



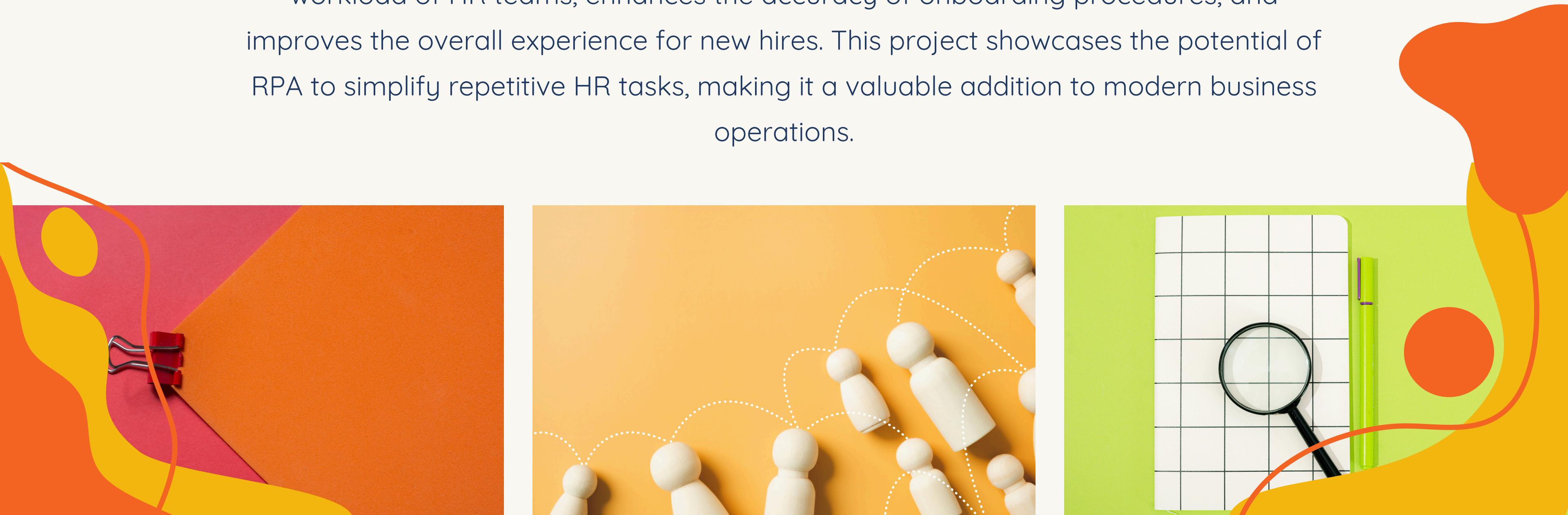
Introduction to Robotic
Process Automation

Employee Onboarding Bot

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Abstract

The "Employee Onboarding Bot" is a Robotic Process Automation (RPA) solution developed using UiPath to streamline the onboarding process for new employees. This bot automates reading data from an Excel file, form filling, and email communication, ensuring efficient and error-free onboarding. The automation reduces the manual workload of HR teams, enhances the accuracy of onboarding procedures, and improves the overall experience for new hires. This project showcases the potential of RPA to simplify repetitive HR tasks, making it a valuable addition to modern business operations.





The Need for the System

Below are the key reasons necessitating the development of the proposed system:

1. Time-Consuming Manual Processes
2. Error-Prone Data Handling
3. Inconsistent Employee Experience
4. Scalability Challenges
5. Compliance and Audit Requirements
6. Cost Efficiency
7. Alignment with Digital Transformation Goals

Advantages of the System

- Efficiency: Reduces the time required to complete onboarding tasks, allowing HR teams to onboard more employees in less time.
- ☐ Accuracy: Minimizes errors in data entry and document handling through automated validation and logging.
- ☐ Consistency: Standardizes onboarding procedures across the organization, ensuring compliance with internal and external requirements.
- ☐ Enhanced Employee Experience: Provides new hires with timely and accurate information, fostering a positive impression of the organization..



