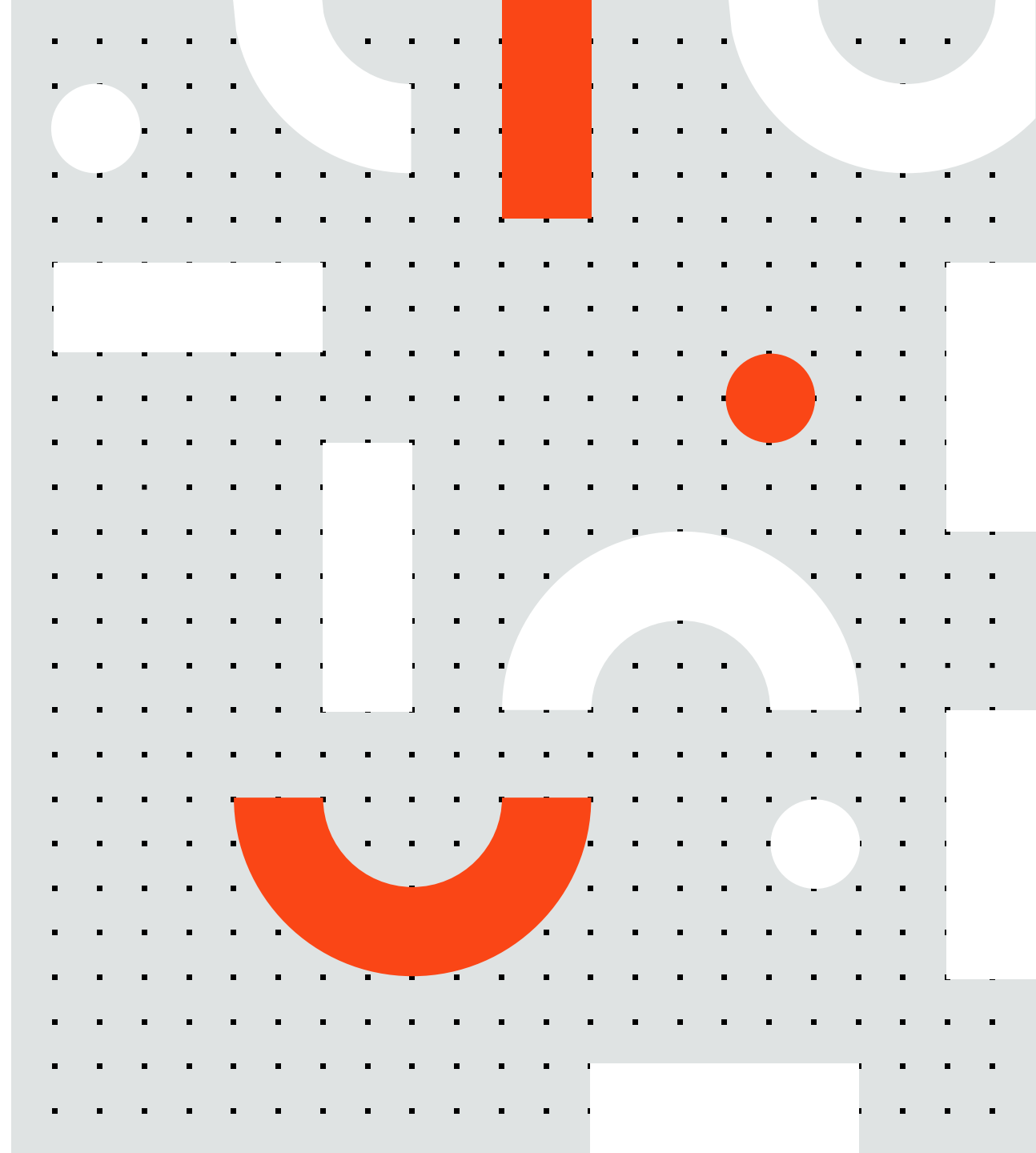


RPA Design & Development

Email Automation



Need for **Email Automation**



What emails would you automate in your personal life? What about University or work?

- Consider emails received as well as sent
- Consider complexity vs. benefits
- Consider your personal life, the university and work

Introduction to **Email Automation**



To this day, many business processes are triggered by email or generate email output.



