

DAILY FITNESS REMAINDER BOT

A PROJECT REPORT

Submitted by

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BONAFIDE CERTIFICATE

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ABSTRACT

The **Daily Fitness Reminder Bot** is an RPA-based system designed to help users stay consistent with their fitness goals. This project utilizes UiPath to automate the process of sending timely fitness reminders to users via email. The reminders are customized and stored in an Excel sheet, which includes details like the activity (e.g., “Go to the gym,” “Drink water,” “Take protein”) and the scheduled time.

The bot reads the Excel file, checks the scheduled time against the current system time, and sends a personalized email notification when the two match. This eliminates the need for manual intervention, ensuring that users receive reminders consistently and without delay. The project leverages UiPath activities such as Excel Application Scope, Read Range, and For Each Row, alongside email integration through SMTP.

Designed to cater to health-conscious individuals, this bot improves adherence to fitness routines by automating reminders. It is especially beneficial for busy individuals who often forget their fitness commitments. The system is scalable, allowing integration with other notification methods like SMS or desktop alerts.

By promoting healthy habits through automation, the Daily Fitness Reminder Bot combines technology and wellness, offering a simple yet impactful solution to encourage a healthier lifestyle.

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CHAPTER 1

INTRODUCTION

1.1 GENERAL

Fitness is an integral aspect of a healthy lifestyle, yet in today's busy world, many individuals struggle to maintain consistent fitness routines. This gap between intention and action often stems from a lack of reminders and the inability to schedule activities effectively amidst other responsibilities. The integration of technology into daily life has opened opportunities for automation to address such challenges.

The **Daily Fitness Reminder Bot** is a step toward leveraging Robotic Process Automation (RPA) to create an efficient and user-friendly system for fitness management. The bot operates as a personal assistant that sends timely reminders for scheduled fitness activities like going to the gym, drinking water, or taking protein supplements. These reminders are personalized and delivered via email, ensuring users stay on track with their fitness goals.

The bot utilizes Excel to store schedules, which are read and processed dynamically. By matching the current time with scheduled reminders, the bot ensures precise notification delivery. Additionally, the system is adaptable to various fitness routines, allowing users to customize their schedules without technical expertise.

The project aims to automate the repetitive task of sending reminders, thereby freeing up time for users and promoting adherence to fitness regimes. Using UiPath, this project demonstrates how RPA can simplify everyday processes while fostering healthier habits. With a focus on simplicity and practicality, this system bridges the gap between intent and action, enabling individuals to prioritize their well-being effortlessly.

1.2 EXISTING SYSTEM

Existing systems for fitness reminders largely rely on smartphone applications or manual processes. These solutions often require users to input data repeatedly and lack automation for seamless operation. While some apps offer reminders, they are not customizable to unique schedules or preferences. Additionally, manual systems demand continuous user intervention, making them less efficient and prone to human error. This creates a gap for a fully automated, adaptable, and user-friendly system to enhance fitness consistency.

1.3 PROPOSED SYSTEM

The proposed system automates fitness reminders using Robotic Process Automation (RPA), offering a user-friendly and efficient approach. By reading schedules stored in an Excel file, the bot dynamically matches the current time with scheduled reminders and sends personalized notifications via email. This system eliminates manual efforts, adapts to individual fitness goals, and ensures timely reminders without user intervention, promoting consistency and improving adherence to healthy routines.

CHAPTER 2

LITERATURE REVIEW

2.1 GENERAL

The integration of automation in personal fitness management has become increasingly relevant in recent years. With the rise of sedentary lifestyles and the growing need for personalized health monitoring, systems that promote consistency and adherence to fitness routines are in high demand. Robotic Process Automation (RPA) offers a compelling solution by automating repetitive tasks and enhancing user engagement through timely notifications.

Automation in fitness has primarily been explored through fitness applications that provide reminders, workout plans, and progress tracking. However, these systems often require manual input and lack the ability to adapt dynamically to users' changing schedules. RPA, on the other hand, offers a seamless approach to managing fitness routines by automating data processing and delivering personalized notifications through email, SMS, or desktop alerts.

Traditional fitness management tools, such as mobile apps and wearable devices, offer basic functionalities like reminders and activity tracking. While these solutions are effective to some extent, they are often limited by their dependency on user input and preset functionalities. Studies have shown that inconsistent use and manual intervention reduce the effectiveness of these tools in promoting adherence to fitness plans.

RPA technology leverages automation to address the shortcomings of traditional systems. By extracting data from structured formats like Excel spreadsheets, an RPA-based fitness bot can automate reminders based on user-defined schedules. Unlike manual apps, the bot ensures that users are consistently reminded about fitness activities, reducing the likelihood of missed routines.

The primary advantage of an RPA-based fitness reminder bot lies in its efficiency and precision. Automation eliminates the risk of human error and ensures that reminders are sent at the correct time. Furthermore, the system's adaptability allows users to modify schedules as needed, making it more effective than static fitness applications. Research highlights the importance of timely reminders in promoting habit formation and adherence to routines, further supporting the case for RPA in fitness management.

While RPA offers numerous advantages, challenges such as ensuring user engagement and addressing varied fitness schedules must be tackled. Literature suggests that integrating additional features, like real-time feedback and analytics, can improve the system's effectiveness. Additionally, combining RPA with cloud-based services enhances scalability and ensures accessibility across devices.

CHAPTER 3

SYSTEM DESIGN

3.1 SYSTEM FLOW DESIGN

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.