Literature Survey

Survey 1: Automating Human Resource Functions Using Robotic Process Automation (RPA)

Source: International Journal of Advanced Research in Computer Science, 2020



Summary

The paper presents case studies where RPA reduced onboarding time by up to 60% in multinational corporations. It also examines the scalability of RPA in handling bulk recruitment.



Advantages

- Time Savings
- Lower operational costs
- Improved data accuracy and compliance through automation
- Scalability efficient without additional resources



Disadvantages

- High upfront costs for RPA software and implementation
- Challenges in integrating RPA with legacy HR systems
- Dependency on Structured Data

Literature Survey

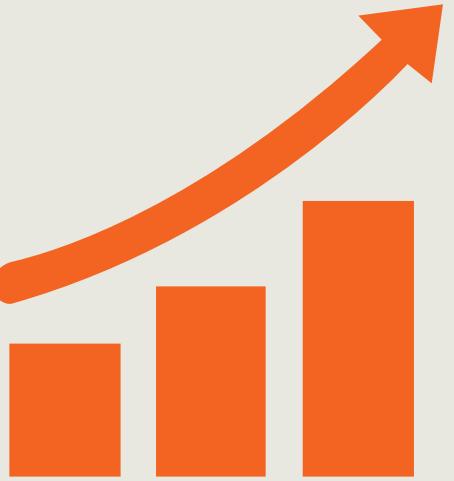
Survey 2: Enhancing Employee Onboarding through RPA and AI

Source: Journal of Business Process Management, 2021



Summary

It highlights AI-enhanced RPA can address unstructured data and complex decision-making during onboarding. The study also discusses the integration of chatbots for real-time communication with new hires



Advantages

- Enhanced Flexibility
- Improved Employee Engagement
- AI-powered bots can predict and correct potential errors in data validation



Disadvantages

- Higher implementation complexity due to AI-RPA integration.
- Maintenance Challenges
- More expensive compared to standard RPA solutions due to AI integration and maintenance.

Objective & Problem Statement

Objective

The primary goal is to revolutionize the traditional onboarding process by automating key activities.

To ensure a seamless and efficient onboarding experience, both for HR professionals and new employees

Problem Statement

Traditional employee onboarding processes are manual, making it challenging for HR teams to handle large-scale recruitment

System Requirements



Hardware Requirements

- Processor: Intel i5 or higher
- RAM: Minimum 8 GB (16 GB for smoother performance)
- Storage: At least 20 GB of free disk space

Network Requirements

- SMTP Configuration: SMTP server credentials
- Database/HRMS Access: for integrating with organizational HR systems.