Estimates show that an average person spends between 5 and 11 hours a week checking, reading and responding to emails.



What can we automate?

- Generating and sending automated messages
- Retrieving messages and extracting data
- Managing messages
- Saving attachments
- Saving messages

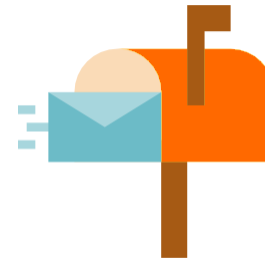
Key Concepts of Email Automation



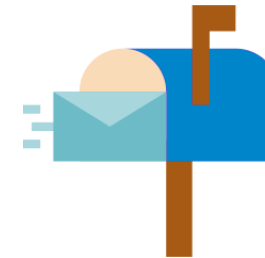
Email Client



SMTP



POP3



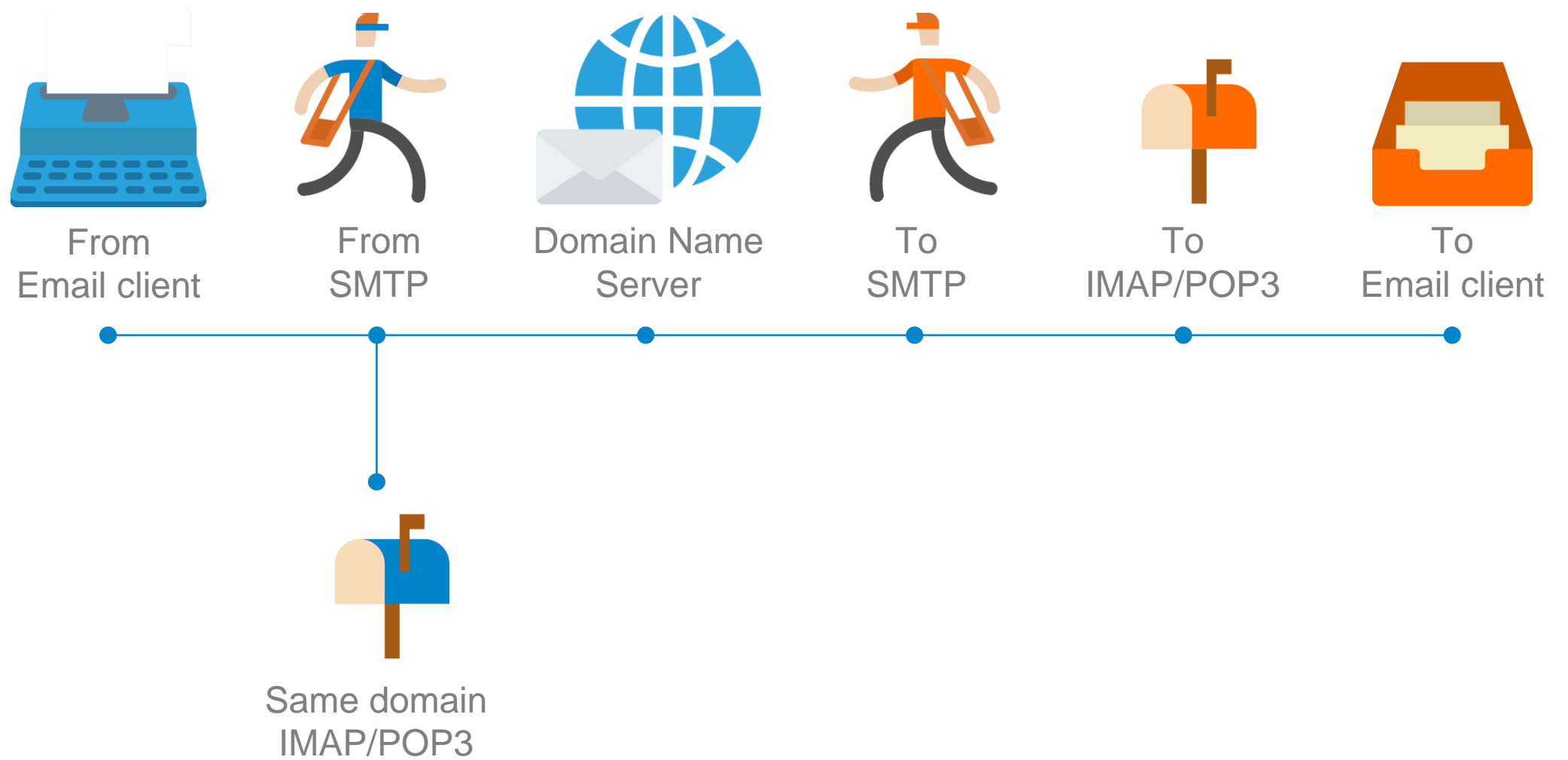
IMAP



Exchange



The Email Process



UiPath Studio Activities

UiPath Studio includes activities for sending, retrieving and organizing messages. The available categories are:

Generating and sending automated messages:

- SMTP, Outlook and Exchange

Retrieving messages and extracting data:

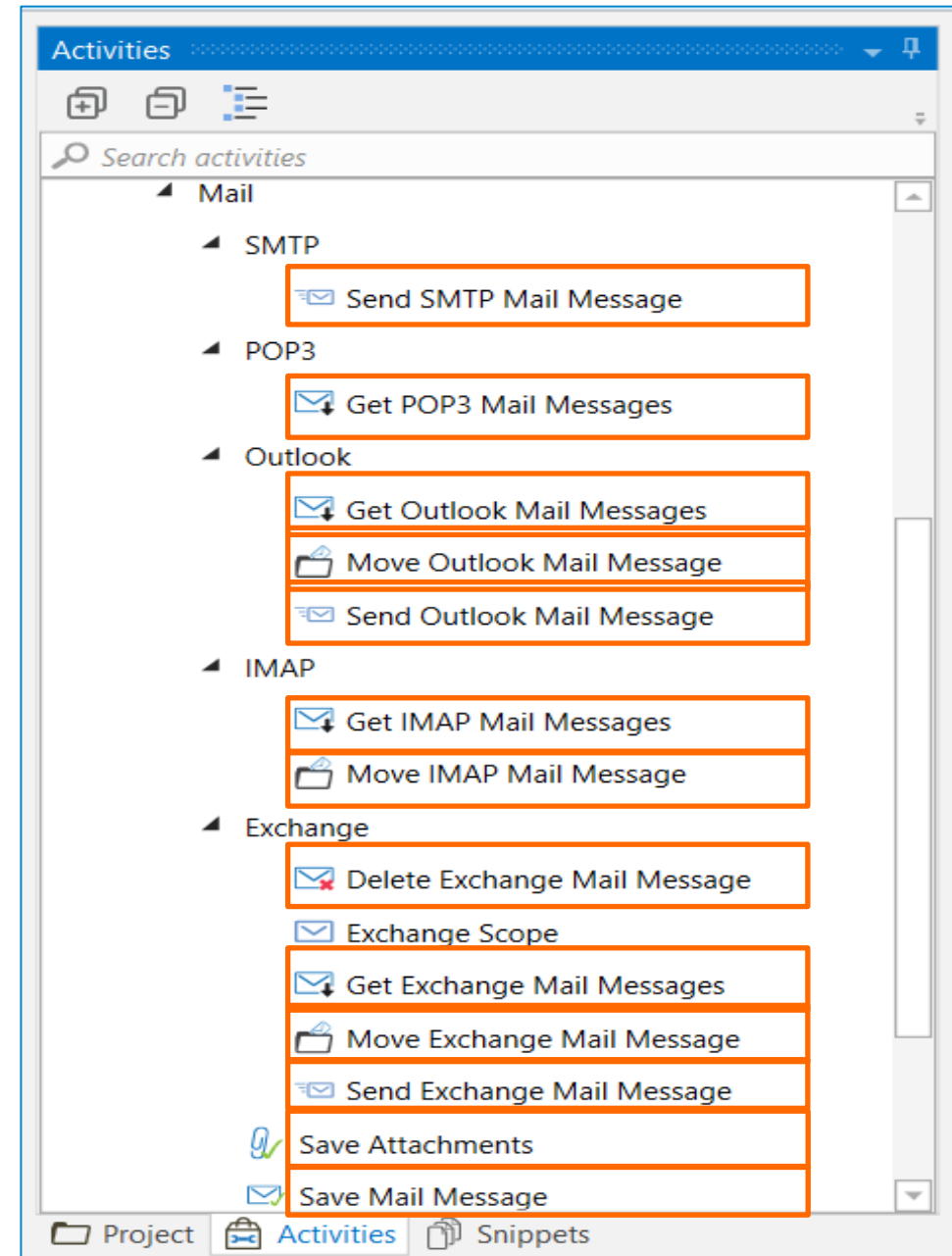
- POP3, Outlook, IMAP and Exchange

Managing Messages:

- Outlook, IMAP, Exchange

Saving attachments and emails:

- Generic Email Activities

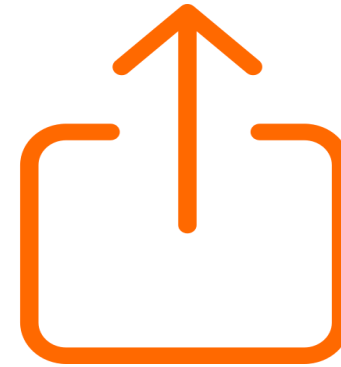


UiPath Studio Activities (Contd.)



Input via email

- Names or ID numbers from the subject or body
- Input files coming as attachments (.xls. .pdf)



Email as output

- Progress reports
- Exception alerts

Email Protocols



SMTP



POP3



IMAP



Microsoft
Exchange



Microsoft
Outlook



Generic Email
Activities

SMTP

POP3

IMAP

Microsoft
Exchange

Microsoft
Outlook

Generic
Email
Activities

SMTP

Definition

SMTP stands for Simple Mail Transfer Protocol. Mail servers and other mail transfer agents use the SMTP protocol to send mail messages on TCP port 25.

Scope

Email as output. SMTP can be used with Gmail to send emails.

UiPath Studio Activities

▲ SMTP

✉ Send SMTP Mail Message

POP3

SMTP

POP3

IMAP

Microsoft
Exchange

Microsoft
Outlook

Generic
Email
Activities

Definition

POP3 stands for Post Office Protocol and is an old and almost obsolete protocol for reading messages but most email servers support it.

Scope

Input via email. POP3 can be also used to retrieve email from Gmail.

UiPath Studio Activities

POP3

Get POP3 Mail Messages

SMTP

POP3

IMAP

Microsoft
Exchange

Microsoft
Outlook

Generic
Email
Activities

IMAP

Definition


IMAP or Internet Message Access Protocol is only used for receiving messages
This offers some useful features to mark messages as read or move them between folders.


Scope

Input via email. IMAP can be also used to retrieve email from Gmail.

UiPath Studio Activities

IMAP

 Get IMAP Mail Messages

 Move IMAP Mail Message

Microsoft Exchange

SMTP

POP3

IMAP

Microsoft Exchange

Microsoft Outlook

Generic Email Activities

Definition






Exchange is Microsoft's enterprise email solution that UiPath integrates perfectly, which help to sends and received emails.

Scope

Sends and receive emails

UiPath Studio Activities

Exchange

-  Delete Exchange Mail Message
-  Exchange Scope
-  Get Exchange Mail Messages
-  Move Exchange Mail Message
-  Send Exchange Mail Message

Microsoft Outlook

SMTP

POP3

IMAP

Microsoft Exchange

Microsoft Outlook

Generic Email Activities

Definition

Microsoft Outlook is a personal information manager from Microsoft. It is mainly used as an email client. This functionality is what we are focusing on in this course.


Scope


Input via email and email as output.