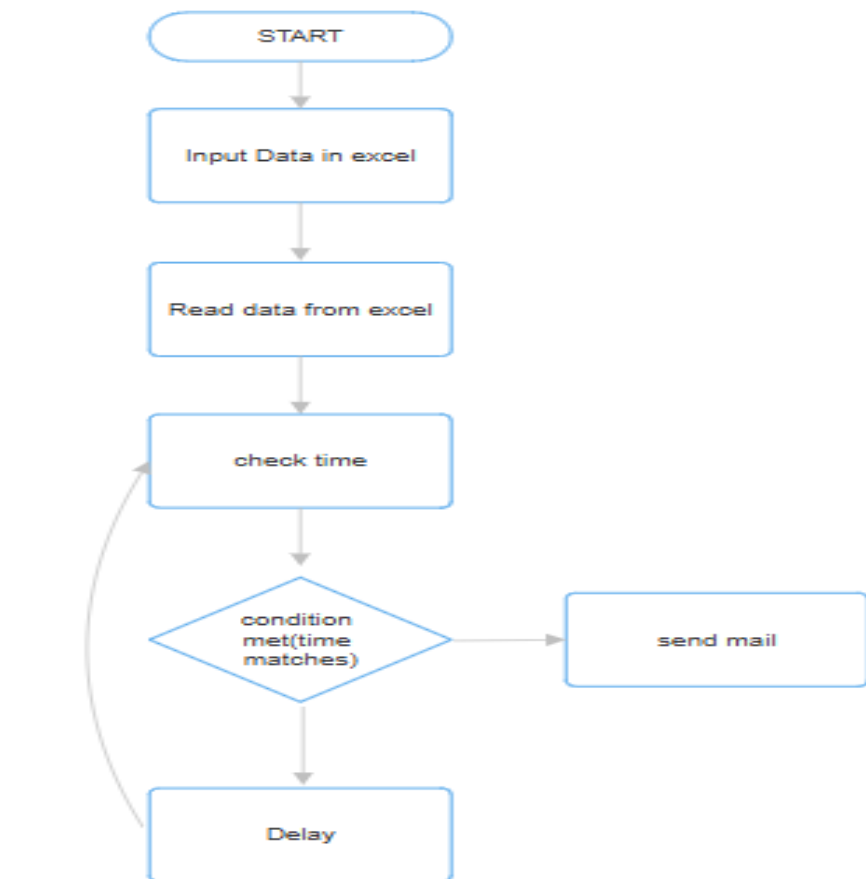


Fig 3.1 System Flow Design

3.2 ARCHITECTURE DIAGRAM

An Architecture Diagram for the Daily Fitness Remainder Bot visually represents system's components and their interactions. It highlights the user interface, processing, storage, and notification layers, showing how user details are gathered, organized in Excel, and sent via email. This diagram simplifies understanding the overall system design and flow, helping stakeholders grasp how each part contributes to the automation process.

