b>CONCLUSION</b>	<b>19</b>
	<b>APPENDIX</b>	<b>20</b>
	<b>REFERENCES</b>	<b>32</b>

## LIST OF ABBREVIATIONS

ABBREVIATION	ACCRONYM
RPA	Robotic Process Automation
URL	Uniform Resource Locator

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 INTRODUCTION**

In today's fast-paced and technology-driven business environment, organizations are increasingly relying on automation to streamline their operations and improve overall efficiency. Human Resources (HR) departments, which are responsible for managing employee records and ensuring smooth employee onboarding, often deal with repetitive and time-consuming administrative tasks. One such task is the generation of unique Employee IDs and corresponding email IDs for new hires. These IDs serve as the fundamental building blocks for tracking employee information, enabling access to company systems, and ensuring seamless communication within the organization. Despite its importance, this process is often prone to human error, delays, and inconsistencies when handled manually.

Traditionally, the process of generating Employee IDs and email addresses involves several steps: assigning a unique identifier, verifying its uniqueness to avoid duplication, creating an email ID, and ensuring it adheres to company policies and standards. This can be a tedious and error-prone task, especially in large organizations where employees are onboarded frequently. Given the growing need for speed, accuracy, and efficiency in HR operations, automating these tasks is an ideal solution.

This project leverages UiPath Studio, a leading Robotic Process Automation (RPA) tool, to design and implement an automated workflow for the generation of Employee IDs and email IDs. UiPath Studio offers a visual interface that allows users to create complex automation processes without requiring deep programming knowledge. It supports a variety of activities, from extracting data from spreadsheets and databases to sending emails and integrating with third-party systems, making it an ideal platform for this kind of automation.

The goal of this project is to automate the process of generating unique and standardized



Employee IDs and email addresses as part of the employee onboarding process. The system will pull essential employee information—such as first and last names, department, and role—from a predefined source (such as an Excel file or a centralized database). Based on this data, the system will generate a unique Employee ID following the company's naming conventions (e.g., combining initials, department codes, or a sequential numbering system). It will also generate a corresponding email address using a standard email format (e.g., [firstname.lastname@company.com](mailto:firstname.lastname@company.com)), ensuring that the email address adheres to the organization's email policies.

Additionally, the system will validate the generated email ID for uniqueness. This ensures that there are no conflicts with existing employees, preventing the situation where two employees are assigned the same email ID. In case of a conflict, the automation will append a number or suffix to the email address to ensure uniqueness. Once the IDs and email addresses are generated, they will be updated in the employee database or HR management system, thus maintaining an up-to-date record of all employees. Furthermore, the generated email IDs can be automatically created and configured in the organization's email system, allowing the new employee to access their email account immediately upon joining.

By automating these tasks, this project aims to eliminate the potential for errors caused by manual data entry, reduce the time and effort spent on routine administrative tasks, and improve the overall accuracy and consistency of employee records. Automation not only speeds up the process of onboarding new employees but also ensures that they have immediate access to the necessary tools and systems they need to perform their roles effectively.

Moreover, this project aligns with the growing trend of digital transformation in HR management, where organizations seek to leverage technology to enhance operational efficiency, reduce overhead, and improve the employee experience. The adoption of RPA tools like UiPath Studio has the potential to transform HR departments by enabling them to focus more on strategic initiatives, such as talent development, employee engagement, and organizational growth, while routine administrative tasks are handled by automation.

In conclusion, the integration of UiPath Studio to automate the generation of Employee IDs and email addresses represents a critical step towards digitalizing and optimizing HR operations. By simplifying the onboarding process, reducing human error, and ensuring consistency, this automation solution offers significant value to organizations looking to enhance their employee management processes and improve overall productivity.

## **1.2 OBJECTIVE**

The objective of this project is to automate the generation of unique employee IDs and standardized email IDs using UiPath Studio. It aims to minimize manual effort, ensure accuracy, and follow predefined organizational rules. The solution integrates with existing HR databases, enhances onboarding efficiency, and provides scalability for future growth. Validation and error-handling mechanisms are implemented to ensure data consistency and reliability, delivering a streamlined and efficient process for employee data management.

### 1.3 EXISTING SYSTEM

In the traditional approach to generating employee IDs and email IDs, the process is largely manual or semi-automated, relying on basic tools such as spreadsheets, databases, or standalone scripts. HR personnel or administrators are responsible for manually entering employee details, applying predefined rules for ID and email creation, and ensuring the uniqueness of the generated identifiers. Typically, this involves verifying data manually or through limited checks within the tools being used.

The process starts with collecting employee information from onboarding documents or systems. Based on this information, HR personnel follow naming conventions to create unique employee IDs and email IDs. However, these methods are prone to errors, including duplicate IDs, inconsistent formats, and typos, especially in large organizations with high employee turnover.

Integrating these manually generated identifiers into existing HR management systems is an additional challenge. It often involves repetitive tasks, such as importing data into multiple systems, updating records, and verifying accuracy across platforms. The lack of automation in these steps increases the time and effort required, delaying the onboarding process.

Moreover, the absence of advanced validation and error-handling mechanisms in the existing system can lead to incorrect or incomplete data entries. These errors may disrupt workflows, cause communication issues, and require significant rework to resolve. In rapidly growing organizations, the scalability of such manual processes is a major limitation, making it difficult to maintain efficiency and consistency as employee numbers increase.

Overall, the existing system is inefficient, error-prone, and not scalable, necessitating the adoption of an automated solution like UiPath Studio to address these challenges effectively.

## **1.4 PROPOSED SYSTEM**

The proposed system leverages UiPath Studio, a robust Robotic Process Automation (RPA) platform, to automate the generation of employee IDs and email IDs. This system aims to address the inefficiencies and limitations of the existing manual process by offering a streamlined, accurate, and scalable solution for employee data management.

The automated workflow begins by fetching employee details directly from existing HR databases, onboarding systems, or input files. UiPath Studio applies predefined business rules to generate unique employee IDs based on organizational standards, ensuring that no two employees have the same ID. Similarly, email IDs are automatically constructed using a consistent format, such as a combination of the employee's first name, last name, and domain, ensuring standardization across the organization.