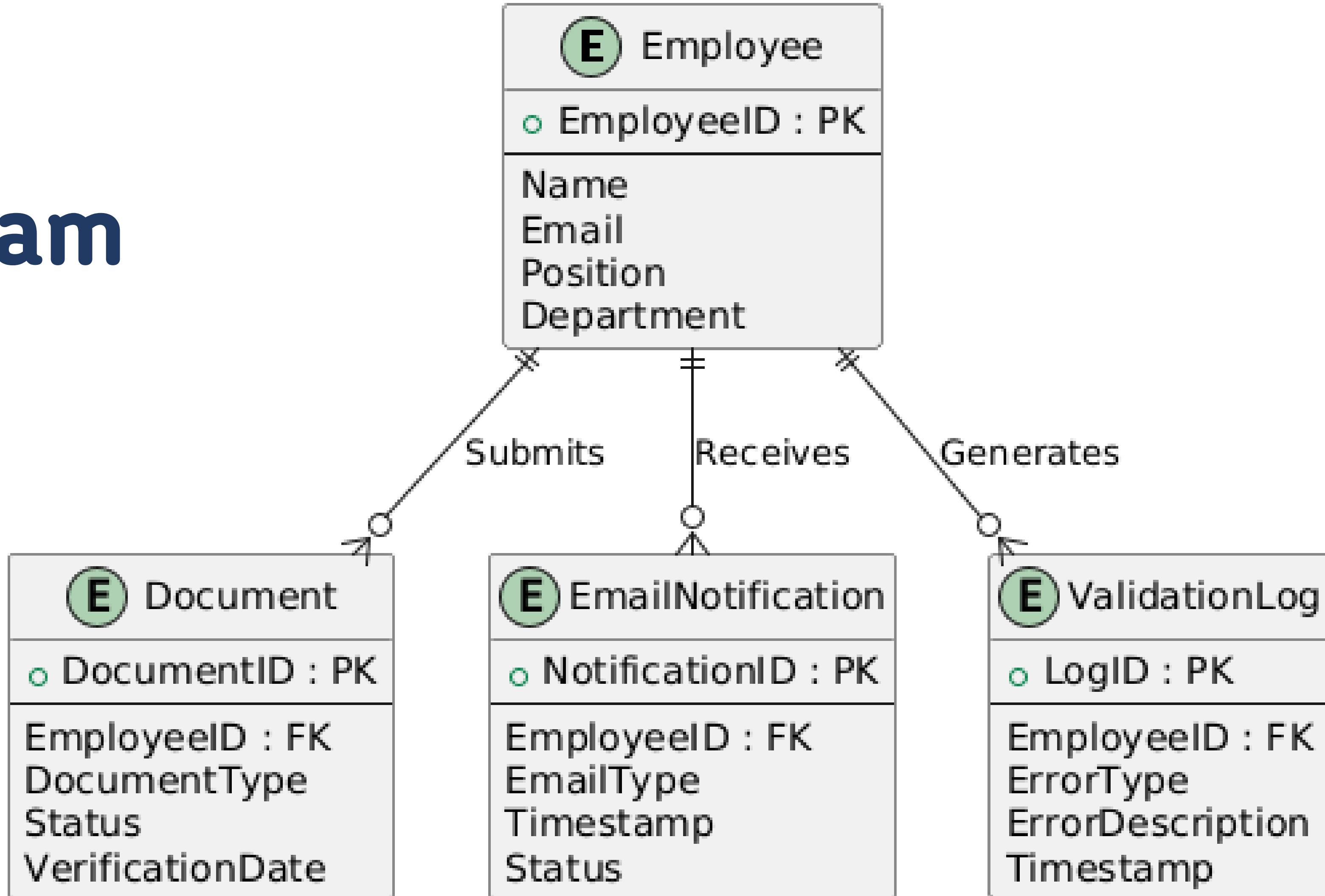
Software Requirements

- RPA Platform: UiPath Studio 2023.x or higher
- Supporting Applications: Microsoft Excel
- Email Client or SMTP Server

