LECTURE 04.
RELATED CONTROL FLOW ACTIVITIES

Robotic Process Automation
[24 October 2022]

Elective Course, 2022-2023, Fall Semester

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Acknowledgements

This course is presented to our Faculty with the support of UiPath Romania.

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Related Control Flow Activities

- in addition to *decision* and *iteration*-based control flow activities, there are other activities in UiPath that help in controlling the flow of the program:

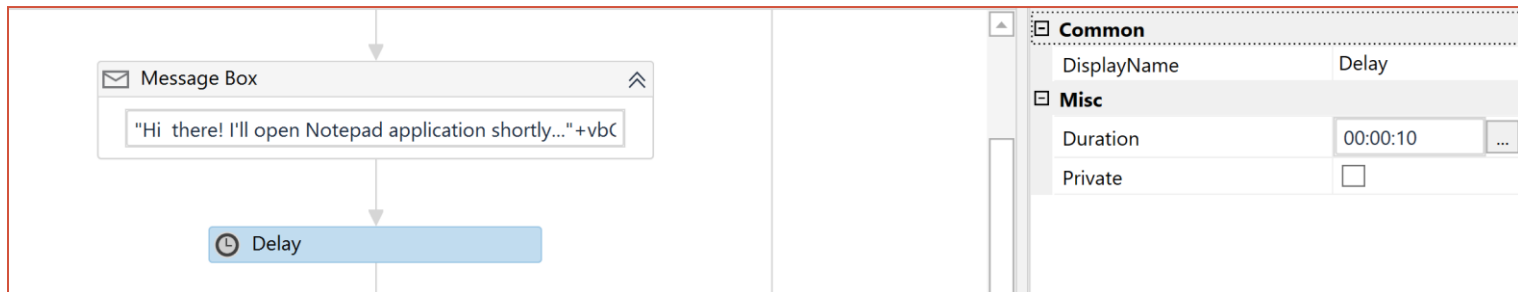**Delay**   **Break**   **Assign**   **Continue**   **Parallel**

see **Demo10 – RelatedControlFlow**
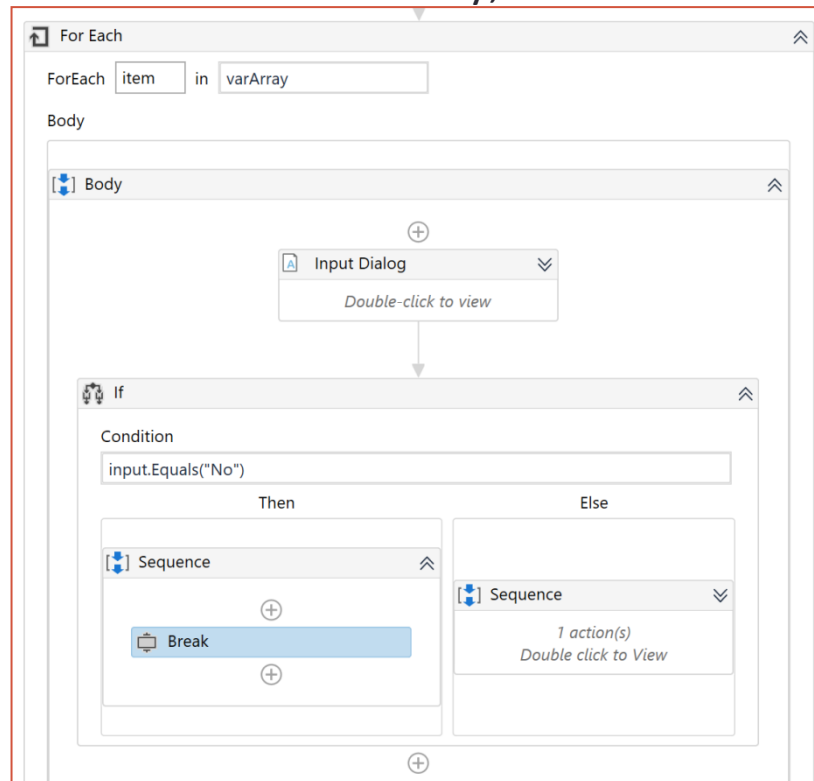
Delay Activity. Details

- **Delay** activity:
  - *pauses* the automation for a <u>custom period</u>;
- it is useful in projects that require ***good timing***, such as:
  - waiting for a specific application to start *or*
  - waiting for some information to be processed so that it can be used in another activity.