UiPath Studio Activities

Outlook

 Get Outlook Mail Messages

 Move Outlook Mail Message

 Send Outlook Mail Message

SMTP

POP3

IMAP

Microsoft
ExchangeMicrosoft
OutlookGeneric
Email
Activities

Generic Email Activities



Definition

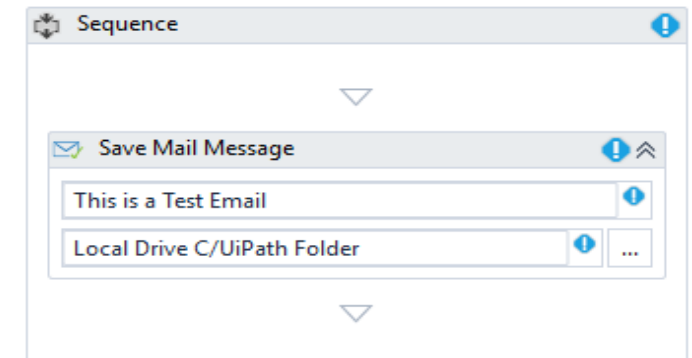
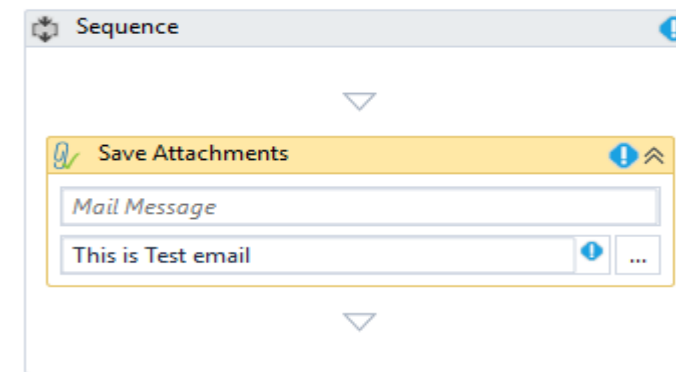
There are two generic email activities available for saving email messages and email attachments on the local drive.

Scope

Input via email.

UiPath Studio Activities

 Save Attachments
 Save Mail Message

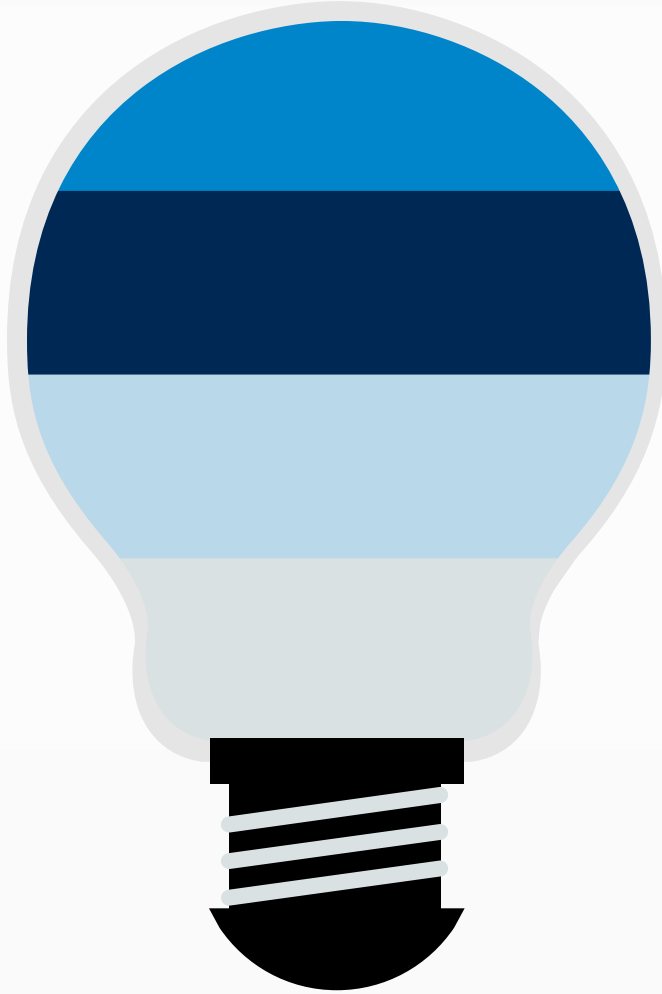


Practice makes perfect...



