

RPA Specialization

Course 4: Control Flow in RPA

Practice Exercise-Do While Activity

Do While Activity

Build a workflow using a Do While activity for creating a 'Guessing Game' with the following conditions:

- Generate a random number and prompt the user to input a number
- If the input number is greater than the number generated, then it should display the message: 'Please enter a lesser number'
- If the input number is lesser than the number generated, then it should display the message: 'Please enter a greater number'
- The activity keeps on running until the input number equals the generated number

Process Overview

- START
- Use an Input Dialog activity within a Do While activity to get the guessed number from the user
- For Do While activity, set the condition to check guessed number is not equal to the actual number
- Use a Message Box activity to display "You Guessed it correct" for the correct match
- Use an If activity within the Do While activity to check if the guessed number is equal to the actual number
    - If correct, use a Message Box activity to display "You Guessed it correct" for the correct match
    - Use another If activity within the Else section to check if the guessed number is greater than the actual number
- If correct, use a Message Box activity to display "Please try a smaller number"
- If incorrect, use a Message Box activity to display "Please try a greater number"
- STOP

Step-by-Step Process

Step 1: Open Studio.

Step 2: Create a new process and name it as “Do While Activity”.

Step 3: Drag a Sequence activity from the Activities panel and drop it in the Designer panel.

Step 4: Name the Sequence activity as “Sequence – ‘Guessing Game”.

Step 5: Right-click on the Sequence activity container and select *Annotations* from the context menu.

Step 6: Enter the annotation:

“This block of code demonstrates a workflow using a Do While statement for creating a 'Guessing Game' with the following conditions:

1. Generate a random number and prompt the user to input a number.

2. In case of a wrong input, a message is displayed to the user stating, 'Please enter a lesser/greater number’.

3. The activity keeps on running until the input number equals the generated number.”

Step 7: Create variables using Variables panel as shown below:

Name	Variable type	Scope	Default
intRandomNo	Int32	Sequence – Guessing Game	25
intGuessedNo	Int32	Sequence – Guessing Game	

Step 8: Insert a Do While activity within the Sequence activity, name it as “Do While - Guessed Number <> Random Number”, add an annotation “The activity iterates until it reaches the given condition”.

Step 9: Set its condition to **int intGuessedNo<> intRandomNo**

Step 10: Insert an Input Dialog activity within the Do While activity, name it as “Input Dialog - Guessed Number”, add an annotation: “Take Guessed Number as User input” and enter values as shown below:

Dialog Title	Input Label	Input Type
“Number”	“Guess a number”	Text Box

Step 11: In the Properties panel of the Input Dialog activity, enter **intGuessedNo** in the Output property.

Step 12: Insert an If activity below the Input Dialog activity, name it as "If - User input equals Random Number", add an annotation: "This activity checks whether the User input is equal to the Random Number" and enter the condition **intGuessedNo= intRandomNo**

Step 13: In the Then section, insert a Message Box activity and name it as "Message Box - Correct Guess". Add an annotation: "Prints Correct Guess message".

Step 14: Enter the text "You Guessed it correct".

Step 15: Insert another If activity, in the **Else** section of the first If activity, and enter condition **intGuessedNo> intRandomNo.** Name it as "If- Guessed number is greater or smaller than Random Number", add an annotation: "This activity checks whether the user input is greater or smaller than the Random number."

Step 16: In the Then section, insert a Message Box activity, name it as "Message Box - Try Smaller Number", add an annotation: "Prints Smaller Number message" and enter the text "Please try a smaller number".

Step 17: In the Else section, insert a Message Box activity, name it as "Message Box - Try Greater Number", add an annotation: "Prints Greater Number message" and enter the text "Please try a greater number".

Step 18: Save and Run the workflow.