The system incorporates robust validation mechanisms to verify data accuracy and check for duplication before finalizing the generated IDs. If errors or inconsistencies are detected, the system sends alerts to designated personnel for review and correction. This ensures high data quality and eliminates manual verification.

Integration with existing HR and IT systems is another key feature of the proposed solution. The UiPath automation workflow seamlessly updates employee records in central databases and synchronizes the generated IDs with downstream applications, such as payroll, attendance, and communication systems. This eliminates the need for repetitive data entry, reducing time and effort.

In addition to its operational efficiency, the system is designed to handle high volumes of data, making it scalable for growing organizations. It also includes error-handling capabilities to address issues like incomplete data entries or system failures. Automated logs and audit trails provide visibility into the process, enabling easy tracking and compliance monitoring.

By automating the generation of employee IDs and email IDs, the proposed system minimizes human intervention, significantly reduces errors, and accelerates the onboarding process. It ensures consistency, improves data management, and provides a reliable, scalable solution that aligns with organizational growth and technological advancements.

## **CHAPTER 2**

### **LITERATURE REVIEW**

The automation of employee ID and email ID generation is a crucial aspect of streamlining human resource management processes. Existing literature on process automation highlights the growing reliance on Robotic Process Automation (RPA) tools like UiPath Studio to improve efficiency, accuracy, and scalability in repetitive tasks. This literature review explores the existing research and technological advancements related to RPA, employee data management, and organizational workflows. The automation of employee ID and email ID generation is a crucial aspect of streamlining human resource management processes. Existing literature on process automation highlights the growing reliance on Robotic Process Automation (RPA) tools like UiPath Studio to improve efficiency, accuracy, and scalability in repetitive tasks. This literature review explores the existing research and technological advancements related to RPA, employee data management, and organizational workflows. Studies have shown that RPA is a transformative technology for automating rule-based, repetitive tasks in organizations. According to Willcocks et al. (2015), RPA reduces operational costs by up to 30% while improving process accuracy and reliability. UiPath Studio, as a leading RPA tool, offers a user-friendly interface and extensive integration capabilities, making it suitable for automating employee ID and email ID generation. Research indicates that RPA systems are particularly effective in reducing human error and enhancing data consistency, which are critical requirements for employee data management. Traditional methods of employee ID and email ID creation are labor-intensive, prone to errors, and lack scalability. A study by Rehman et al. (2018) highlights the inefficiencies in manual employee onboarding processes, emphasizing the need for automated solutions to handle large-scale data entry and validation tasks. The generation of unique identifiers like employee IDs and email addresses often involves complex naming conventions and validation rules, which manual processes struggle to execute consistently.



Automation, therefore, offers a viable solution to address these challenges.

Research by Pardo and Clemente (2019) shows that automation in HR processes, including onboarding, payroll, and attendance, significantly enhances organizational efficiency. Automated systems reduce the time required for routine administrative tasks, enabling HR personnel to focus on strategic initiatives. The generation of employee IDs and email IDs is a foundational step in onboarding, and automating this process ensures seamless integration with downstream systems like payroll and attendance management

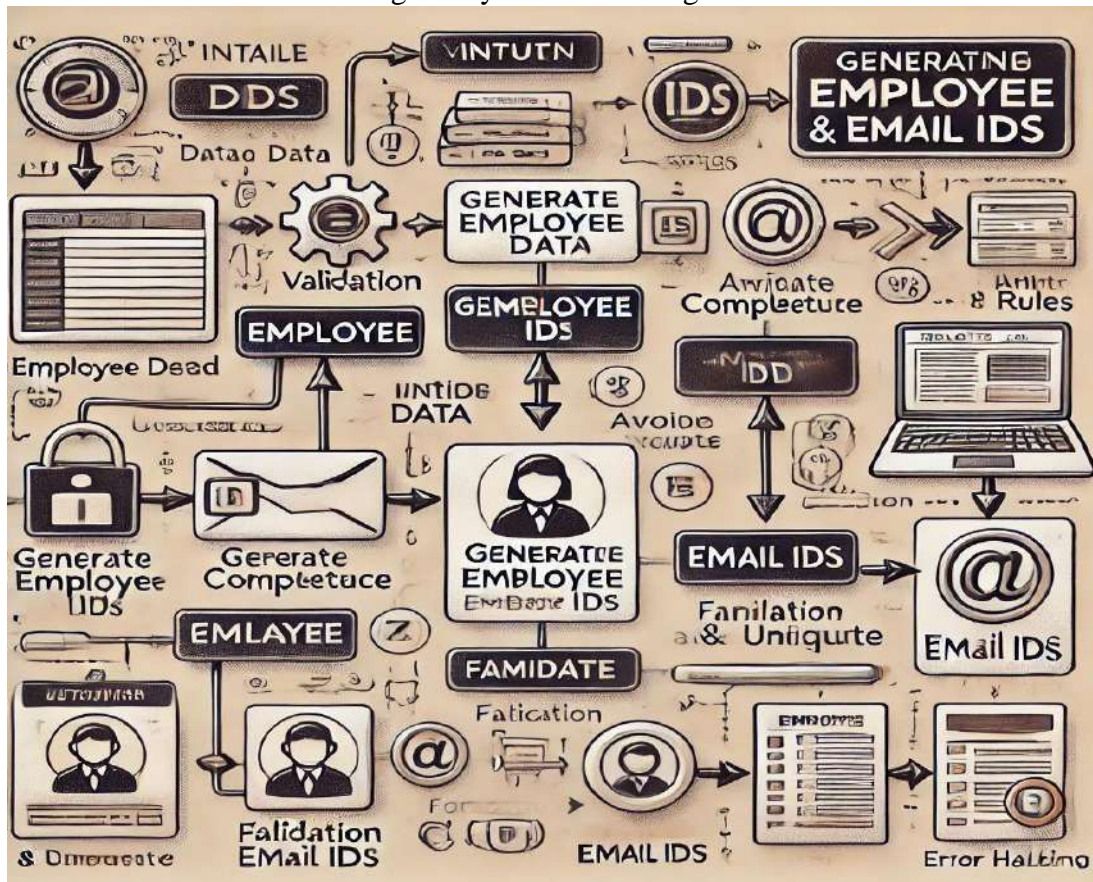
## CHAPTER3

### SYSTEMDESIGN

#### 3.1 SYSTEM FLOW DIAGRAM

A flowchart is a type of diagram that represents an algorithm, workflow or process. The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows. This diagrammatic representation illustrates a solution model to a given problem

Fig 3.1 System Flow Diagram



### 3.2 ARCHITECTURE DIAGRAM

An architecture diagram is a graphical representation of a set of concepts, that are part of an architecture, including their principles, elements and components.