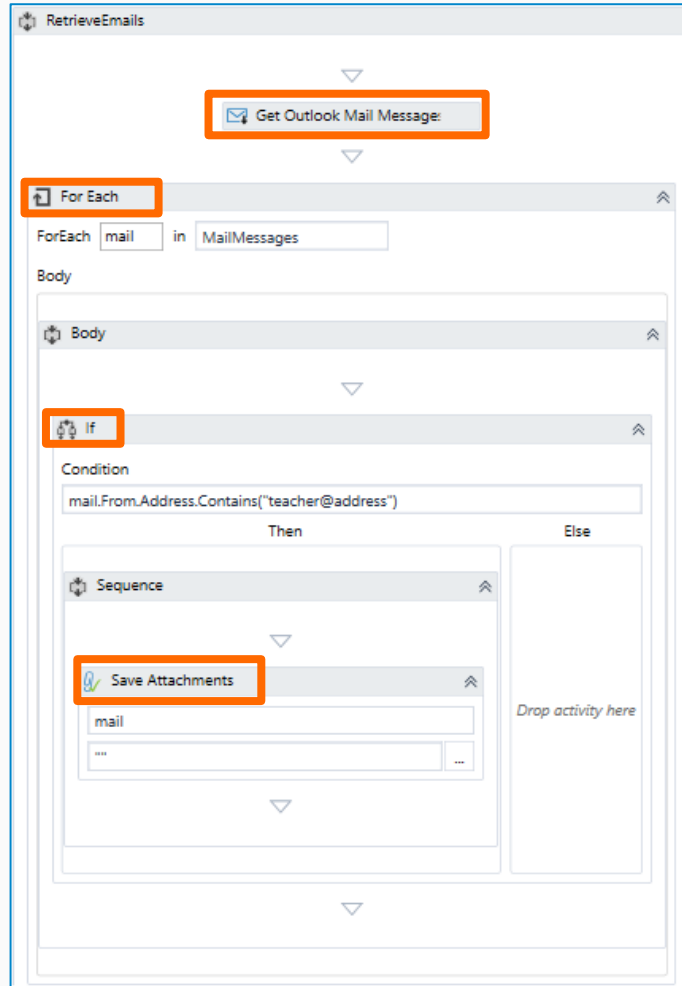
What activities would you use to automate the email processes written down in the first discussion?

Let's Practice **Retrieving Emails**



Can you write an automation project in UiPath Studio to retrieve emails from Outlook and save attachments for the emails sent by teacher@address?