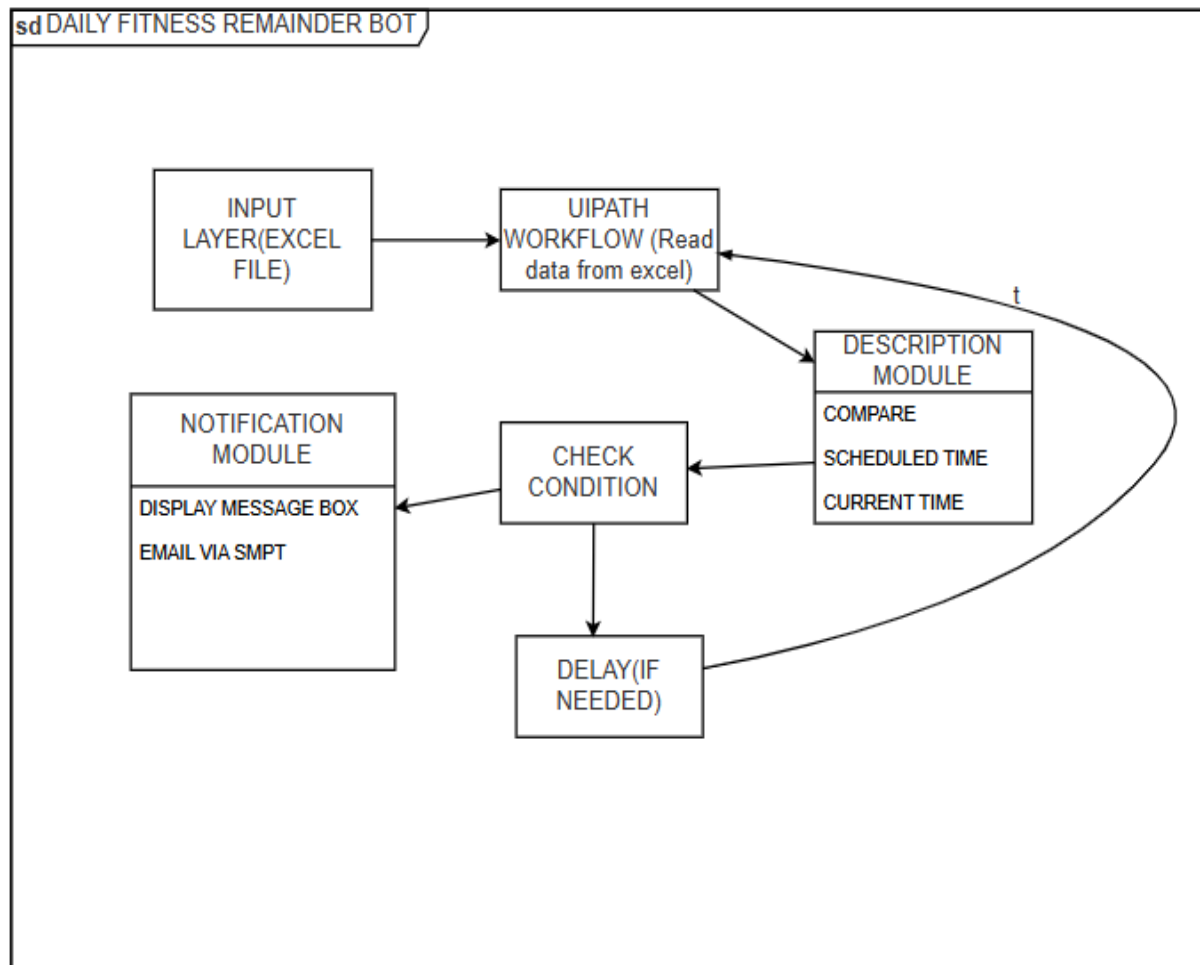


Fig 3.2 Architecture Diagram

3.3 SEQUENCE DIAGRAM

A sequence diagram is a type of interaction diagram because it describes how— and in what order—a group of objects works together. A sequence diagram is a type of UML (Unified Modeling Language) diagram that illustrates the interactions and messages exchanged between different components or objects in a system over time. It provides a dynamic view of a system, focusing on the order of interactions between objects or components.

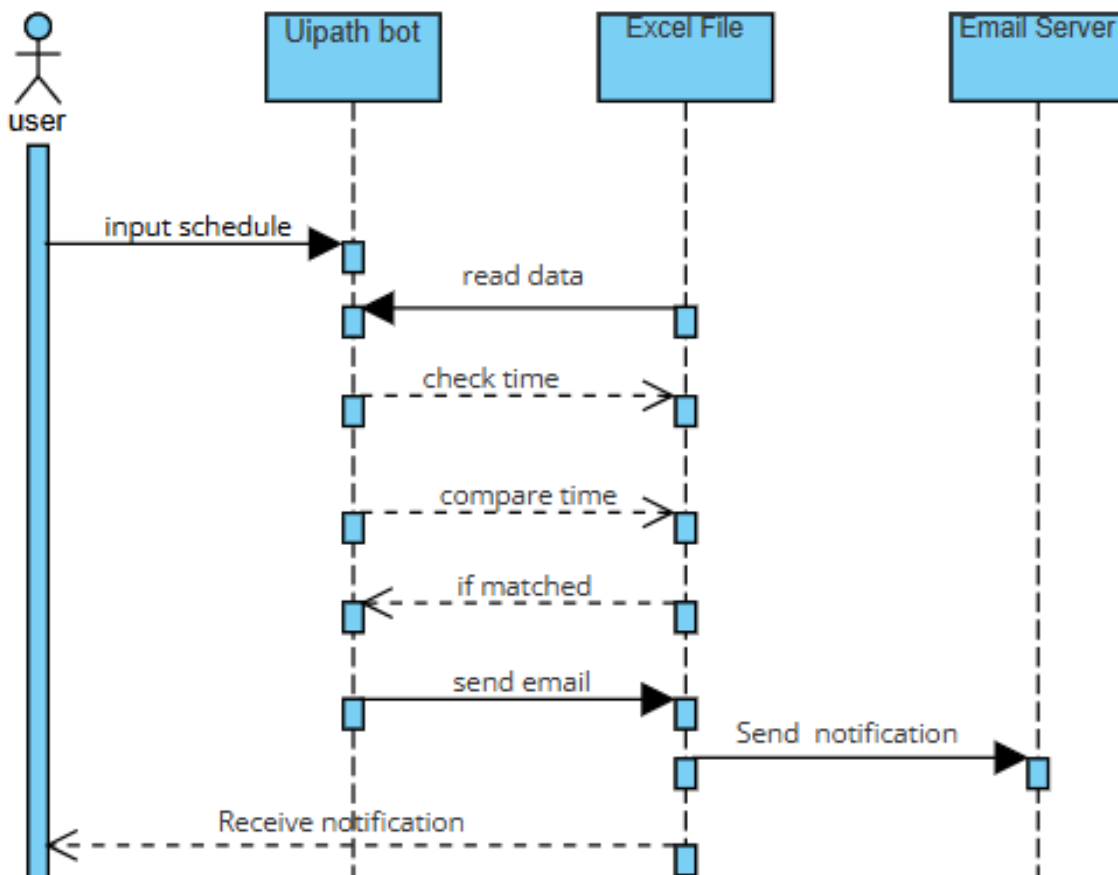


Fig 3.2 Sequence Diagram

CHAPTER 4

PROJECT DESCRIPTION

4.1 CREATING PROJECT

Open UiPath Studio and check for the version of the application. While it's not compulsory to work with the latest version, it is recommended as some features might have been added or few changes might have been made to the already existing Packages/Activities/Properties etc. Once the application is opened, create a new process, name the file and choose the directory where the UiPath files must be stored. Once you are done with the following steps, you will be good to continue with the next steps of actually Creating the Project.

