

- Adjust the selector to include unique attributes that identify the element, avoiding properties that may change dynamically.
- Use wildcards (*) where necessary to handle dynamic attribute values.
- Remove unnecessary or volatile properties from the selector to improve stability.
- 4. **Validate Selector**
 - After customizing the selector, click on the "Validate" button in UiExplorer to ensure that the selector correctly identifies the target element.
 - Verify that the selector is unique and does not match unintended elements on the screen.
- 5. **Update Selector in Activity Properties**
 - Open the activity (e.g., Click, Type Into) that interacts with the target element.
 - In the properties pane of the activity, locate the "Selector" field.
 - Paste the customized selector into the "Selector" field to replace the default selector.
- 6. **Test the Automation**
 - Test the automation process to verify that the customized selector correctly identifies and interacts with the target element. Run the workflow and observe the behavior of the activities interacting with the element

SOURCE CODE

Selectors: In uipath, selectors are xml strings that define the unique properties of UI element, like id, name, title, class, etc. The selector identifies on element the screen for automation purposes.

a) Dynamic selectors:

These selectors can be modified programmatically at runtime to adapt to changing UI structures.

Steps to Automate Selector Customisation in Uipath:

1) Basic setup for Uipath Automation:

- * open Uipath studio.
- * create a new process
- * use the selector editor in activities like click, Type Into...

2) Modify selectors Dynamically:

Uipath provides a way to manipulate selectors dynamically during execution using variables or expressions. Here's an ex of how you can customise a selector dynamically

ex:- Automating Dynamic Selector Customisation:

Step 1: capture the selector

2: make the selector Dynamic.

3: use variables for Dynamic selectors.

4: ex - use Dynamic selectors in workflow

5: handle Dynamic elements in multiple places.

6: Using find element with Dynamic selectors.

Tips for customising selectors Dynamically in Uipath:

- 1) use wildcards
- 2) Anchor Base
- 3) Selector Editor
- 4) Debugging
- 5) Attributes

→ By leveraging dynamic selectors in uipath, you can automate applications where UI elements might change over time, allowing your automation to remain flexible and robust.

VIVA QUESTIONS

1. What is a selector in UiPath?

Ans. selector in uipath uniquely identifies us elements for automation.

2. Why are selectors important in UiPath automation?

Ans. selectors are crucial in uipath automation for accurate element identification.

3. What are the key components of a selector?

Ans. Attributes, tags, element identifiers.

4. What is the purpose of an anchor base in selectors?

Ans. Anchor Base in selectors helps locate elements relative to another element.

5. What is Ui-Explorer, and how is it used?

Ans. It helps inspect, identify and refine selectors accurately.

Img aut^m

- 1) open browser → search cmrit hyderabad
- 2) open wpath → select 'indicate applⁿ to automate' (1a to 1)
- 3) D&D click OCR Text Image
→ select '1 a to 1'
choose → cmrit
- 4) properties > o/p > create var
- 5) choose 'wpath poc^m ocr'
↓
open browser type
cloud.wpath
↓
more optⁿ
↓
admin
↓
pro plan trail
↓
consumables (copy API key)
- 6) paste API key into misc. (of props)
- D&D msg box → use var
- 8) Debug it.

- 1) open browser → search wikipedia
- 2) D&D → select 'Indicate appn to automate'
choose wikipedia home page
- 3) D&D type into → select 'into'
↓
choose search area
type → India
- 4) D&D click → choose → search box (create var)
- 5) D&D write Text file → Text: var created
write → "we.doc"
- 6) Debug it.

To upload

→ D&D upload files

↓
> choose > add new conn^t

> connect your mail

> files (choose > filename (given above))

> Destination (drive)

VIVA QUESTIONS

1. What is OCR in UiPath, and why is it used?

Ans. OCR in UiPath extracts text from images, PDFs, and scanned documents for automation and data processing.

2. What is the difference between OCR-based automation and selector-based automation.

OCR-based	selector-based
Ans. - extracts text from images	- uses UI element selectors for automation
- slower	- faster.

3. What are the common OCR engines available in UiPath?

Ans. Tesseract OCR, Google cloud OCR, Microsoft OCR, UiPath document OCR

4. What are the limitations of OCR in UiPath?

Ans. - lower accuracy - language limitations.
- slow processing - formatting loss

5. How would you automate text extraction from a multi-page scanned document?

Ans. use UiPath's read PDF with OCR activity with a reliable OCR engine to extract text from a multi-page scanned document efficiently.

- 1) open wpath studio
- 2) Drag & Drop 'read csv' activity.
- 3) Before that download a csv file from github.
- 4) Then select that csv file.
type: csv data.
- 5) Drag & Drop 'write csv' file
set properties as
→ output: ctrl k + variable name (csvdata)
choose → 'write' in how to write
- 6) Drag & Drop 'write csv'
choose → 'append' in how to write.
same set properties as before.
- 7) Drag & Drop output data Table as Text.
csvdata → properties
↓
o/p
↓
set variable. (datatext)
- 8) Drag & Drop message box
Text → datatext
- 9) Debug it.

