Capgemini

Robotic Process Automation

Using UI Path

Apps NA – CSDM – TCG Chennai

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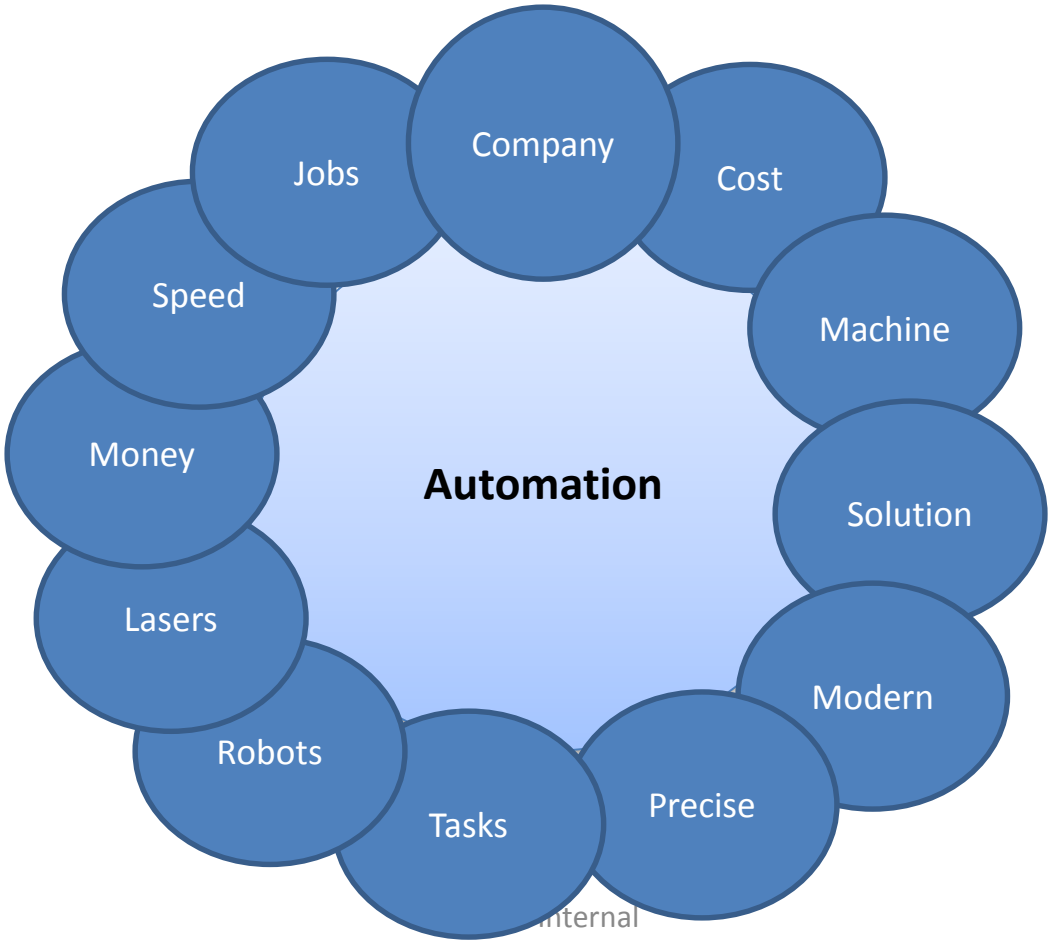
Overview about UIPath

What is Automation

Automation can be defined as the technology by which a process or procedure is performed without human assistance



What is RPA ?