4.2 PACKAGES REQUIRED

For the successful completion of the Daily Fitness Remainder Bot, it's crucial to download the necessary packages to enable the required activities. The following packages should be installed:

UiPath.Excel.Activities: To work with Excel files and organize flight data.

UiPath.Mail.Activities: For sending the Excel file via email.

UiPath.UIAutomation.Activities : For sending emails with attachments (Excel file).

UiPath.System.Activities: For basic workflow automation tasks like logging & exception.

4.3 PROJECT WORKFLOW

Now, as we know the objective of the project it is time to create the workflow that actually makes up the project. The workflow for this project is simple.

4.3.1 ACTIVITIES USED

To create the project the following activities are required:

1. Excel Application Scope
2. Read Range
3. For Each Row in Data Table
4. Assign
5. If
6. Send SMTP Mail Message
7. Message box
8. Delay
9. While
10. Write Line

4.3.2 EXPLAINING SEQUENCE

Here's the sequence of the Flight Details Automation Bot project, detailing each step in the workflow from start to finish:

Initialized the project by setting up a UiPath workflow and adding the necessary dependencies such as Excel and mail activities.

Configured an Excel file to act as the input for reminders, including columns like time, activity, and notification method. The bot was designed to read this file during execution.

The data from the Excel file was read into a DataTable using the Read Range activity, ensuring the correct file path and sheet name were provided.

A For Each Row activity was implemented to iterate through each row in the DataTable, enabling the bot to process one reminder at a time.

Extracted the scheduled time, activity, and notification method from the current row of the DataTable. The time was converted to a standard format using `DateTime.ParseExact` to ensure compatibility with the current time comparison.

An If activity was used to compare the scheduled time with the current system time. If the two matched, the bot proceeded with sending the notification.

The bot sent notifications based on the method specified. If email was chosen, the Send SMTP Mail Message activity was used to send a reminder email. For desktop notifications, a Message Box displayed the activity.

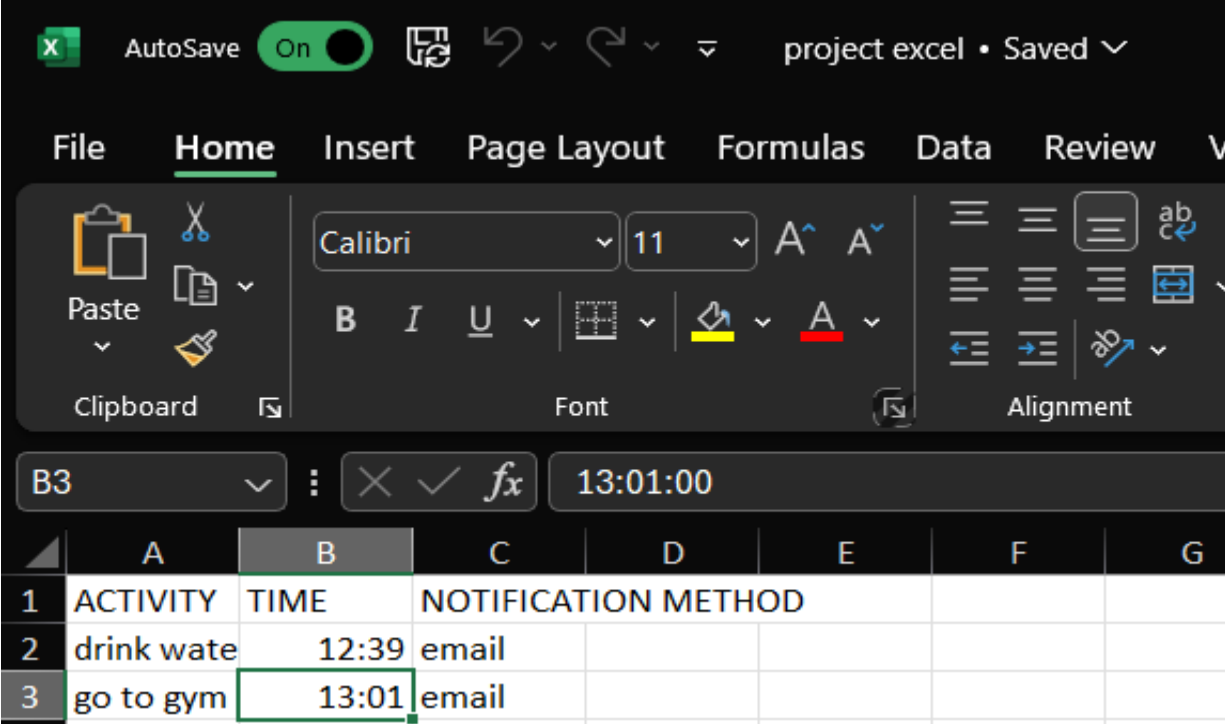
Introduced a delay of 30 minutes to make the bot pause and recheck the condition, ensuring efficient and periodic reminders.

The bot continued processing until all rows in the Excel file were handled, sending reminders as scheduled.

Once all reminders were sent, the workflow was completed, and the bot was tested for accuracy and reliability.