VIVA QUESTIONS

1. What activities are available in UiPath for working with Excel?

Ans. → Read/write cell → sort
→ Insert Rows/columns → Delete Rows/columns

2. What is a Data Table in UiPath?

Ans. Is a collection of data stored in rows and columns,
similar to an Excel spreadsheet.

3. What are the common scenarios where you use Data Tables in automation?

Ans. DataTables used for data manipulation, data
Extraction data validation.

4. What are the different ways to loop through a Data Table?

Ans. By using for each row, for each column or
for loop activities.

5. How do you perform data validation in Excel automation?

Ans. use If-else statements, switch statements, Data
Table.select, and Excel filter activities.

- **For Each:** Use a "For Each" activity to iterate through each retrieved email message.
 - **Send SMTP Mail Message:** Use the "Send SMTP Mail Message" activity to send an email. Configure the activity with the necessary details such as sender, recipient, subject, and body.
 - **Save Attachment:** Use the "Save Attachment" activity to save attachments from email messages to a specified location on your computer.
5. **Configure Activities**
- Configure each activity with the necessary inputs and properties. For example:
 - Specify the IMAP server settings and mailbox credentials in the "Get IMAP Mail Messages" activity.
 - Specify the email details (sender, recipient, subject, body) in the "Send SMTP Mail Message" activity.
 - Specify the folder path to save attachments in the "Save Attachment" activity.
6. **Run the Workflow**
- Save your workflow and click on the "Run" button in UiPath Studio to execute the email automation process.
 - Monitor the execution and verify that emails are retrieved, sent, and attachments are saved as expected.

SOURCE CODE

1) create an excel file with name & Email id
2) open wpath studio, create new process.
3) Drag & drop "Read Range workbook"
4) Next select the dr Data table as text & create a var as "mailDataTable" in properties.
5) Next Add writeline & create a variable "Table Text" in properties.

6) select the for each row in DataTable, in it use the created variable "mailDataTable" in the item Name → enter → Text currentRow.

7) In body select "Get Row Item"

→ In Row column : 'current Row'

→ select col as → Number → '0'

→ enter username in value.

8) Drag & Drop 'Assign' Activity

↓
'Get Row Item' (source) In col → 'Email'
val → EmailId

9) D&D 'Assign' Activity

save to → mailId

value → New string(emailId)

10) Again D&D 'Assign' Activity:

save to → mailbody

value to save → 'msg' + Environment.NewLine + stringc) ...

11) D&D 'Send Email' Activity

fill necessary details.

12) debug it.

VIVA QUESTIONS

1. What is email automation in UiPath?

Ans. Email automation handles sending, receiving, reading and processing emails automatically.

2. What email activities are available in UiPath?

Ans. Send outlook mail, Get outlook mail, SMTP, IMAP, POP3 activities.

3. What are the main email protocols supported by UiPath.

Ans. SMTP, IMAP, POP3 are the mail email protocols.

4. What are the prerequisites for email automation using Outlook activities?

Ans. Outlook application installed, configured account and CUPATH.MAIL.Activities package need to install.

5. How do you process emails from multiple accounts in UiPath?

Ans. Configure each account separately and specify account in email activities.

selected folder. Store this list in an array variable.

- **For Each:** Use a "For Each" activity to iterate through each PDF file in the array.
- **Read PDF Text:** Use the "Read PDF Text" activity to read the text from each PDF file.
- **Close Application:** Use the "Close Application" activity to close the PDF reader application (e.g., Adobe Acrobat) after reading each PDF file.

5. Configure Activities

- Configure each activity with the necessary inputs and properties. For example:
- Specify the folder path variable in the "Assign" activity to define the location of your PDF files.
- Specify the array variable containing the list of PDF files in the "For Each" activity.
- Configure the "Read PDF Text" activity to read the text from each PDF file.

6. Run the Workflow

- Save your workflow and click on the "Run" button in UiPath Studio to execute the PDF automation process. monitor the execution and verify that the text is read from each PDF file, and the PDF reader application is closed after processing each file

SOURCE CODE

1) open uipath studio.
2) drag & drop 'for each file in folder' activity.
3) choose pdf file folders.
4) choose > Include subfolders
> Skip folders where access is denied.
filter by > "*.pdf"

5) Drag & drop
> message box
Text → CurrentFile.FullName

6) Drag & Drop 'Extract PDF Text'
→ choose file.

7) Drag & Drop 'message box'
text → extractPDF

8) Run the file.