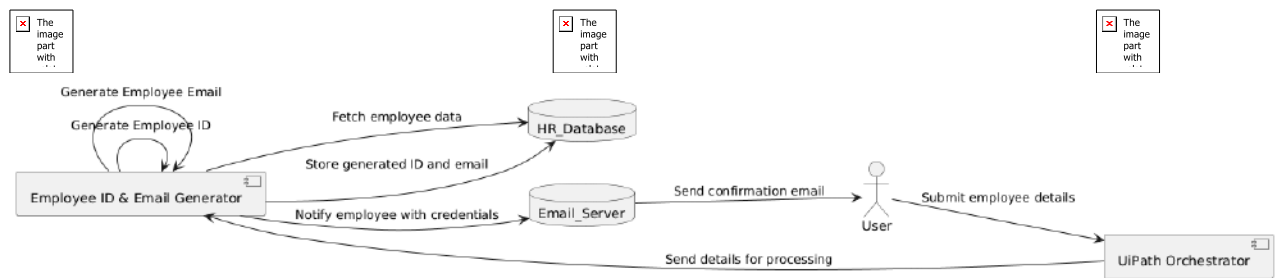
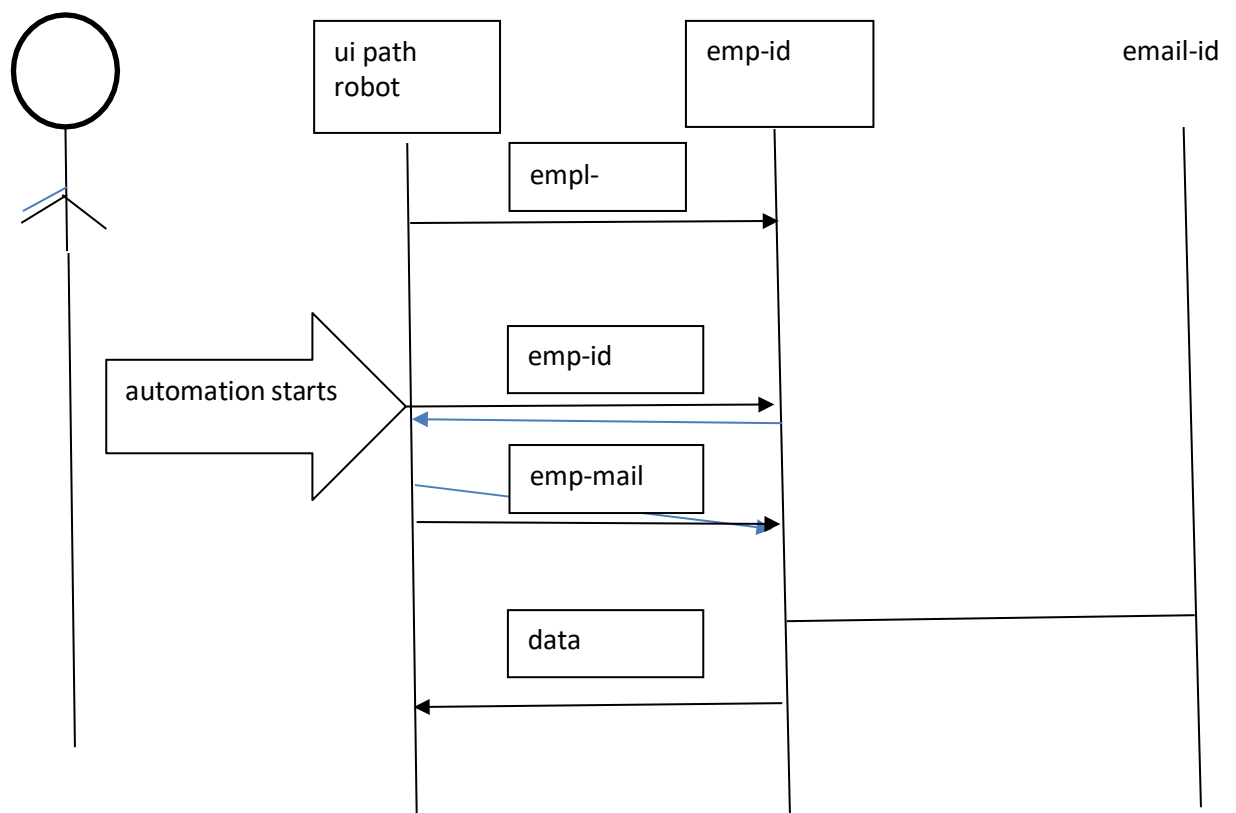


Fig 3.2 Architecture Diagram

### 3.3 SEQUENCE DIAGRAM

A sequence diagram is a type of interaction diagram because it describes how—and in what order—a group of object



Sequence diagram

## CHAPTER 4

### PROJECT DESCRIPTION

#### 4.1 MODULES

##### 4.1.1 CREATING PROJECT

The objective of this project is to automate the process of generating Employee IDs and corresponding email addresses for new employees, using UiPath Studio as the automation platform. This automation helps streamline the employee onboarding process, ensuring consistency, reducing manual effort, and improving data accuracy. The following sections outline the key steps involved in creating this project.