CHAPTER 5

OUTPUT SCREENSHOTS



The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The ribbon includes options for File, Home, Insert, Page Layout, Formulas, Data, Review, and View. The 'Home' ribbon is divided into sections: Clipboard (Paste, Copy, Paste Special), Font (Font Face: Calibri, Size: 11, Bold, Italic, Underline, Text Color, Background Color, Font Color), and Alignment (Text Alignment, Orientation, Indentation). The active cell is B3, which contains the time '13:01:00'. The formula bar shows the time '13:01:00'. Below the ribbon is a table with the following data:

	A	B	C	D	E	F	G
1	ACTIVITY	TIME	NOTIFICATION METHOD				
2	drink wate	12:39	email				
3	go to gym	13:01	email				

Fig 5.1 Details given to email

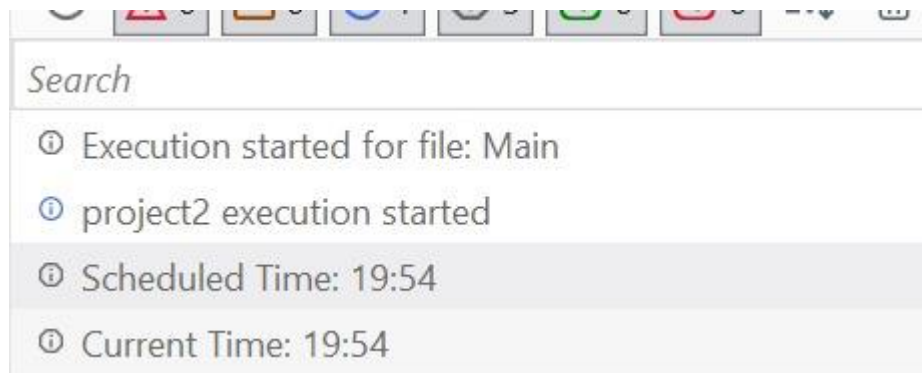


Fig 5.2 Write Log Displaying Message

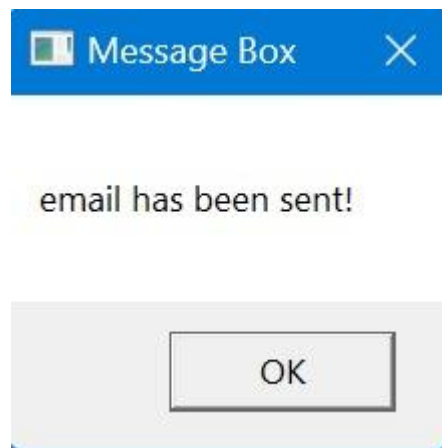


Fig 5.3 Message Box

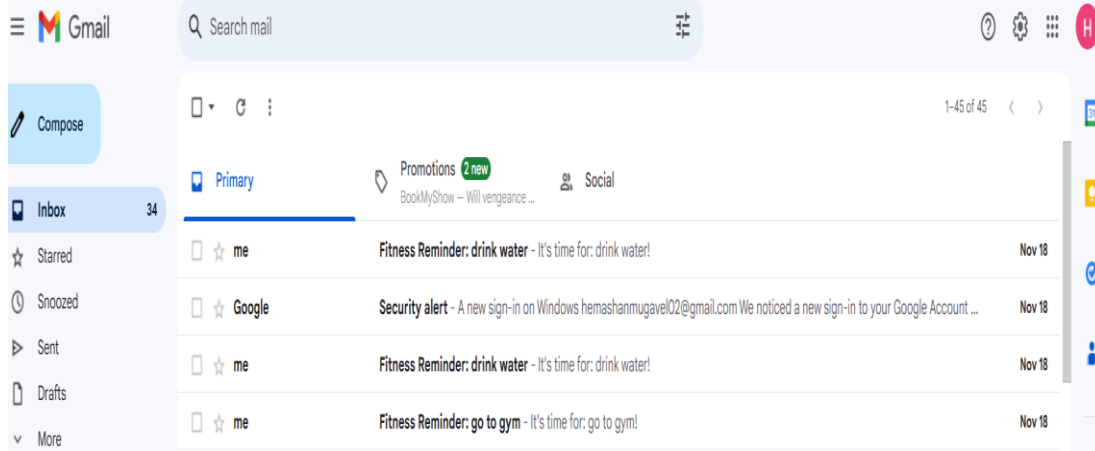


Fig 5.4 Email Notification