- the duration can be set from the **Properties Panel**:
  - **Duration** property = hh:mm:ss format.

see **Demo10 – RelatedControlFlow**
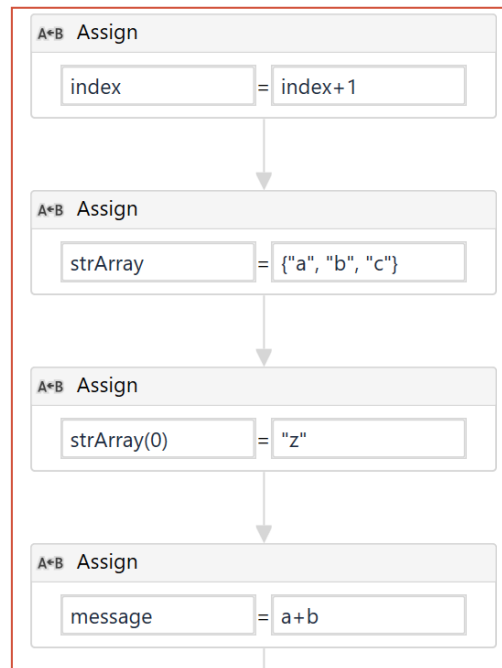
Break Activity. Details

- **Break** activity:
  - *stops* the loop at a chosen point, and then continues with the <u>next activity</u>;
  - can be used with **For Each** activities only;

see **Demo10 – RelatedControlFlow**
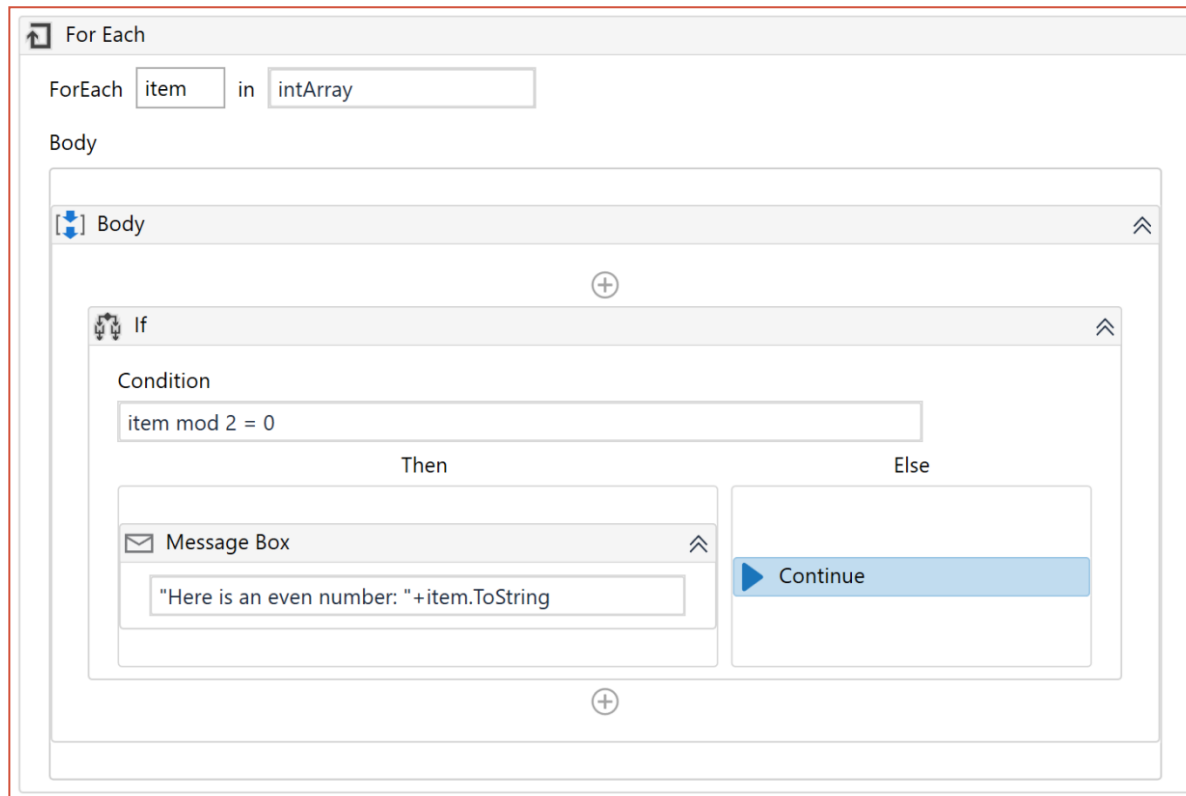
Assign Activity. Details