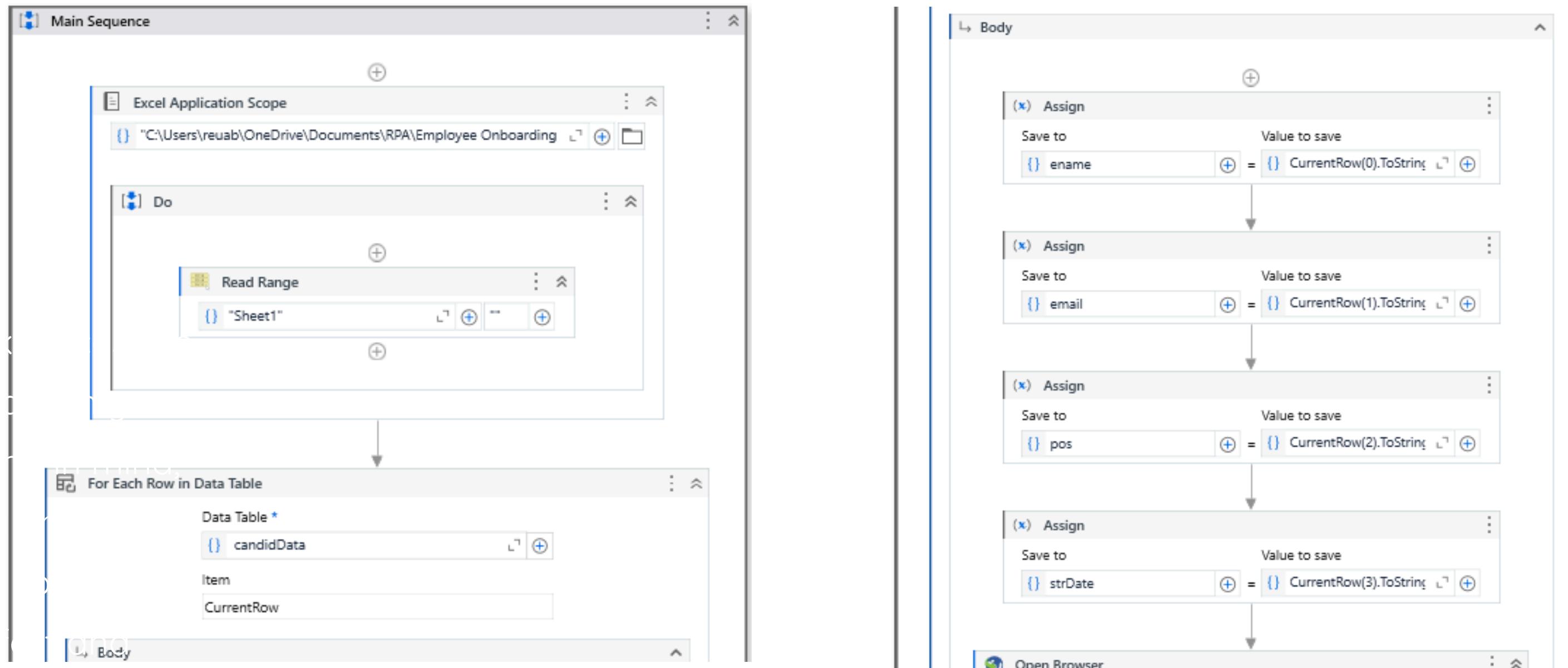
Additional Requirements

- Access to HR folders or directories containing onboarding documents.
- Folder paths for input files and logs preconfigured.