#### Step 1: Setting Up the UiPath Studio Environment

##### 1. Install UiPath Studio:

- a. First, you need to have **UiPath Studio** installed on your machine. UiPath Studio is available for free under the Community Edition, which can be downloaded from UiPath's official website.
- b. Once installed, open UiPath Studio, and create a new project by selecting "Process" from the template options.

##### 2. Create a New Project:

- a. After opening UiPath Studio, click on **"New Project"**, choose the **"Process"** template, and name the project something like **"EmployeeID\_And\_Email\_Generation"**.
- b. Click **Create** to start with a blank automation workflow

#### Step 2: Generate Employee ID

## 1. Create Employee ID Format:

- a. The Employee ID can be created using a combination of the employee's initials and a sequential number. For instance, the format might be “[**First Initial**][**Last Name**][**Department Code**]”.
- i. Example: John Doe from HR could have the Employee ID: JDHR001.

## 2. Create Employee ID:

- a. Loop through the DataTable (dtEmployeeData) using a **For Each Row** activity.
- b. Inside the loop, use the **Assign** activity to create the Employee ID by concatenating the first initial, last name, and department code.
  - i. **Assign Activity:**

```

1. EmployeeID = row("First
Name").ToString.Substring(0,1) + row("Last
Name").ToString
+
row("Department").ToString.Substring(0,2)
+
(dtEmployeeData.Rows.IndexOf(row)
+
1).ToString.PadLeft(3, "0"c)

```
  - ii. This expression extracts the first letter of the first name, the entire last name, the first two letters of the department name, and appends a unique sequential number for the ID.

## Step 3: Generate Email ID

### 1. Email ID Format:

- a. The Email ID can be created using a standard format: [firstname.lastname@company.com](#).
- i. Example: John Doe's email address would be ["john.doe@company.com"](#).

## 2. Generate Email ID:

- a. Inside the same **For Each Row** loop, use the **Assign** activity to generate the Email ID.

- i. **Assign Activity:**

1. EmailID = row("First Name").ToString.ToLower +  
"." + row("Last Name").ToString.ToLower +  
["@company.com"](#)

- ii. This will create the email ID in lowercase and concatenate it with the company domain.

## 3. Check for Email Uniqueness (Optional):

- a. To ensure the email address is unique, you can maintain a list of already generated email addresses and check for duplicates. If a duplicate is found, append a number (e.g., [john.doe1@company.com](#)) until a unique email is generated.

## Step 4: Storing or Updating the Data

Once the Employee ID and Email ID are generated, the next step is to either store this information in a database or update the original Excel file.

### 1. Update Excel with New IDs:

- a. Use the **Write Cell** activity to write the generated Employee ID and Email ID back to the Excel file.

- b. Add two new columns to the DataTable: **EmployeeID** and **EmailID**.
- c. For each row in the loop, update these columns:
  - i. **Write Cell** for **EmployeeID** and **EmailID** based on the row index.

## 2. (Optional) Save to a Database:

- a. If you wish to store the generated IDs in a database, you can use **Insert Row** or **Execute Non Query** activities to insert the new data into an SQL database.
- b. This would require a connection to the database and a properly structured table to store the data.

## Step 5: Automate Email Creation

If you want to automatically create email accounts in your organization's email system (e.g., Microsoft Exchange, Google Workspace), you can integrate with the email system's API or use system-specific tools like **PowerShell** (for Office 365). This step involves invoking an external process or application and is typically beyond basic UiPath activities. However, UiPath can execute PowerShell scripts or make HTTP requests if API integration is available.

### 1. Example PowerShell Script (for Office 365):

- a. UiPath can run PowerShell scripts using the **Invoke PowerShell** activity to create a user in Office 365.
- b. You can pass the generated email address to the PowerShell script, which will create the corresponding email account.

## Step 6: Testing and Deployment

### 1. Testing:

- a. Test the automation thoroughly by running it with various employee data inputs. Ensure that the Employee IDs and Email IDs are generated correctly and that there are no duplicates.



- b. Verify that the updated Excel file reflects the changes.

## 2. **Deployment:**

- a. Once tested, the process can be deployed to the UiPath Orchestrator for scheduling or running on demand.

### 4.1.2 DATA MANIPULATION

**Data manipulation** in **UiPath Studio** involves using various activities to process, transform, and store data in a structured manner, ensuring that raw data can be converted into the desired format for further use in automation. For the **Employee ID and Email ID generation** process, data manipulation is essential to ensure that employee information, such as first name, last name, department, and role, is processed correctly and formatted into Employee IDs and Email IDs.

Here's a detailed explanation of how different UiPath activities like **Assign**, **For Each Row**, and **Write Range** are used to manipulate and store employee information:

#### **Assign Activity**

The **Assign** activity is used to assign a value or expression to a variable. In the context of the Employee ID and Email ID generation project, the **Assign** activity is crucial for transforming raw employee data into the required format.

#### *Use Case in Employee ID and Email ID Generation:*

The **Assign** activity allows you to apply transformations to employee data in order to generate the desired **Employee ID** and **Email ID** formats.

- **Employee ID Generation:** The Employee ID could be a combination of the employee's initials, last name, department code, and a unique sequential number (e.g., JDHR001 for John Doe in the HR department).
- **Email ID Generation:** The Email ID is generally created by concatenating the employee's first name, last name, and a company domain (e.g., [john.doe@company.com](mailto:john.doe@company.com)).

## For Each Row Activity

The **For Each Row** activity is one of the most frequently used activities in UiPath when dealing with **DataTables** (which store structured data, such as employee information from Excel). The **For Each Row** activity loops through each row of the DataTable and allows you to perform operations on individual pieces of data (e.g., first name, last name, department).

### *Use Case in Employee ID and Email ID Generation:*

In the **Employee ID and Email ID generation** project, the **For Each Row** activity is used to:

- Iterate over each row in the employee data table (e.g., `dtEmployeeData`).
- Extract individual data fields (first name, last name, department, etc.).
- Apply business logic to generate Employee IDs and Email IDs.