- **Assign** activity:
  - associate a **value** to a <u>variable</u> or <u>argument</u>;
- as a control flow activity, it can be used to:
  - increment the value of a variable in a loop;
  - sum up the value of two or more variables and assign the result to a different variable;
  - assign values to an array.

A·B Assign	
index	= index+1

A·B Assign	
strArray	= {"a", "b", "c"}

A·B Assign	
strArray(0)	= "z"

A·B Assign	
message	= a+b

see **Demo10 – RelatedControlFlow**

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Continue Activity. Details

- **Continue** activity:
  - skips the current **For Each** iteration and <u>continues</u> to the next element;
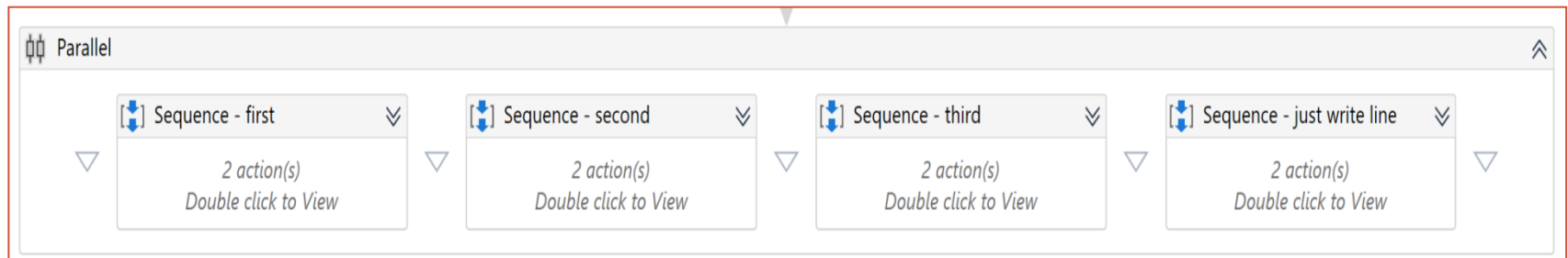 - can be used with **For Each** activities only.

see **Demo10 – RelatedControlFlow**

Parallel Activity. Details (1)

- **Parallel** activity:
  - executes child activities in parallel (side by side);
  - it is helpful when there is the need to run several processes at the same time.

- it allows the user to schedule two or more child activity branches for processing simultaneously;
- Ways to run child activities:
  - **foreground** – a single process is allowed to be run at one moment;
  - **background** - more than one process at the same time;
- the user has to choose a single activity branch to run in the *foreground*, and remaining activity branches have to run in the *background*, by using **SendWindowMessages** and/or **SimulateType** property of the employed activities.

see **Demo10 – RelatedControlFlow**

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Parallel Activity. Details (2)

- **Parallel** activity:
  - run in foreground:
    - if **SendWindowMessages** or **SimulateType** is not used;
    - it begins to process *one activity* branch at a time; when it completes one activity branch, and then ***randomly*** picks another activity branch.

see **Demo10 – RelatedControlFlow**

References

- UiPath Docs
  - https://docs.uipath.com/studio/docs/introduction
- UiPath Forum
  - https://forum.uipath.com/
- UiPath Academy
  - https://academy.uipath.com/