# LECTURE 03. RELATED CONTROL FLOW ACTIVITIES

**Robotic Process Automation**
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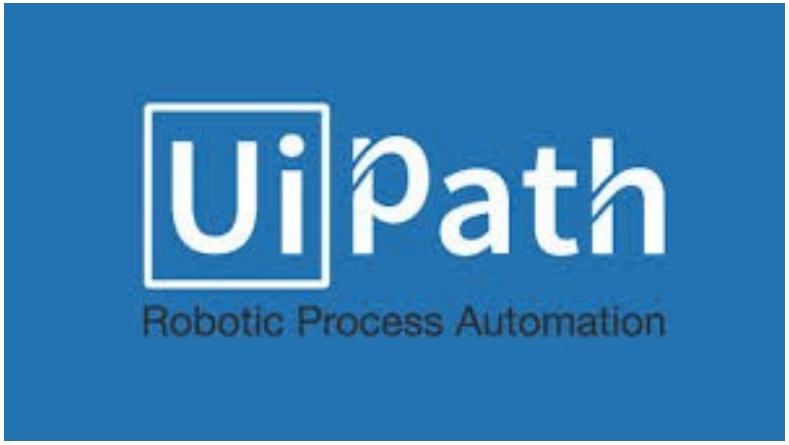
# Acknowledgements

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:


*see* **Demo10 – RelatedControlFlow**

# Delay Activity. Details

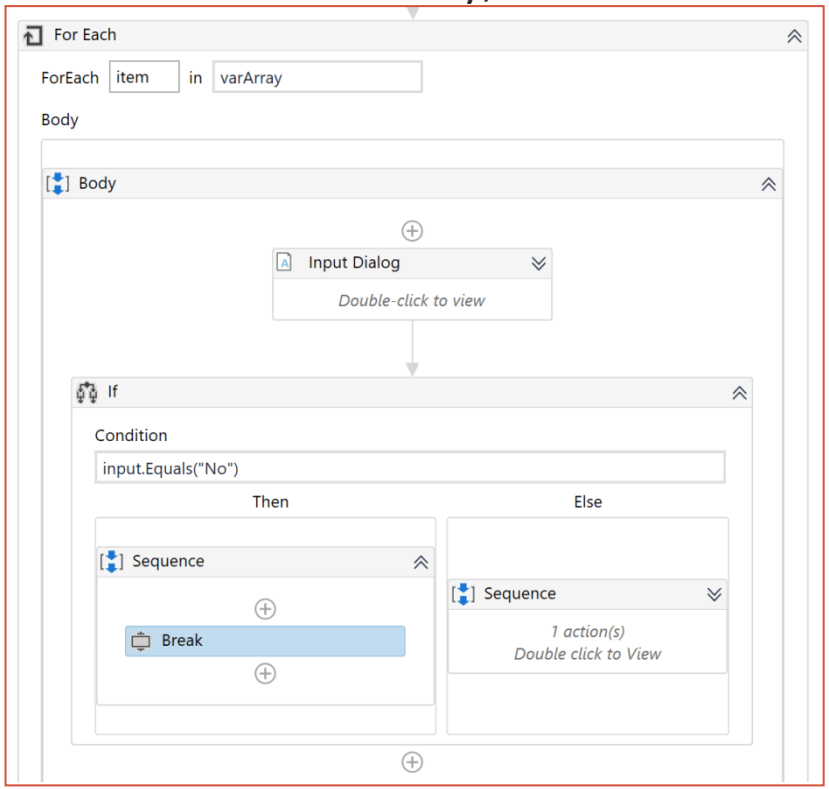
- **Delay** activity:
  - *pauses* the automation for a custom period;
- it is useful in projects that require ***good timing***, such as:
  - waiting for a specific application to start *or*
  - waiting for some information to be processed so that it can be used in another activity.

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


*see* **Demo10 – RelatedControlFlow**

# Break Activity. Details

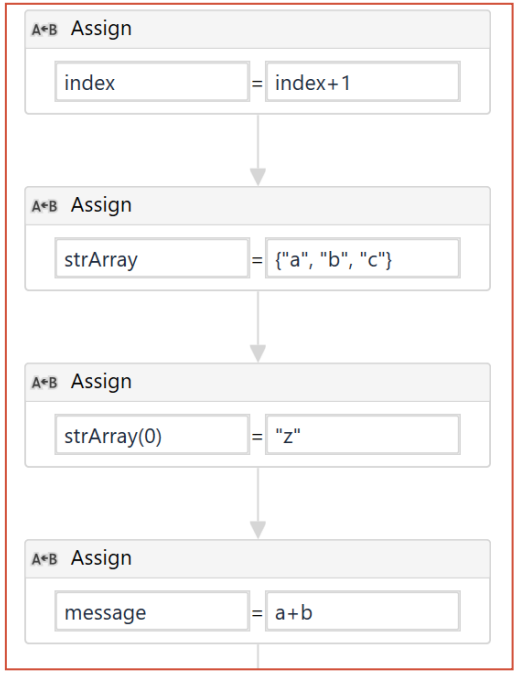
- **Break** activity:
  - *stops* the loop at a chosen point, and then continues with the next activity;
  - can be used with **For Each** activities only;