### 4.1.3 Data Manipulation Workflow Summary

Here's how these activities come together in the **Employee ID and Email ID generation** workflow:

1. **Read Data:** Use **Excel Application Scope** with **Read Range** to load employee data into a DataTable.
2. **Iterate Through Rows:** Use **For Each Row** to loop through each employee record in the DataTable.
3. **Transform Data:** Use the **Assign** activity to generate Employee IDs and Email IDs for each employee based on the logic defined.
4. **Update Data:** The newly generated IDs are stored in the DataTable, either as new columns or updated fields.
5. **Write Data:** Use **Write Range** to save the updated DataTable back to the Excel file or other destinations.

## CHAPTER 5

### OUTPUT SCREENSHOTS

The screenshot displays the 'HR On-Boarding Process Form' in a web browser. The form is titled 'NEW REGISTRATION' and includes sections for 'Personal Details' and 'Terms and Mailing'. In the 'Personal Details' section, the 'Official Mail Id\*' field is populated with 'sara.john@excelcult.com'. A 'Message Box' dialog is overlaid on the form, displaying the email address 'sara.john@excelcult.com' and an 'OK' button. The 'Terms and Mailing' section shows a checked checkbox for 'I accept the Privacy Policy for W3Docs'. A 'SURMIT' button is located at the bottom of the form. The browser's address bar shows the URL 'excelcult.com/hr-on-boarding-process-form/'. The Windows taskbar at the bottom includes social media links, a search bar, and system icons showing the date and time as 18-11-2024, 23:07.

HR On-Boarding Process Form

NEW REGISTRATION

Personal Details

Employee Id\* 329 Official Mail Id\* sara.john@excelcult.com

First Name\* Last Name\*

DOB\* Please fill in

Mobile Number\* Gender\* ☐ Male ☒ Female

Terms and Mailing

☒ I accept the [Privacy Policy for W3Docs](#).

SURMIT

Share this:

WhatsApp Pocket LinkedIn Facebook Twitter Reddit

29°C Mostly cloudy

Search

Activate Windows  
Go to Settings to activate Windows.

ENG IN 23:07 18-11-2024

Fig. Email id recieved

HR On-Boarding Process Form

NEW REGISTRATION

Personal Details

Employee Id\* 329 Official Mail Id\* sara.john@excelcult.com

First Name\* Last Name\*

DOB\* Please fill in this 329

Mobile Number\* Gender\* ☐ Male ☒ Female

Terms and Mailing

☒ I accept the [Privacy Policy for W3Docs.](#)

SUBMIT

Share this

WhatsApp Pocket LinkedIn Facebook Twitter Reddit

29°C Mostly cloudy

Search

ENG IN

23:07 18-11-2024

Fig. Employee id recieved

## **CHAPTER 6**

### **CONCLUSION**

In conclusion, the project focused on the generation of employee IDs and employee emails using UiPath Studio successfully demonstrated how Robotic Process Automation (RPA) can streamline administrative tasks in an organization. Through the development of an automated workflow, the solution efficiently generates unique employee identification numbers and corresponding email addresses, eliminating manual intervention, reducing the likelihood of errors, and improving overall operational efficiency.

By utilizing UiPath Studio, we leveraged various automation components such as input handling, string manipulation, loops, and the UiPath Mail activities to create a seamless, scalable solution. The employee ID generation was accomplished by implementing a rule-based system that automatically assigns an ID based on predefined criteria (such as the department or role), while the email address was generated by formatting it according to the company's domain and the employee's personal information (e.g., first and last name).

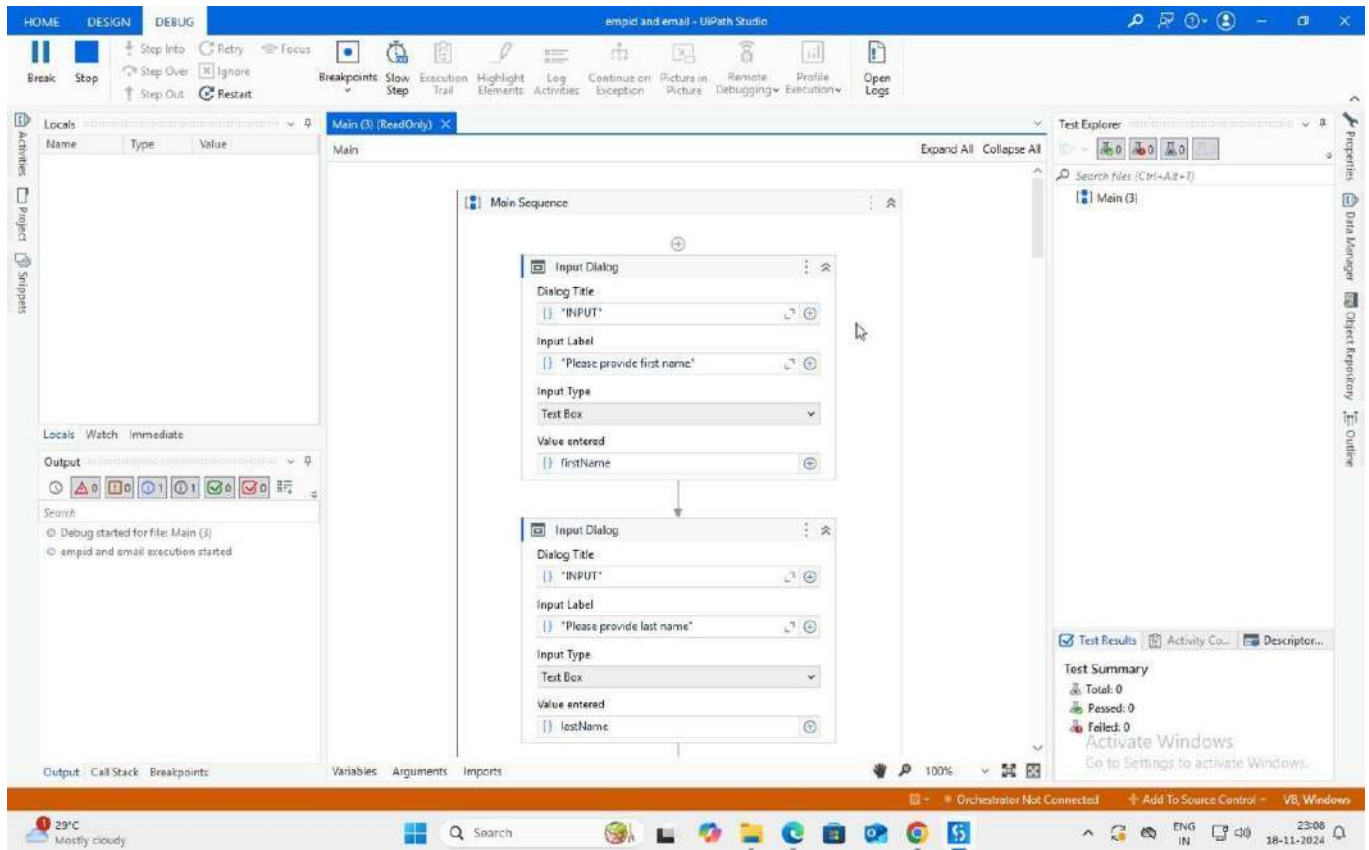
This project highlights the effectiveness of RPA in reducing repetitive, time-consuming tasks, ensuring consistency, and enabling human resources and IT teams to focus on more value-added activities. Furthermore, this automation could be easily adapted and scaled to fit larger teams, departments, or organizations, allowing businesses to grow without adding significant manual workload.