- **Write Cell:** Use the "Write Cell" activity to write data to a specific cell in the Excel file. This activity can also be used to change the background color of a cell.
5. **Configure Activities**
- Configure each activity with the necessary inputs and properties. For example:
 - Specify the file path for the Excel file in the "Excel Application Scope" activity.
 - Specify the cell address (e.g., "A1") in the "Write Cell" activity where you want to change the background color.
 - Use the **Background** property of the "Write Cell" activity to set the desired background color. You can use color codes (e.g., "#FF0000" for red) or named colors (e.g., "Red").
6. **Run the Workflow**
- Save your workflow and click on the "Run" button in UiPath Studio to execute the Excel automation process.
 - Monitor the execution and verify that the background color of the specified cell is changed as expected.

SOURCE CODE

- 1) Drag and Drop excel process scope.
- 2) Drag and Drop 'Use excel file'
choose an excel file
- 3) Drag and drop set Range color
↓
color :
System.Drawing.Color.Blue
Range :
"A1:A2"
SheetName :
"Excel sheet Name"
- 4) Debug it.

VIVA QUESTIONS

1. What is the purpose of the excel application scope activity?

Ans. opens an Excel instance, providing a scope for other excel activities to interact

2. How do you highlight a specific range in excel using UiPath.

Ans. Use the Excel set Range color activity in uipath to highlight a specific range in excel.

3. How do you ensure compatibility with machines that have different versions of Excel.

Ans. use com interfaces and uipath's excel activities to ensure compatibility.

4. You need to change the background color of the header row in an Excel file. How would you do it?

Ans. Use the Excel set Range color activity in uipath to change the background color of head row.

[1] open wpath studio.

2) Drag & Drop 'delay' activity

> set time

3) D&D 'message box'

> Add text

4) D&D 'send email' Activity

On

1) open wpath studio.

2) D&D 'Generate DataTable from Text'

> Input → Add necessary data.

> create a variable as 'datatable'.

3) D&D 'Output DataTable as Text'

> select properties → create variable.

4) D&D 'for each Row in Data Table'

> load created var

In Body

> D&D 'Get Row Item' (8 times)

Based on the columns you've created,

where

> column → 0-6.

> values → Attributes you've given.

5) D&D 'use Application/Browsers'

Before this create a 'doc file' and save it in your folder.

> Later Navigate through that file.

6) D&D 'word Application scope'

> save as your requirement.

> file path (doc loc) > create var as 'text to be typed'

- 7) RPA 'Append Text'
 - > choose : text has to be typed (created var)
- 8) RPA 'Save Document as PDF'
 - > file path: default name to convert word → pdf.
- 9) RPA 'Assign'
 - > fill necessary data
- 10) Debug it.

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 100. Select the data table

VIVA QUESTIONS

1. What activities in UiPath are used for extracting data from websites?

Ans. -HTTP request, Get Text, Get Attribute, Extract structured data, data scrapping, screen scrapping.

2. How can you export scraped data into an Excel file?

Ans. Build DataTable, Add DataRow, Write Range, Excel Application scope, Save workbook.

3. What activities are used to send emails in UiPath.

Ans. Send SMTP mail message, send outlook mail message, send mail message, send IMAP mail message, send POP3 mail message.

4. How do you ensure the data extracted is accurate and up-to-date?

Ans. dynamic selectors, errors handling, Data validation, wait for element, Regular scheduling, logs & Alerts.

5. How can you make the recipient's email address dynamic in the workflow?

Ans. Define a variable, assign Activity, use variable in mail activities, Extract email Address from Data.

6. How do you design the workflow to scrape data from multiple websites.

Ans. Create a list of websites, for each loop to iterate through websites, open browser for each website, store extracted data.

- **Message Box:** Use the "Message Box" activity to display a reminder message to the user. Customize the message to indicate that it's time to take their medicine.
5. **Run the Workflow**
- Save your workflow and click on the "Run" button in UiPath Studio to execute the automation process.
 - The automation will wait for 4 hours and then display a message box reminding the user to take their medicine.
6. **Repeat the Process**
- To ensure continuous reminders, you can add a loop around the sequence of activities so that the process repeats indefinitely.
 - Use the "While" or "Do While" activity to create a loop that continuously executes the reminder activities every 4 hours

SOURCE CODE

1) open upathstudio

2) Drag and Drop 'Delay' Activity

> set time

3) Drag and Drop 'message box' Activity

> Add text

4) D&D "send email" Activity

Gmail > connect your Gmail id

save as > false

To > select mail to send report

subject > Add content to it

Body > Write the msg you wanna share!

5) Run The process.

VIVA QUESTIONS

1. What activity in UiPath can be used to schedule tasks?

Ans. Use UiPath Orchestrator triggers or Windows task scheduler for scheduling.

2. How do you trigger reminders in UiPath.

Ans. Use Orchestrator triggers, Delay Activity, message Box for reminders.

3. Can UiPath workflows run continuously without stopping.

Ans. Yes, using Orchestrator triggers, loops, or Unattended robots continuously.

4. How can you handle scenarios where the user acknowledges the reminder but wants to delay it?

Ans. Use Input Dialog, capture response then apply Delay activity.

5. What is the purpose of the Delay activity?

Ans. The Delay activity pauses workflow execution for a specified duration.