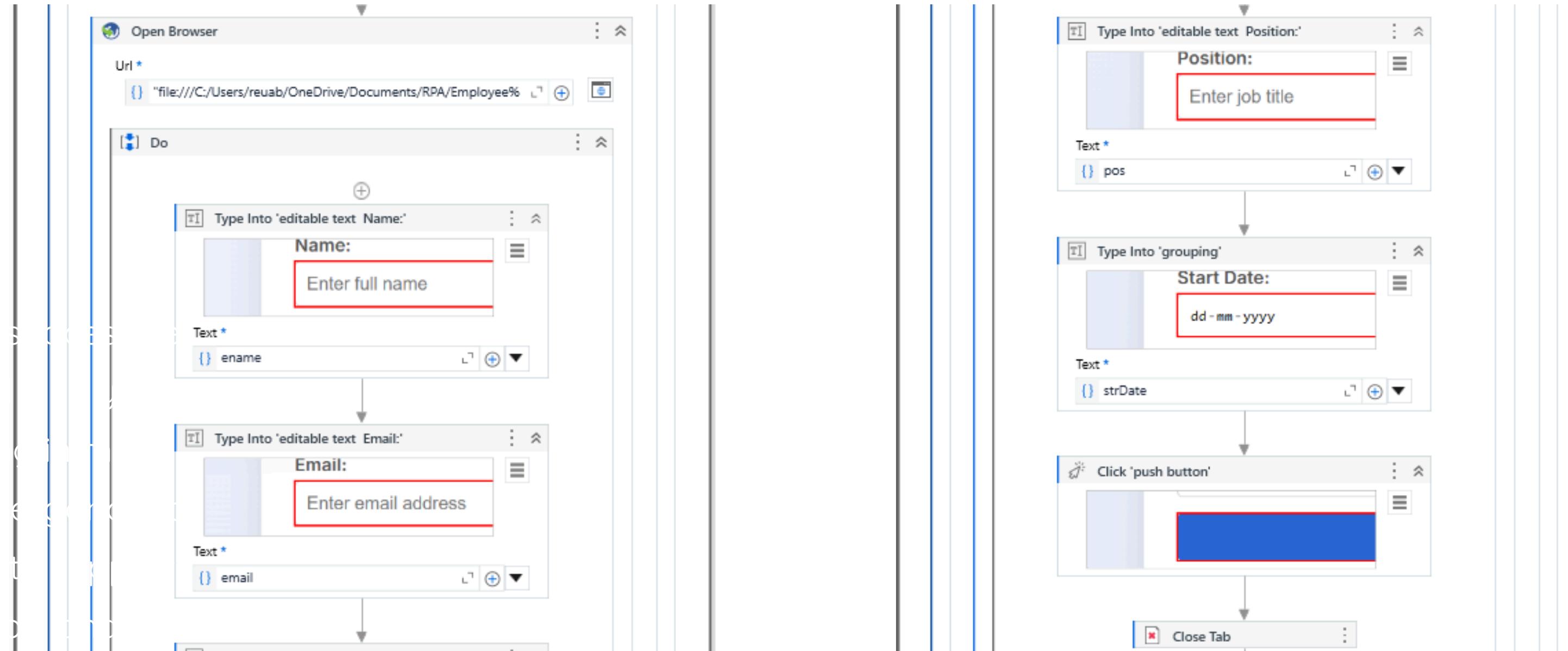
ER Diagram



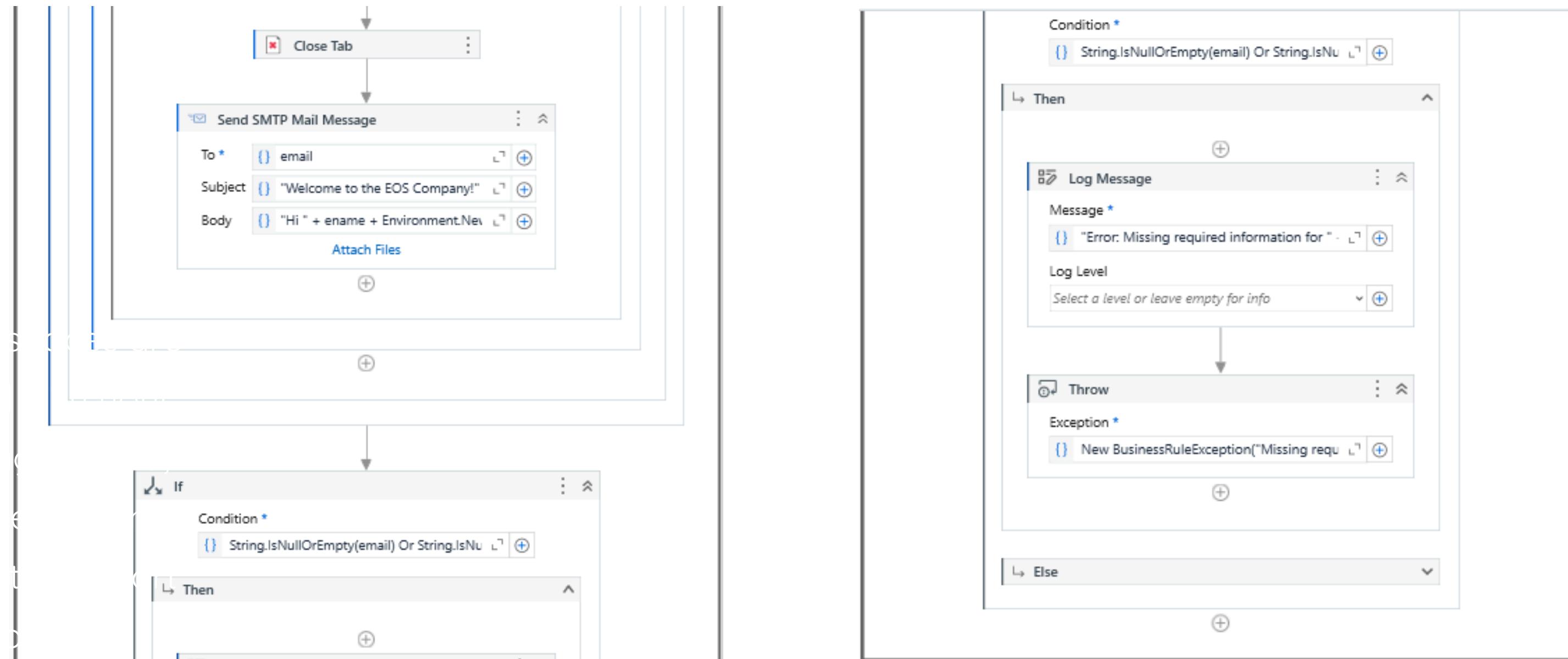
Process Design



Process Design



Process Design



Implementation

The content from each Excel document is Typed Into the fields of the HR System content