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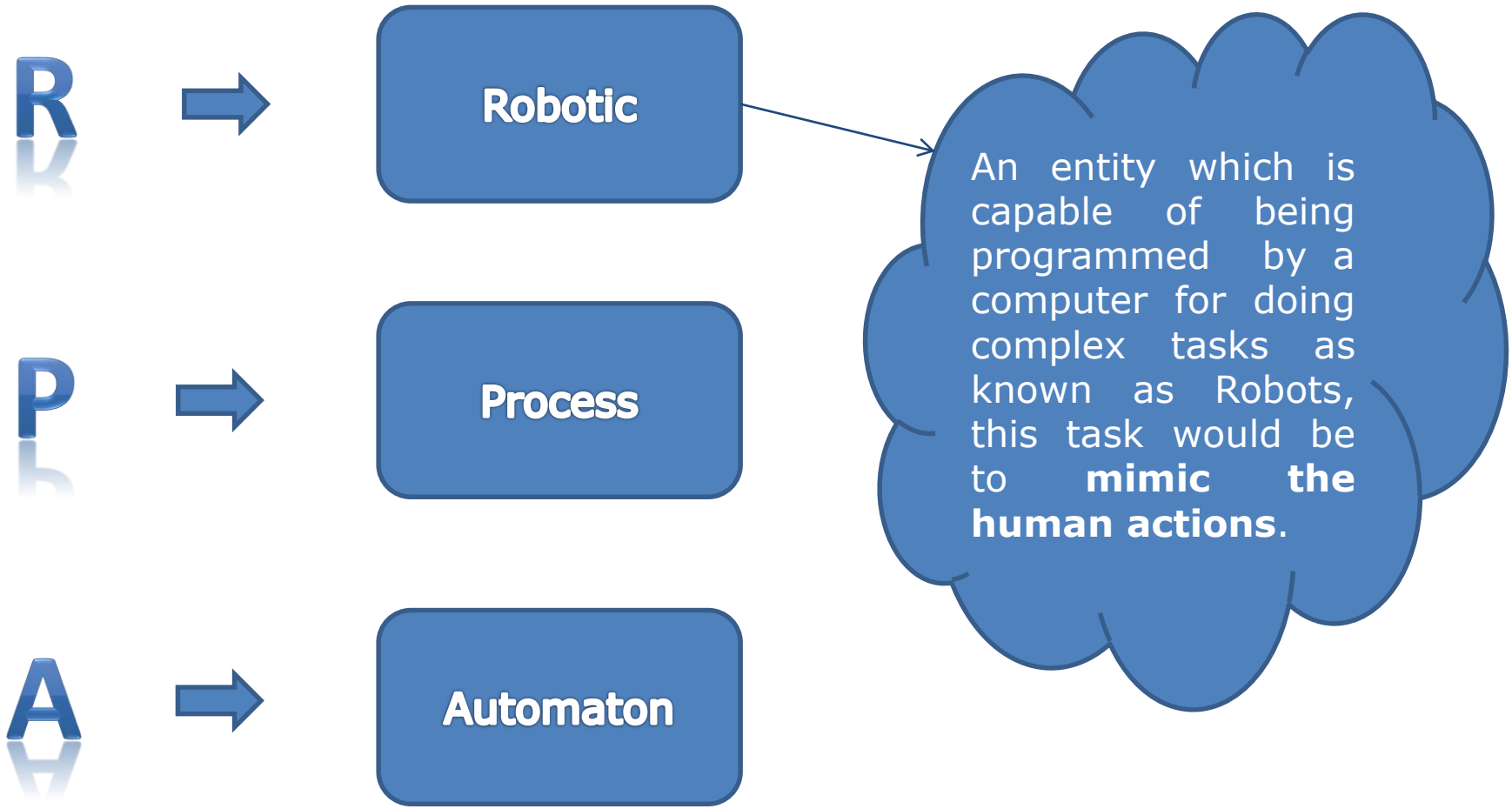
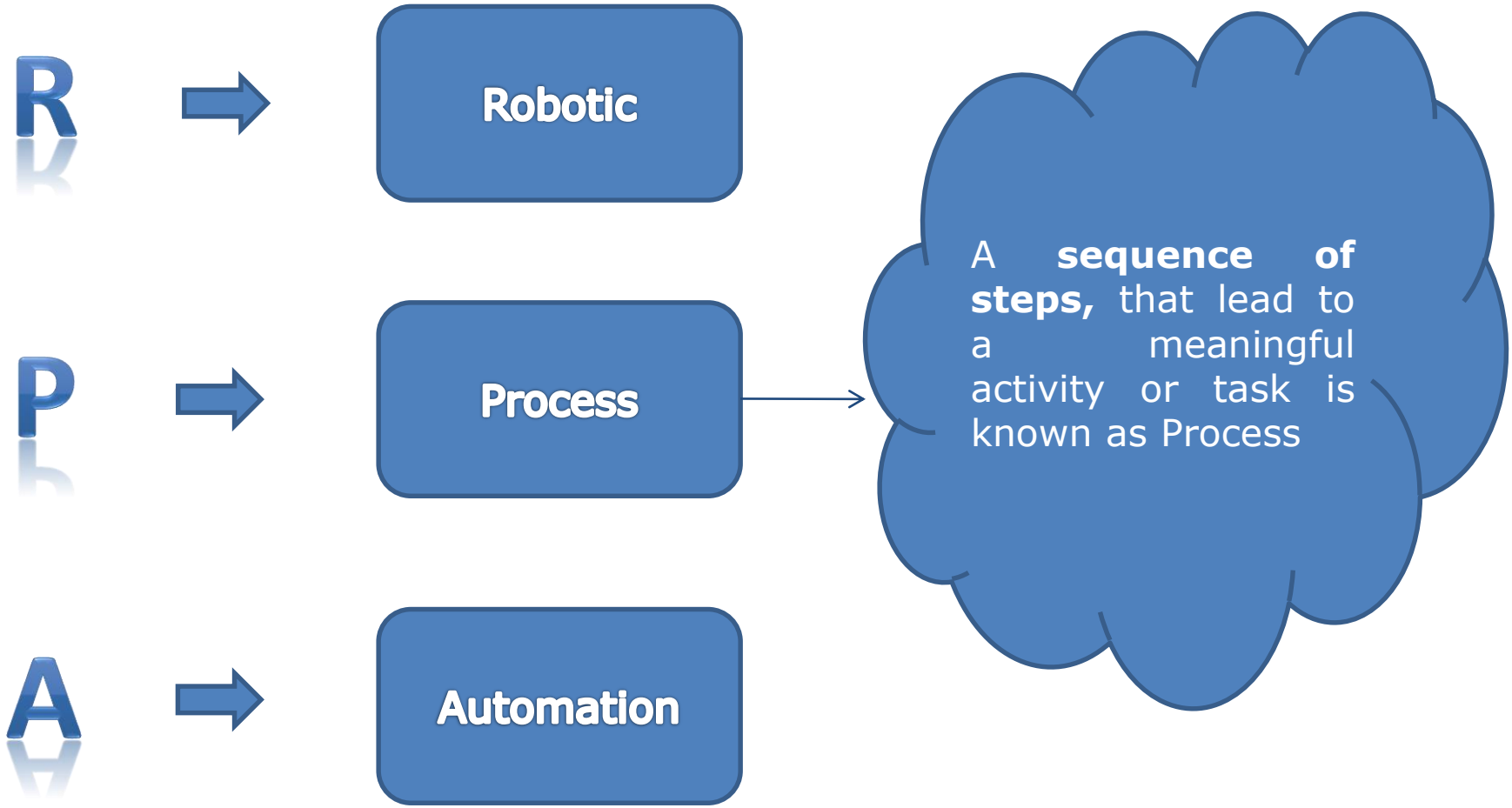