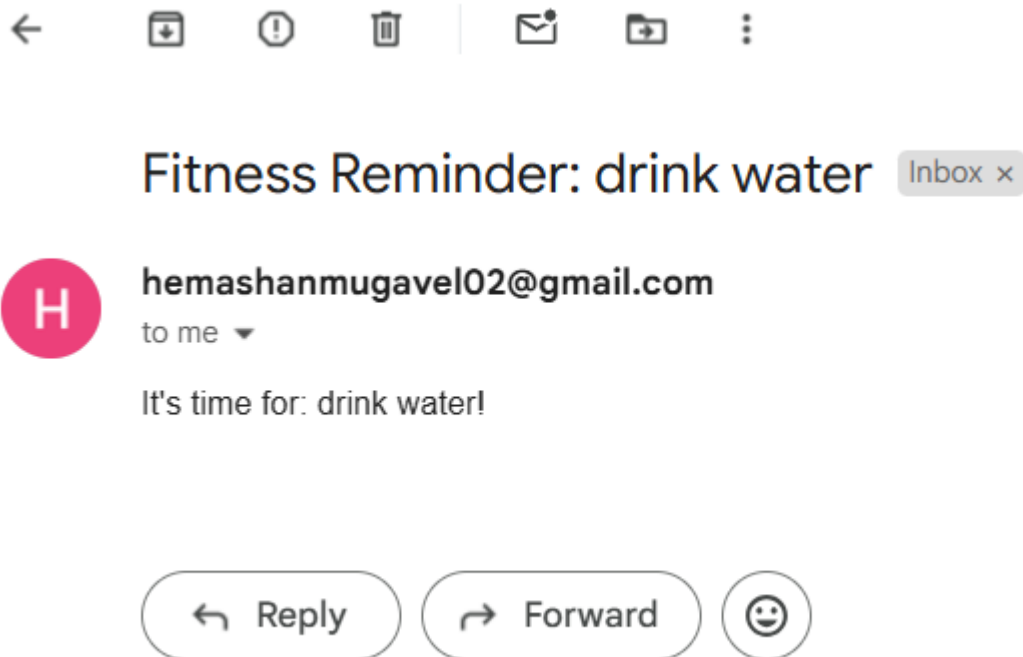


Fig 5.5 Remainder

CHAPTER 6

CONCLUSION

The Daily Fitness Reminder Bot demonstrates the effective use of Robotic Process Automation (RPA) to streamline personal fitness routines. By leveraging UiPath, the bot automates the process of sending timely fitness reminders, ensuring that users stay on track with their health goals. The integration of Excel as a data source and the use of activities like Read Range, For Each Row, and Send SMTP Mail Message showcases how RPA can efficiently handle repetitive tasks with precision.

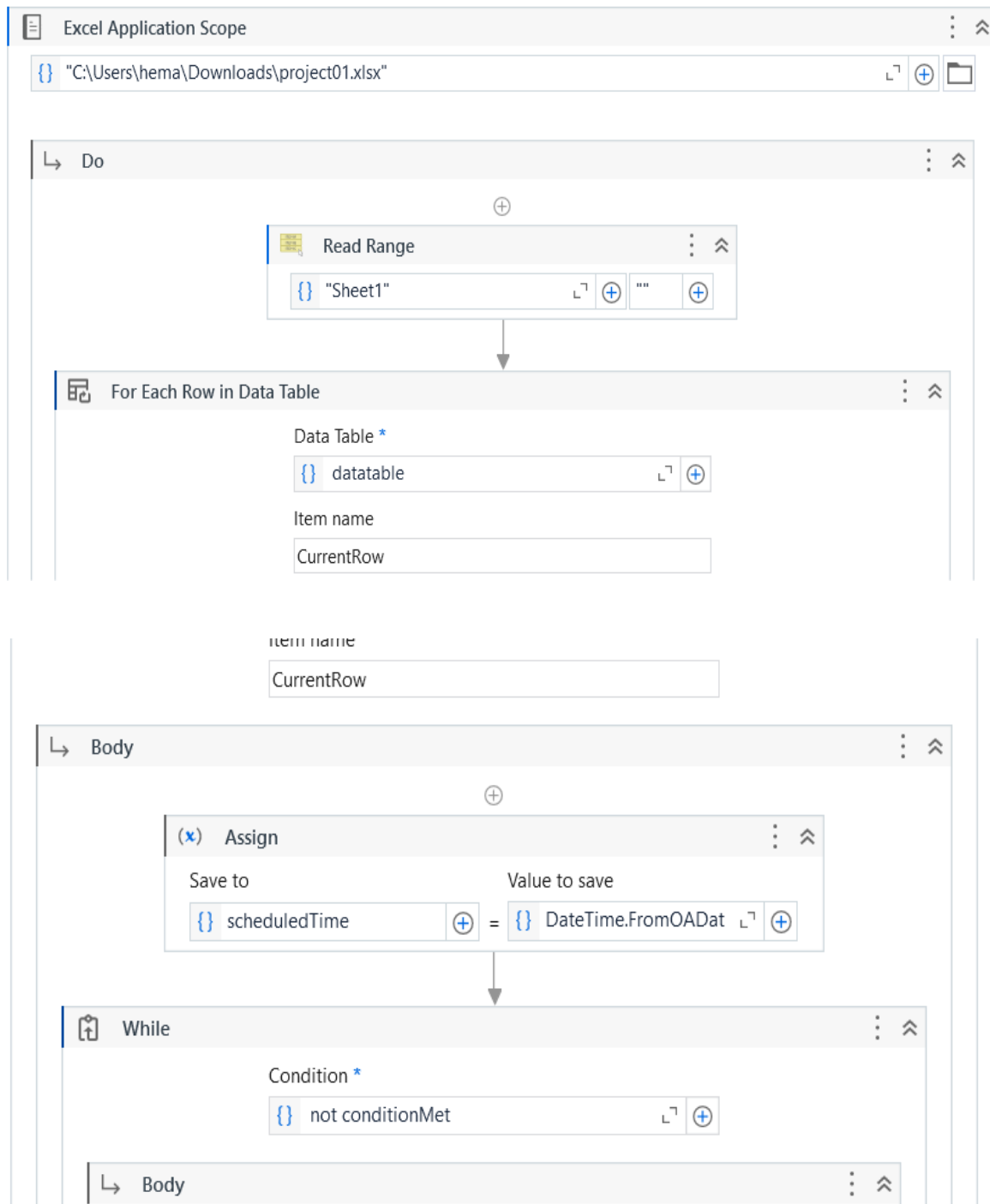
This project highlights the potential of automation in personal productivity and fitness management. It reduces manual intervention by dynamically scheduling reminders based on predefined times and activities. Furthermore, the bot's flexibility in handling different notification methods makes it adaptable for diverse user needs.