*see* **Demo10 – RelatedControlFlow**

# Assign Activity. Details

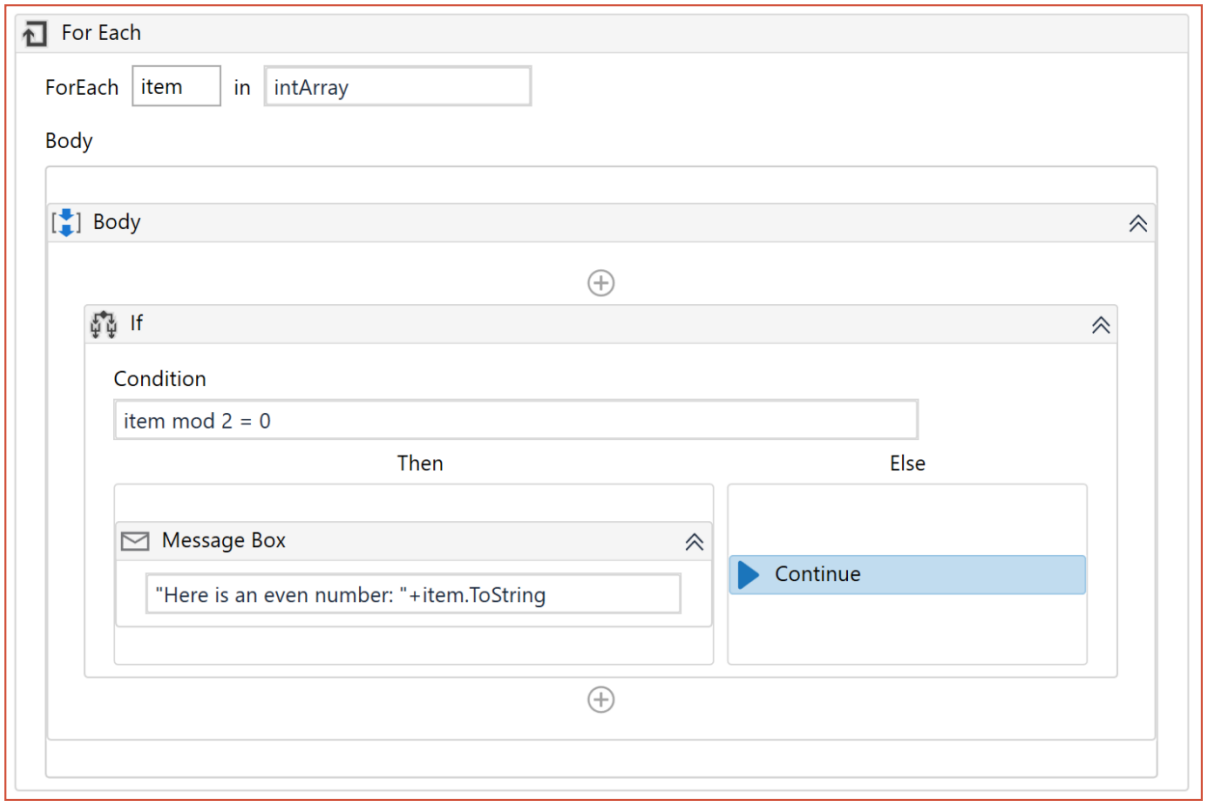
- **Assign** activity:
  - associate a **value** to a variable or argument;
- as a control flow activity, it can be used to:
  - increment the value of a variable in a loop;
  - sum up the value of two or more variables and assign the result to a different variable;
  - assign values to an array.




*see* **Demo10 – RelatedControlFlow**

# Continue Activity. Details

- **Continue** activity:
  - skips the current **For Each** iteration and continues 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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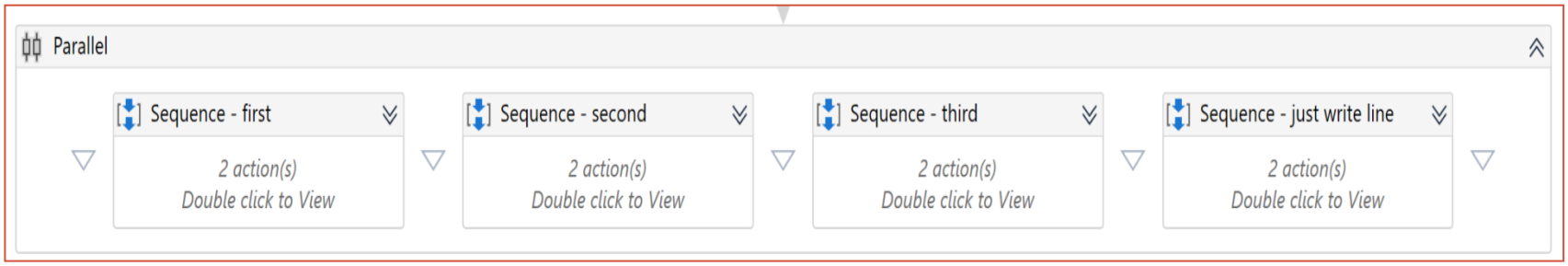
# Parallel Activity. Details (2)

- **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/
- UiPath Studio Docs - https://docs.uipath.com/studio/standalone/2023.4
- UiPath Forum - https://forum.uipath.com/
- UiPath Academy - https://academy.uipath.com/