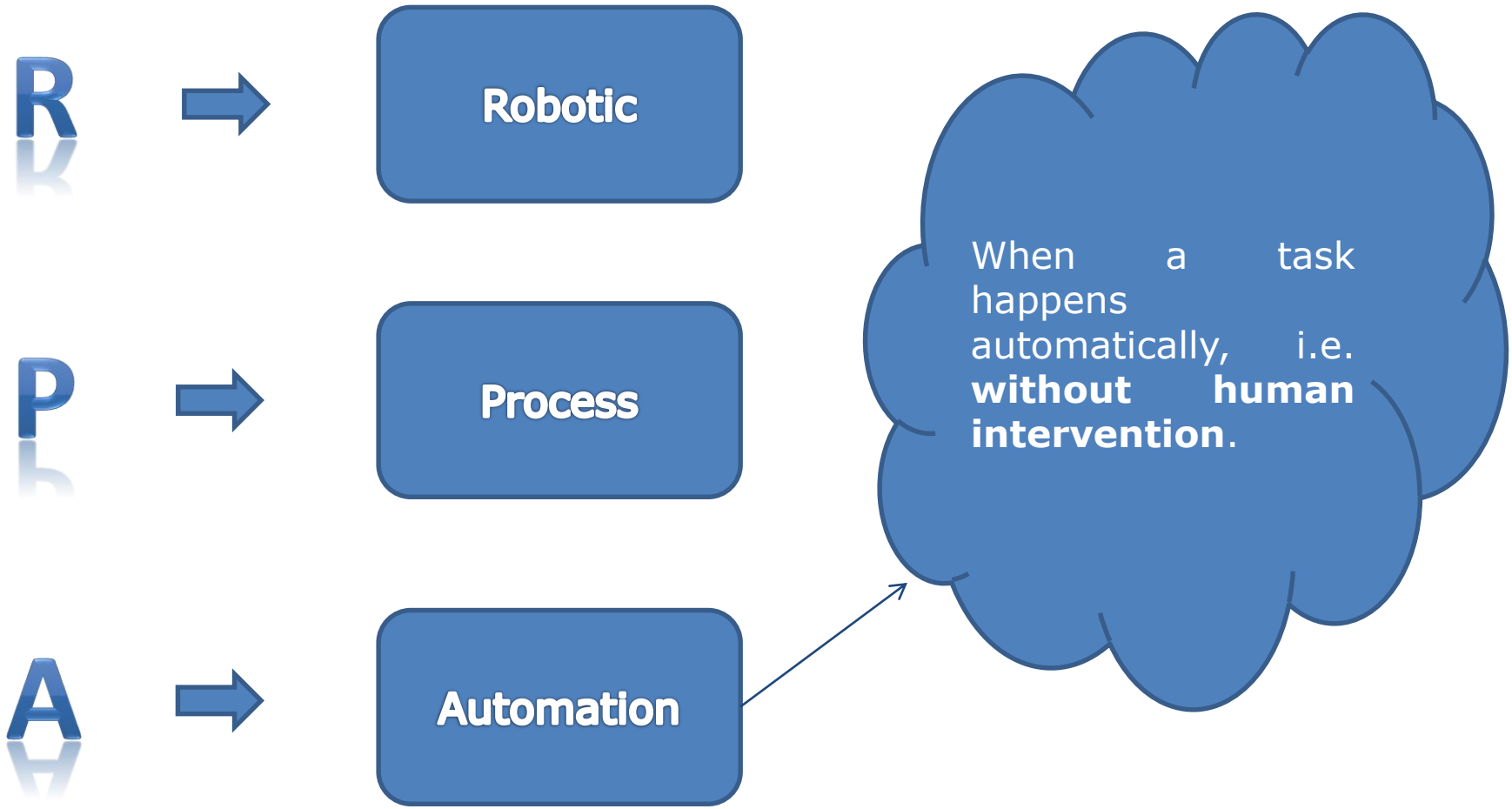