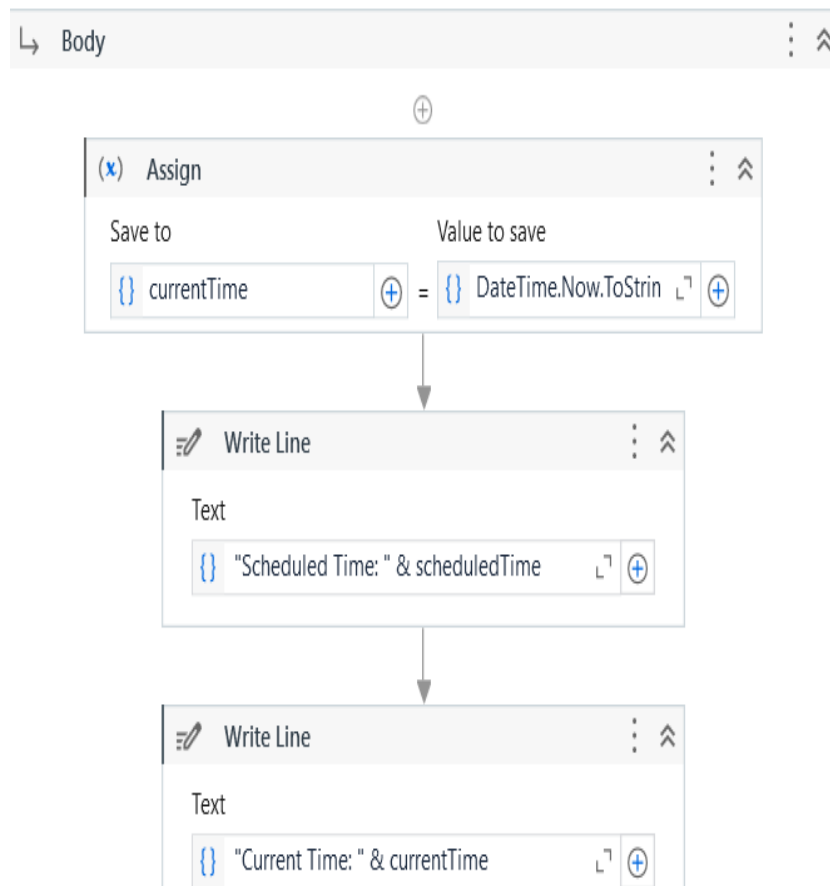
The successful execution of the bot proves its reliability and scalability, making it a robust solution for individuals or organizations promoting health and wellness initiatives. With additional enhancements, such as integrating mobile app notifications or syncing with smart devices, the bot can be further developed into a comprehensive fitness management system.

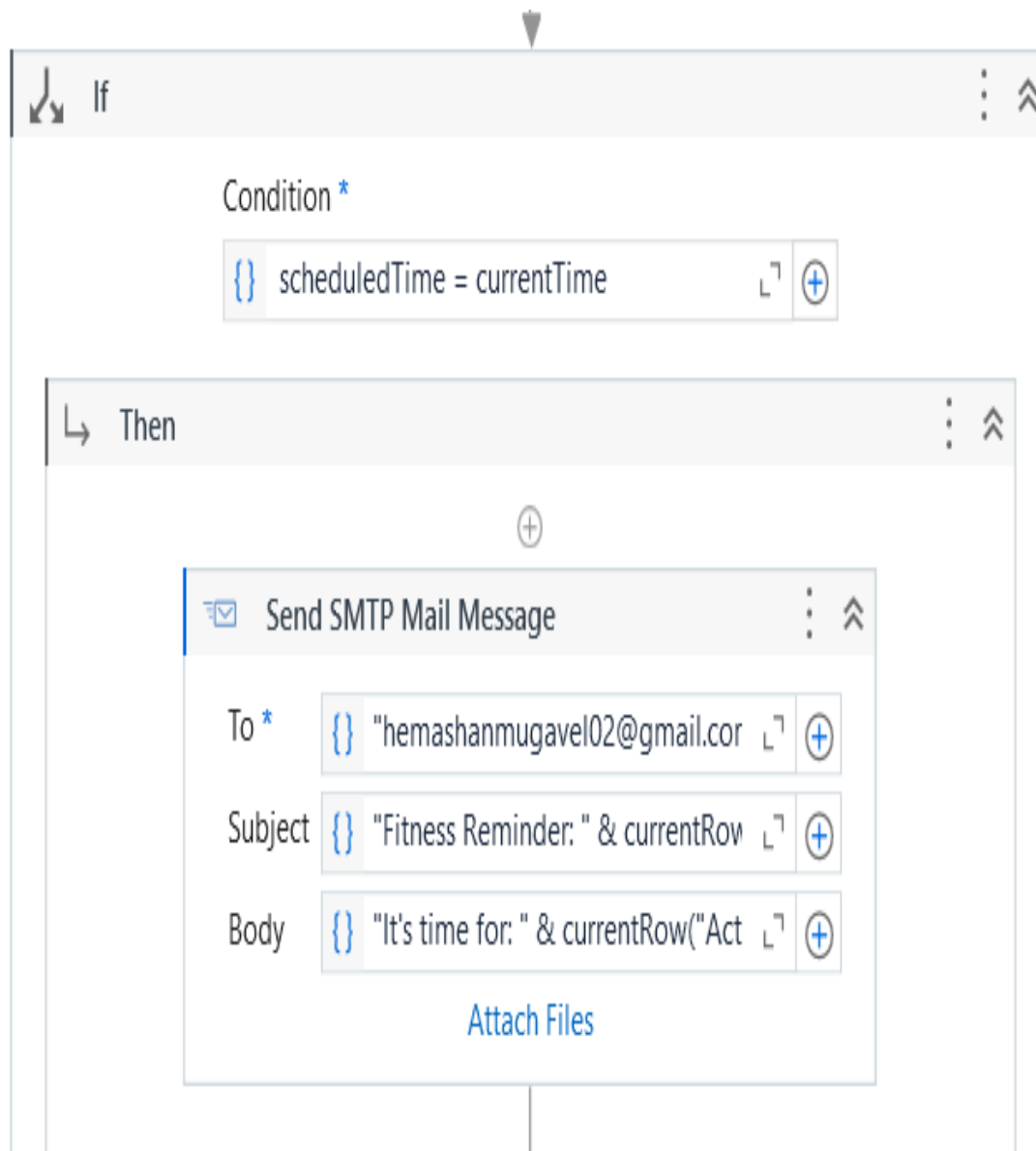
In conclusion, the project not only simplifies fitness tracking but also serves as a foundation for exploring the broader applications of RPA in improving everyday life.