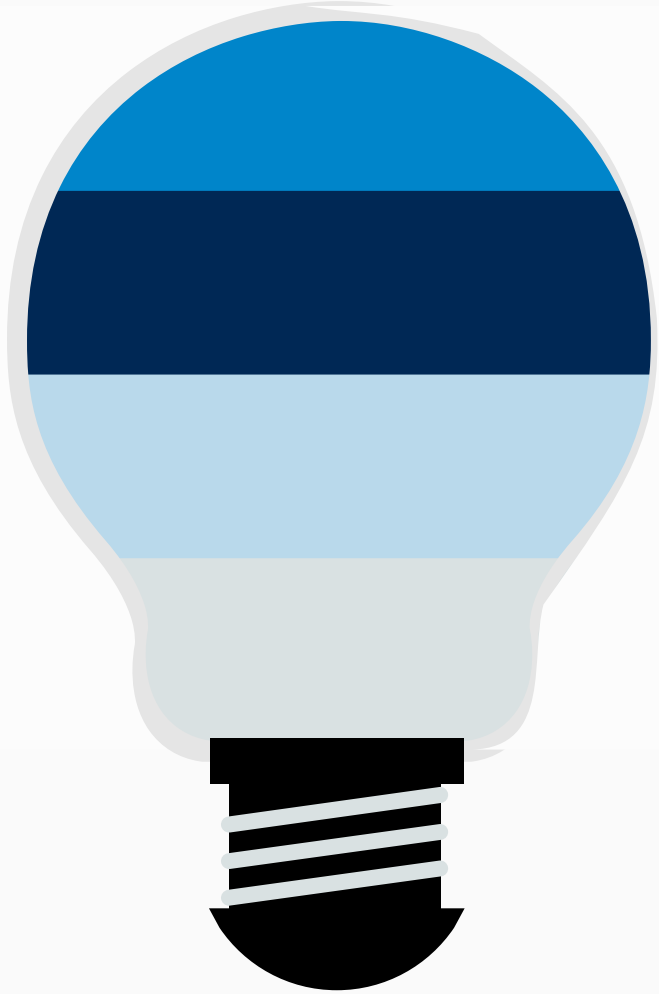
Retrieve and Save Emails from Outlook



Main steps of the solution

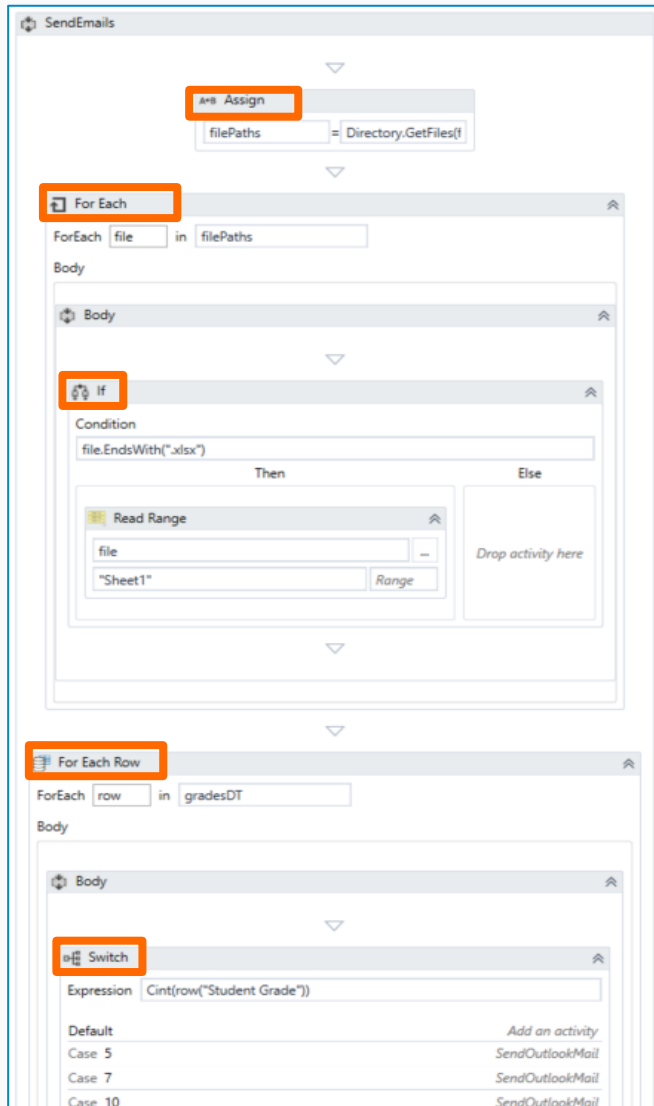
- 1. Get Outlook Mail Messages** - Retrieve a set amount of emails from the Outlook inbox.
- 2. For each** - Type of argument used is `System.Net.Mail.MailMessage`
- 3. If** - The condition here is used to see if one of the emails in the list retrieved is from the teacher or not.
- 4. Inside the 'If'** we have the **Save Attachments** activity, which saves the attachments from the email sent from the teacher. The attachments are saved in the local folder of the project.

Let's Practice **Sending Emails**



Can you write an automation project in UiPath Studio to read an .xlsx file and send a custom email to each student, based on their email address, name and grade?

Sending Emails from Outlook



Main steps of the solution

1. Assign Activity - This is used to retrieve all the files inside the folder project.
2. For Each - Simple string argument.
3. If - If the file ends with .xlsx we will read the whole file.
4. For Each Row - This will iterate through the rows of the previously read excel file.
5. Switch - Depending on the grade the student received, he will also receive a personalized message inside the email.

Questions and Answers



Which email processes can we automate in UiPath Studio? (Multiple Select)

- a) Generating and sending automated messages
- b) Retrieving messages and extracting data
- c) Managing messages
- d) Saving attachments
- e) Saving messages
- f) Understanding and summarizing messages

Which factors would you take into account when deciding the types of email processes to automate? (Multiple Select)

- a) Type of input (standard, structured or unstructured)
- b) Type of output (standard, structured or unstructured)
- c) Sender domain
- d) Time savings
- e) Communication language
- f) Quality improvement

Which activity groups do you have available for sending emails? (Multiple Select)

- a) SMTP
- b) Exchange
- c) IMAP
- d) Outlook
- e) POP3

Which activity groups do you have available for retrieving emails? (Multiple Select)

- a) SMTP
- b) Exchange
- c) IMAP
- d) Outlook
- e) POP3

You have a csv file with the test scores for 10 students. You want to automate sending each one an email with their grade. In this example email is an

- a) Input
- b) Output

Next Steps

Debugging and Exception Handling