In summary, the automated generation of employee IDs and emails through UiPath not only improves the speed and accuracy of these administrative processes but also offers significant cost-saving potential and enhanced productivity, aligning with the broader goals of digital transformation in the workplace.

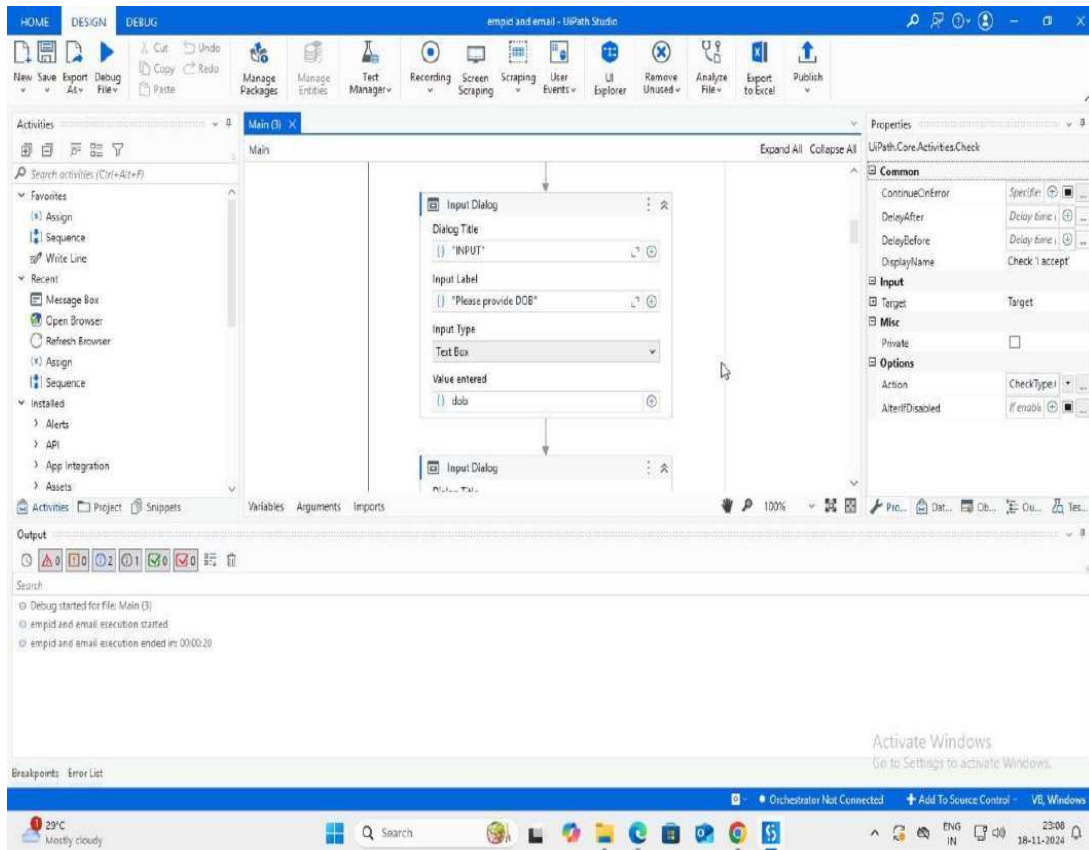
Future improvements to this project could involve integrating additional data validation checks, leveraging a database for storing employee information, and even incorporating advanced reporting features to allow for real-time monitoring and management of employee