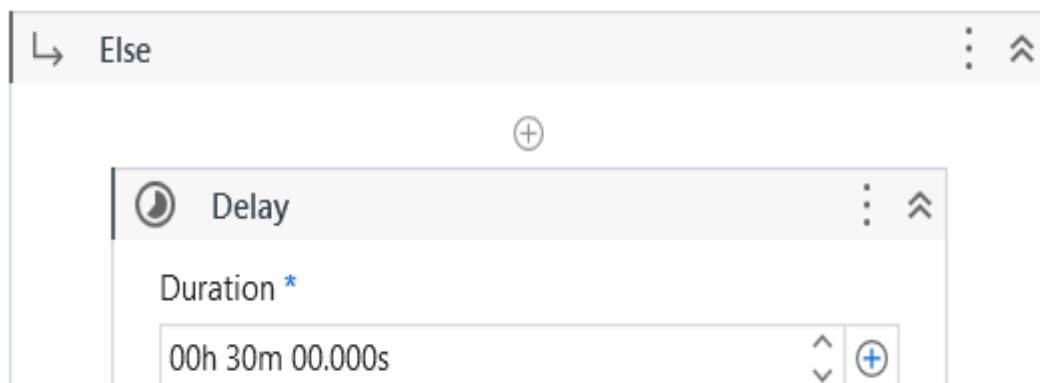
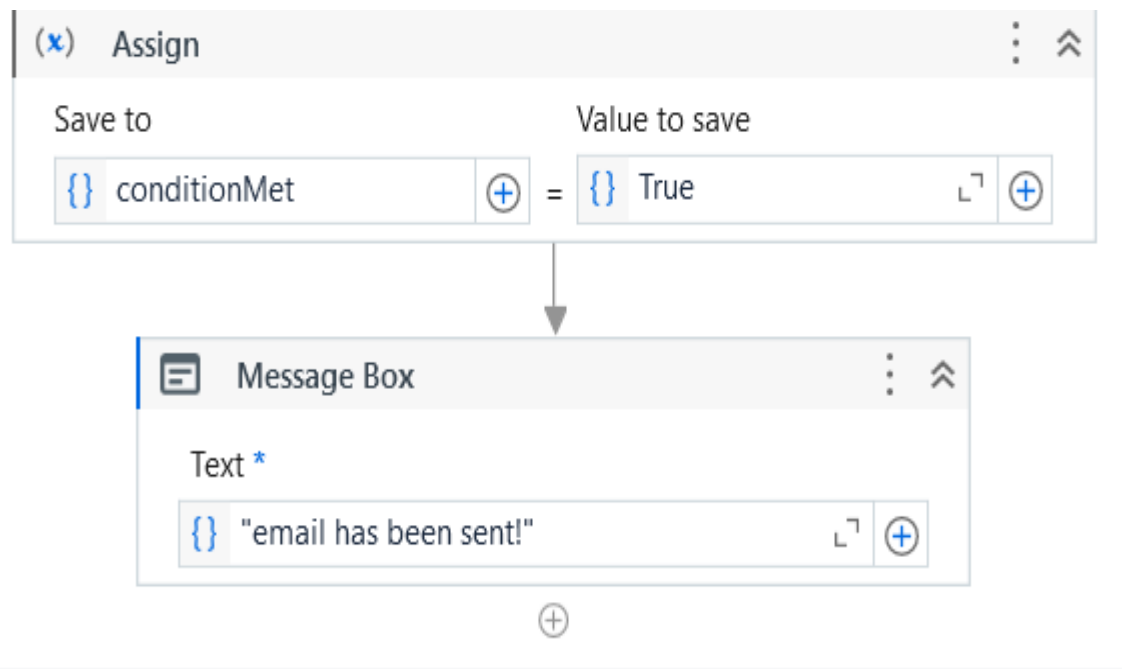
APPENDIX

SAMPLE PROCESS









REFERENCES

1. UiPath Forum: The UiPath Forum community where users share their experiences and solutions. <https://forum.uipath.com/>
2. UiPath Documentation: The official documentation of UiPath features and functionalities <https://docs.uipath.com/>