Employee Onboarding System

Streamline your onboarding process with ease.

Name:

Email:

Position:

Start Date:

 CALENDAR

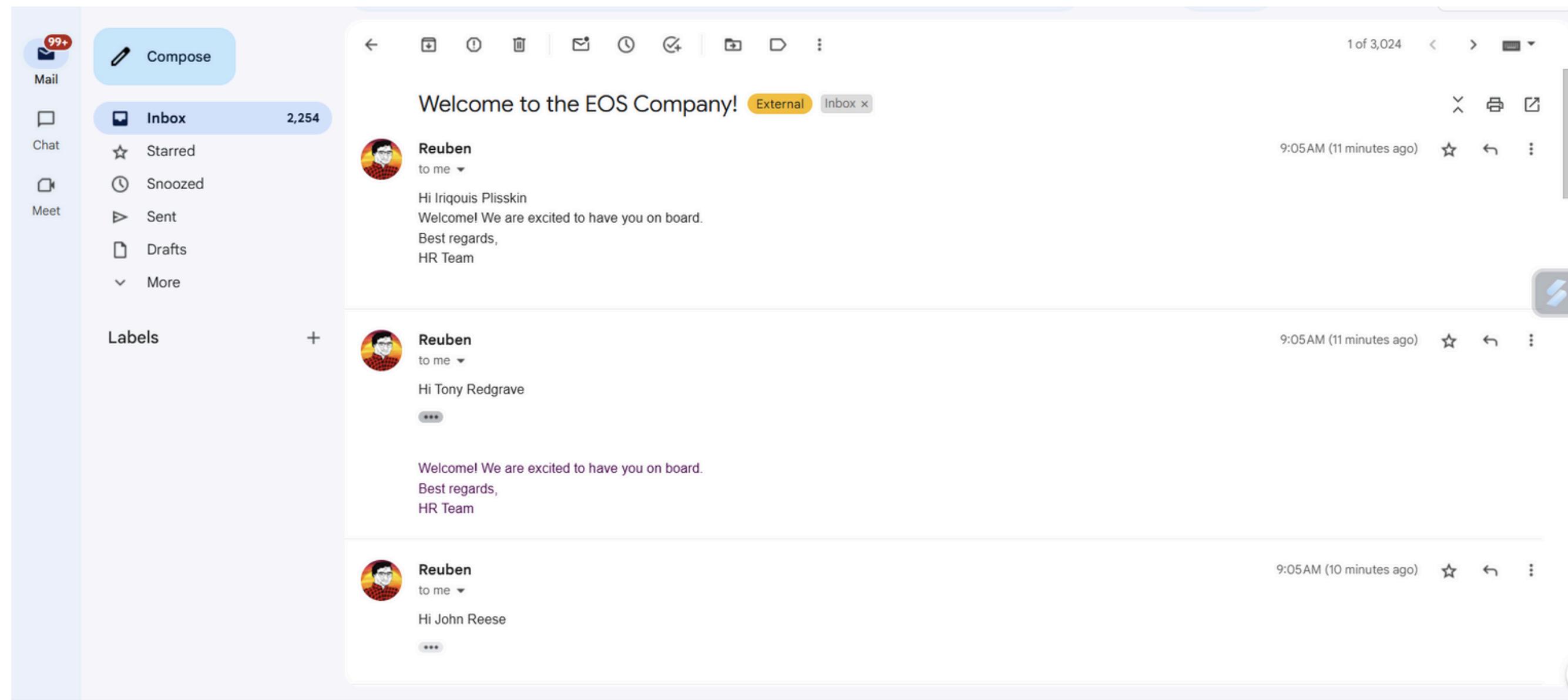
Add Employee

 **Employee List**

Iriqous Plisskin (SD-1)	 220701223@rajalakshmi.edu.in	 Start: 2025-05-21	Remove
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Implementation