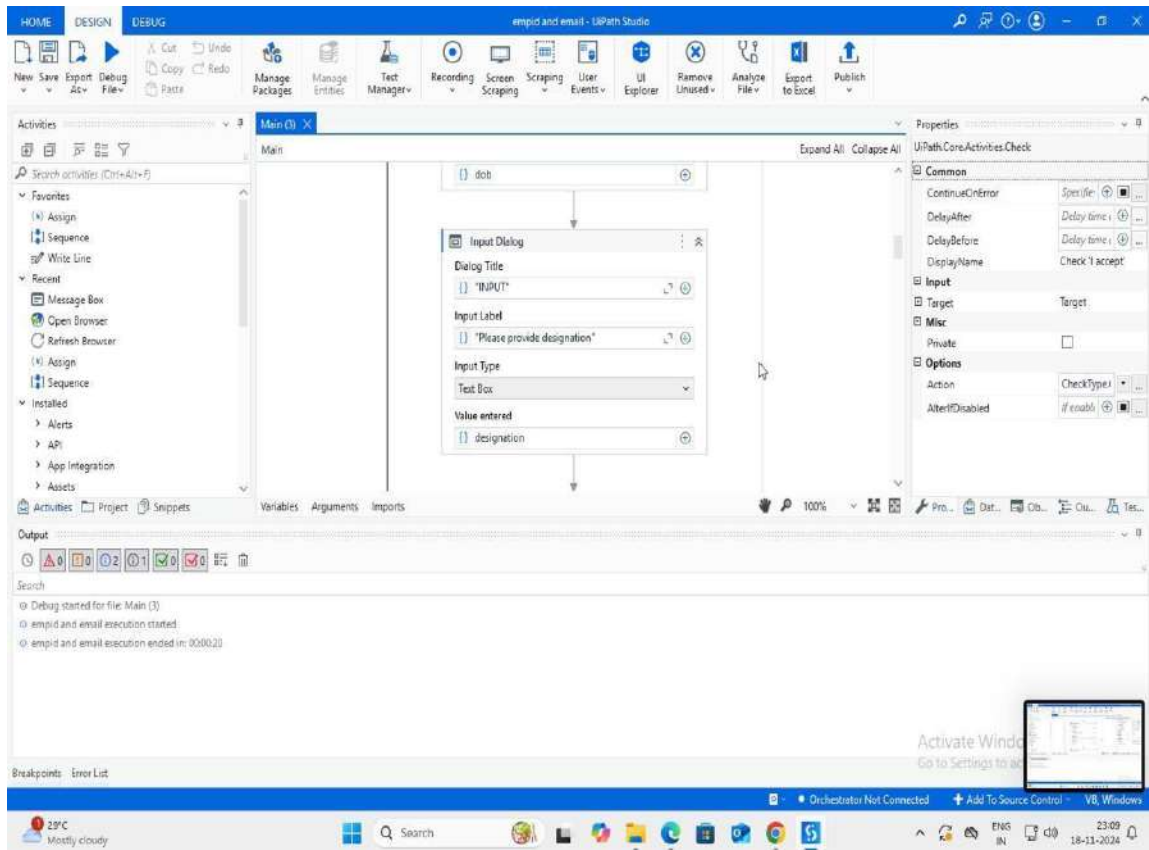
## APPENDIX

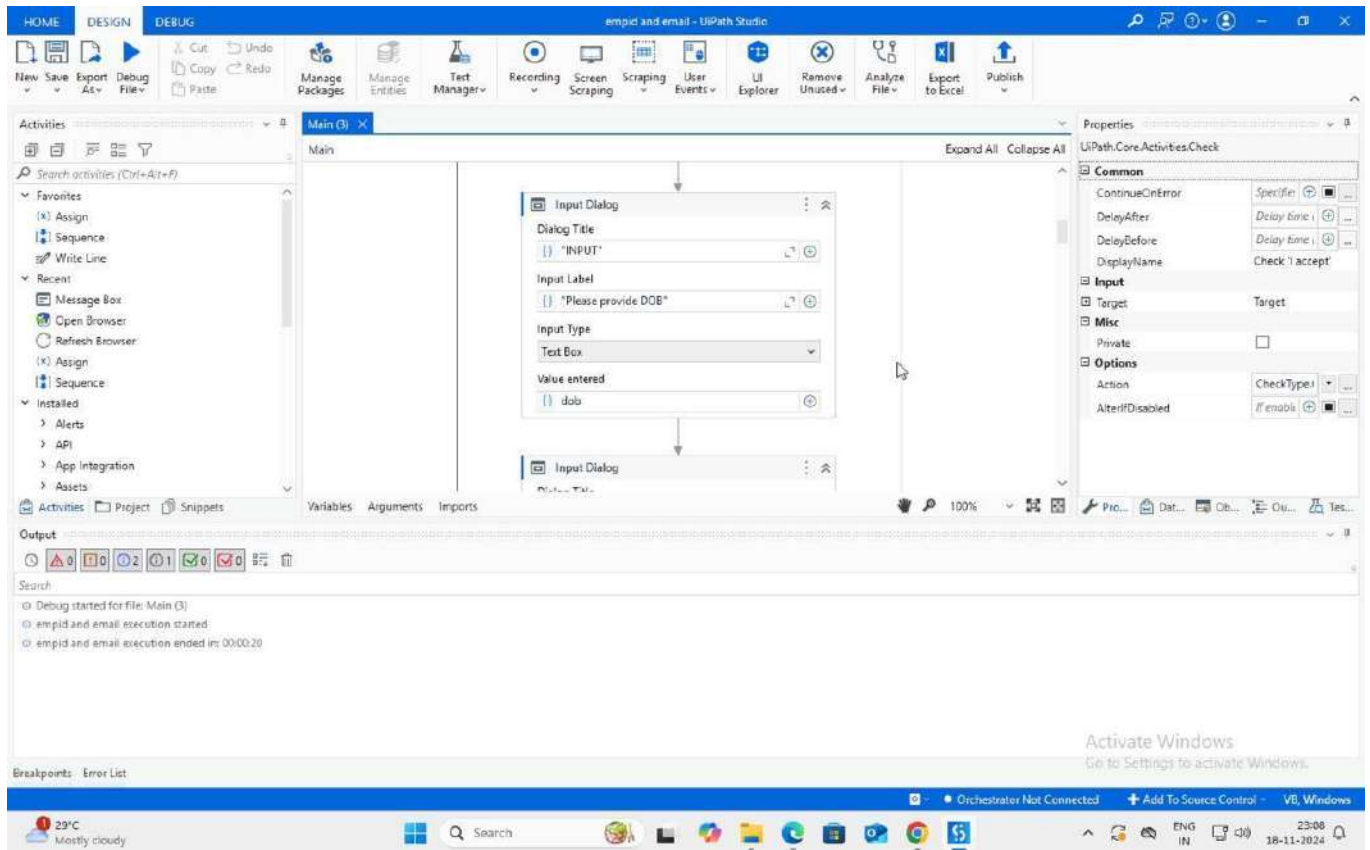
### SAMPLE PROCESS

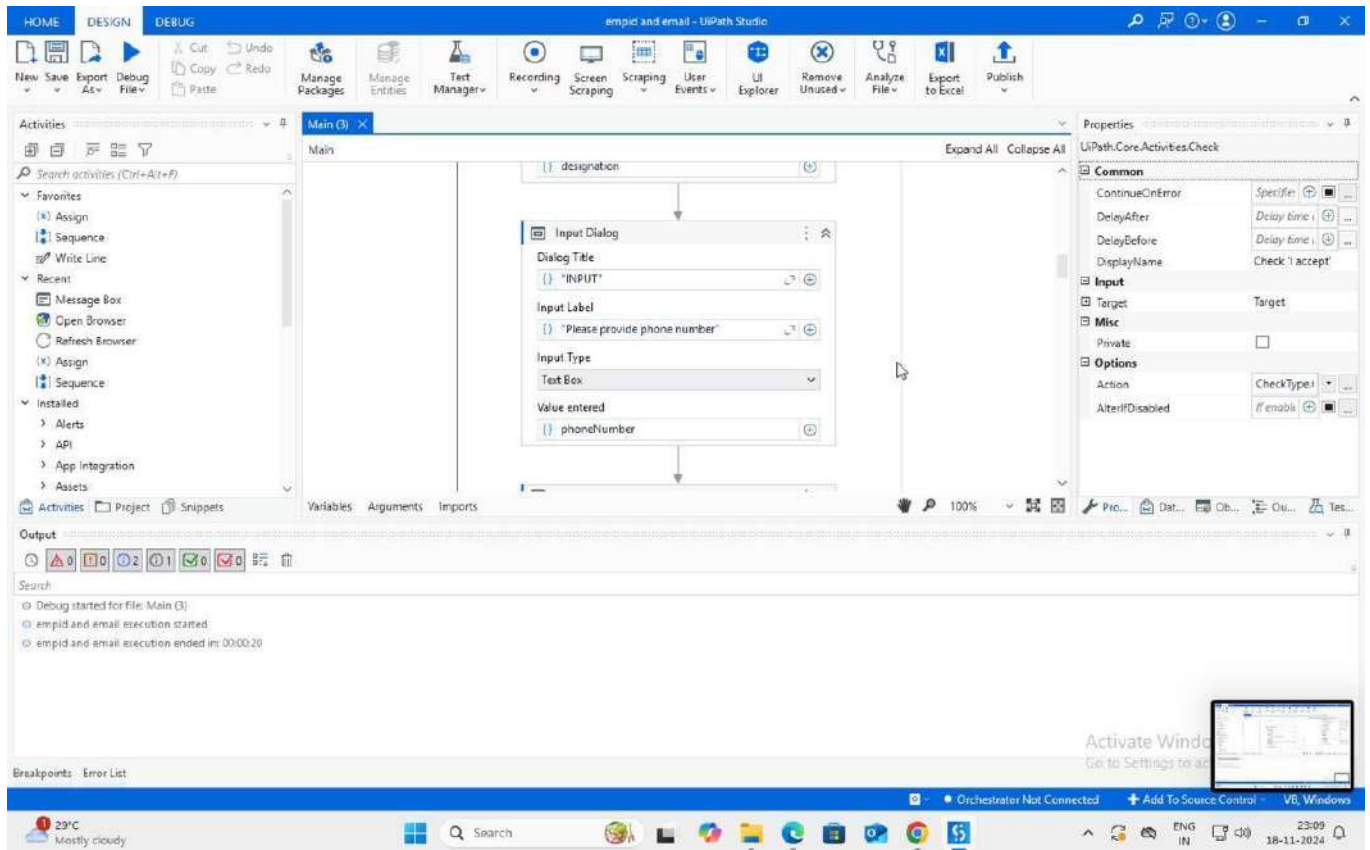












The screenshot displays the UiPath Studio interface for a project named "empid and email - UiPath Studio". The main workspace shows a workflow with three activities: "Get Text 'EmployeeEmail'", "Message Box", and another "Message Box". The first "Message Box" has a text field labeled "Text" with the value "empID". The second "Message Box" has a text field labeled "Text" with the value "empEmail". The workflow is connected by arrows indicating the sequence of execution.

The left sidebar contains the "Activities" pane with a search bar and a list of activities including "Assign", "Sequence", "Write Line", "Message Box", "Open Browser", "Refresh Browser", "Assign", "Sequence", "Alerts", "API", "App Integration", and "Assets".

The right sidebar shows the "Properties" pane for the selected "UiPath.Core.Activities.Check" activity. The properties are organized into sections: "Common", "Input", "Misc", and "Options". The "Common" section includes "ContinueOnError" (Set to "Specify"), "DelayAfter" (Set to "Delay time"), "DelayBefore" (Set to "Delay time"), and "DisplayName" (Set to "Check 1 accept"). The "Input" section includes "Target" (Set to "Target"). The "Misc" section includes "Private" (Set to "False"). The "Options" section includes "Action" (Set to "CheckType") and "AlterIfDisabled" (Set to "If enable").

The bottom status bar shows the "Output" pane with a search bar and a list of output messages. The messages include "Debug started for file: Main (3)", "empid and email execution started", and "empid and email execution ended in: 00:00:20".

The bottom taskbar shows the Windows operating system with various application icons and a system tray displaying the date and time as 23:09 on 18-11-2024.

## **REFERENCES**

"Robotic Process Automation and Cognitive Automation: The Next Phase" by Mary C. Lacity and Leslie P. Willcocks

"UiPath Studio: A Complete Guide for Beginners" by Gayan Dissanayake

### **Research Papers and Articles:**

1. "Robotic Process Automation (RPA) in Human Resource Management"
2. "Exploring the Future of Work: RPA and its Role in Streamlining Administrative Tasks"

### **Websites:**

1. UiPath Community Forum
2. Stack Overflow - UiPath Tag