

RPA Specialization

Course 4: Control Flow in RPA

Practice Exercise-For Each Activity

For Each Activity

Build a workflow using For Each activity to display file names from a folder in the Output panel and also store names in an MS Word file.

- Locate and select a folder containing multiple files
- List the directory path of all the files in the Output panel
- Also, store the updated names in an MS Word file and save and close it

Process Overview

- START
- Use a Browse Folder activity to select a folder containing a few files
- Use an Assign activity to store file names in an array
- Use an Attach Window activity below the Assign activity and select MS Word window
- Use a For Each activity to iterate through each file name in the array
- Use a Write Line activity within the For Each activity to display file names in the Output panel
- Use a Type Into activity below the Write Line activity to store file names in an MS Word file
- Use Click and Send Hotkey activities to save and close the file
- STOP

Step-by-Step Process

Step 1: Open a new MS Word file.

Step 2: Open Studio.

Step 3: Create a new process and name it as “For Each Activity”

Step 4: Drag a Sequence activity from the Activities panel and drop it in the Designer panel.

Step 5: Name the Sequence activity as “Sequence – ‘This code is to write all the file names in MS Word present in a particular folder.’”

Step 6: Right-click on the Sequence activity container and select *Annotations* from the context menu.

Step 7: Enter the annotation shown below:

“1. Locate and select a folder containing multiple files.

2. List the directory path of all the files in the Output panel.
3. Store the updated names in MS Word file and save and close it."

Step 8: Insert a Browse Folder activity in the Designer panel and add an annotation: "User selects a folder".

Step 9: In the Variables panel, define a new variable as shown below:

Name	Variable type	Scope	Default
FolderName	String	Sequence - 'This code is to write all the file names in MS Word present in a particular folder'	

Step 10: In the Properties panel of the Browse Folder activity, enter **FolderName** in the Output property.

Step 11: Insert an Assign activity below the Browse Folder activity and name it as "Assign - 'File List'". Add an annotation: "Get all the file names that the user selects and stores it in a list".

Step 12: In the Variables panel, define a new variable as shown below:

Name	Variable type	Scope	Default
FileList	System.String[]	Sequence - 'This code is to write all the file names in MS Word present in a particular folder'	

Step 13: In the Properties panel of the Assign activity, enter **FileList** in the Output property.

Step 14: In the Assign activity, enter the value as shown below:

To	Value
FileList	Directory.GetFiles.(FolderName)

Step 15: Drag and Drop an Attach window activity and name it as "Attach Window – MS Word". Add an annotation: "Attach MS Word window".

Step 16: Click on the "Indicate window on screen" link and select the MS Word window opened in the background.

Step 17: Click the hamburger button and select Edit Selector. In the bottom panel of the Selector Editor, rename the title of the MS Word to '*'. Click OK to save the changes.

Step 18: Drag and drop a For Each activity in the Do section of the Attach Window activity, insert **item** in the first text box, and the variable **FileList** in the second text box. Add an annotation: "For Each activity iterates for each item in the list".

Step 19: Drag and Drop a Write Line activity in the Body section of the For Each activity. Enter the expression: **item.ToString.** Add an annotation: "The result will appear in the Output Panel".

Step 20: Drag and Drop a Type Into activity in the Body section of the For Each activity and name it as "Type Into - 'File List into MS Word'". Add an annotation: "Each item in the list results to be printed in the MS Word file."

Step 21: Click on the "Indicate element inside window" link and select the editor area of MS Word.

Step 22: In the text area of Type Into activity, enter the expression: **item.ToString + "[k(enter)]"**

Step 23: Drag a Send Hotkey activity and drop it below the For Each activity.

Step 24: Name the "Send Hotkey" activity as "Send Hotkey - ' Open the Save As dialog box.'". Add an annotation: "Pressing F12 key opens the 'Save As' Dialog box in the MS Word".

Step 25: Click on the "Indicate element inside window" link and select the editor area of MS Word.

Step 26: In the Send Hotkey activity, select *F12* from the dropdown for Key option.

Step 27: Insert a Click activity. Click "Indicate element inside window" link and select the Save button of the 'Save As' dialog box.

Step 28: Name the Click activity as "Click 'Save' button". Add an annotation: "Press Save button from Save As pop Dialog box."

Step 29: Insert second Send Hotkey activity and name it "Send Hotkey" activity as Send Hotkey - 'To close the application'" Add an annotation: "Press 'Alt+F4' key to close the MS Word window."

Step 30: Click on the "Indicate element inside window" link and select the editor area of MS Word.

Step 31: In the Send Hotkey activity, check the box below Alt option, and choose *F4* from the dropdown of Key option.

Step 32: Save and Run the workflow.