Automated Email Notification Screenshot





FUTURE ENHANCEMENTS

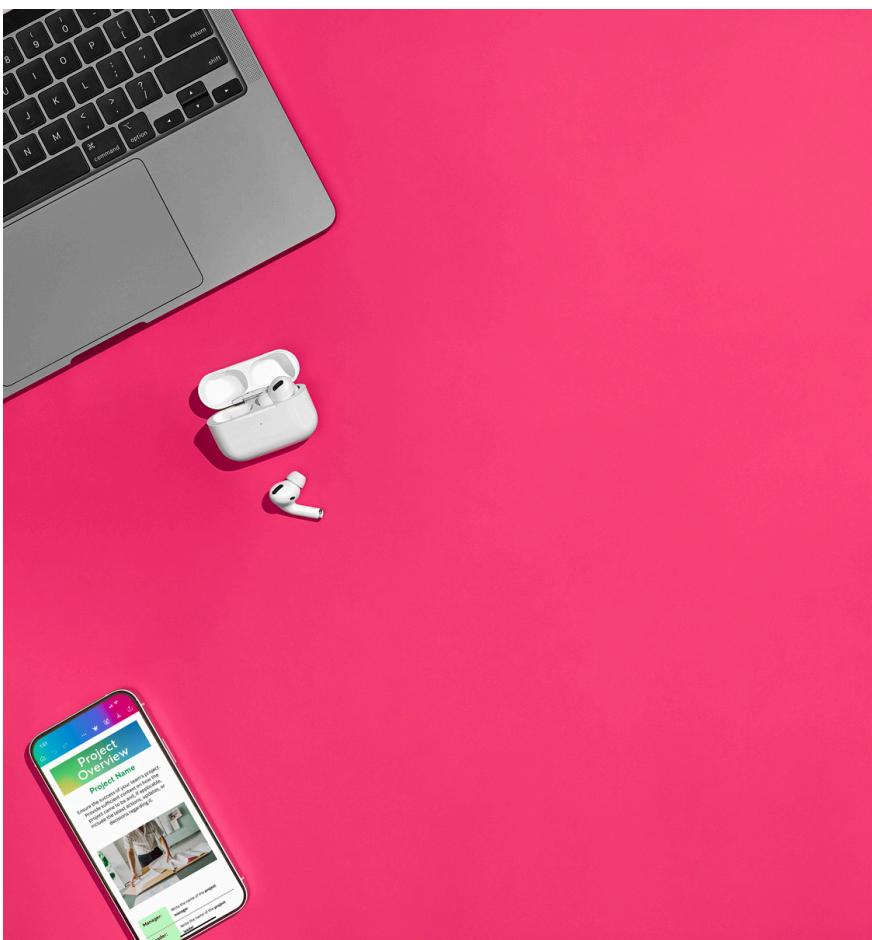
Integration with Artificial Intelligence for Advanced Validation:

The bot can be enhanced by incorporating AI and machine learning models to handle complex scenarios in data validation and document verification. AI could enable

Multilingual and Cloud-Based Deployment

To cater to global organizations with diverse workforces, the bot can be upgraded to support multiple languages for data input, email communication, and reporting.

References



- Automating Human Resource Functions: A Robotic Process Automation Perspective - International Journal of Advanced Research in Computer Science
- Robotic Process Automation: A Guide for HR Professionals by James Manos and Sarah Riggs
- The Role of RPA in Enhancing Employee Experience During Onboarding - Journal of Business Process Management

Conclusions

In summary, the "Employee Onboarding Bot" effectively addresses traditional onboarding inefficiencies, enabling organizations to modernize their processes and focus on strategic HR initiatives. As organizations embrace digital transformation, such automation tools will play a pivotal role in creating efficient, scalable, and employee-friendly systems.





Thank you