R
Robotic
P
Process
A
Automaton
An entity which is capable of being programmed by a computer for doing complex tasks as known as Robots, this task would be to **mimic the human actions**.

What is RPA ?


R
Robotic
P
Process
A
Automation
A sequence of steps, that lead to a meaningful activity or task is known as Process

What is RPA ?



Traditional Automation Vs RPA

Traditional Automation

- Traditional automation is primarily based on programming and relies on APIs.
- Requires complex integration.
- Rolls out slower.
- Cost is more.
- Automation can not be personalized.

RPA

- RPA on the other hand mimics the actions of a user at the User Interface level.
- Requires no complex integration
- Rolls out faster.
- Cost is less.
- One of the key benefit of an RPA automation can be that it can be personalized for a particular user. For e.g. the robot can read an email, extract information , do something and reply back to the email.

Introduction to UIPath

UiPath Studio - an advanced tool that enables you to design automation processes in a visual manner, through diagrams.

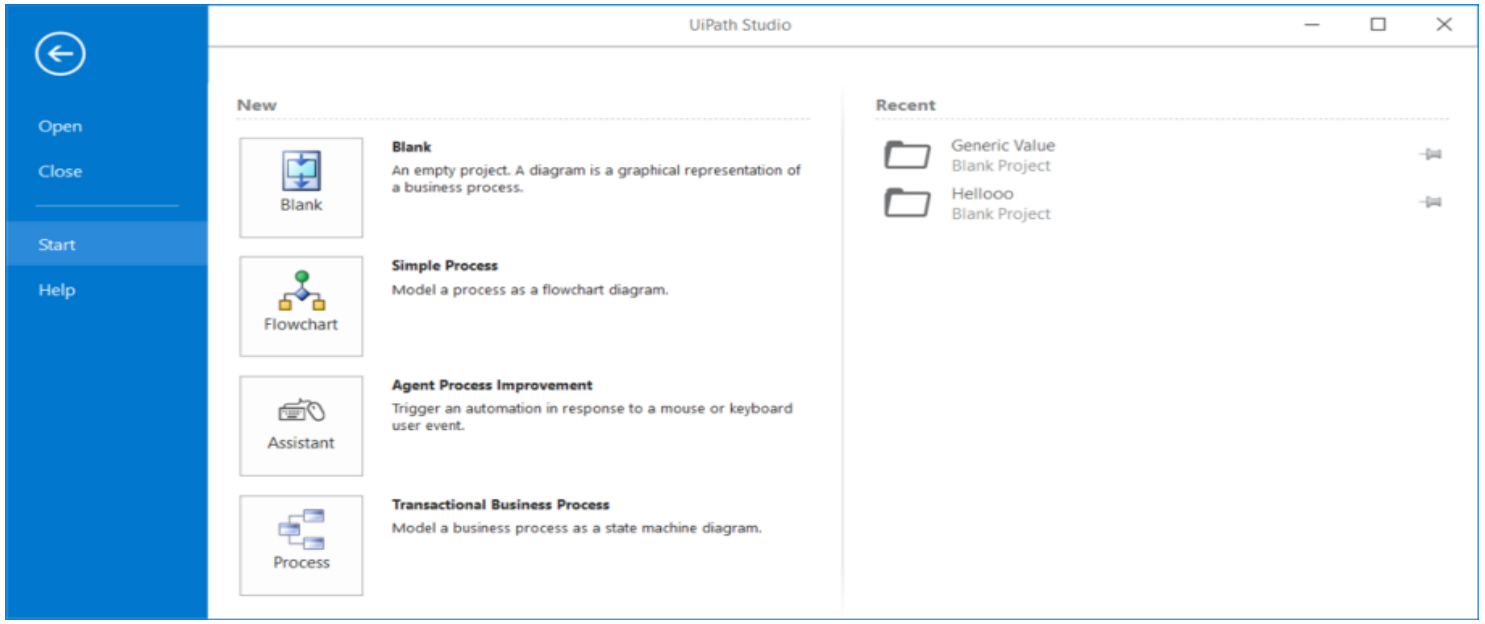
UiPath Robot - executes the processes built in Studio, as a human would. Robots can work **unattended** (run without human supervision in any environment, be it virtual or not) or as **assistants** (a human triggers the process).

UiPath Orchestrator - a web application that enables you to deploy, schedule, monitor and manage Robots and processes, while business exception handling is available through centralized work queues.

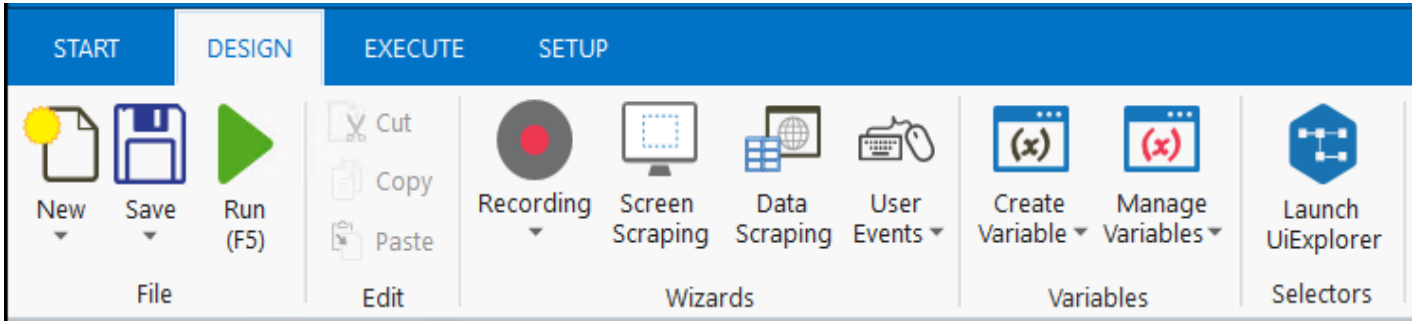
The User Interface Of UIPath

The Ribbon - The ribbon is straightforward and can be minimized or expanded by clicking the **Minimize / Expand** button . It consists of the following four tabs:

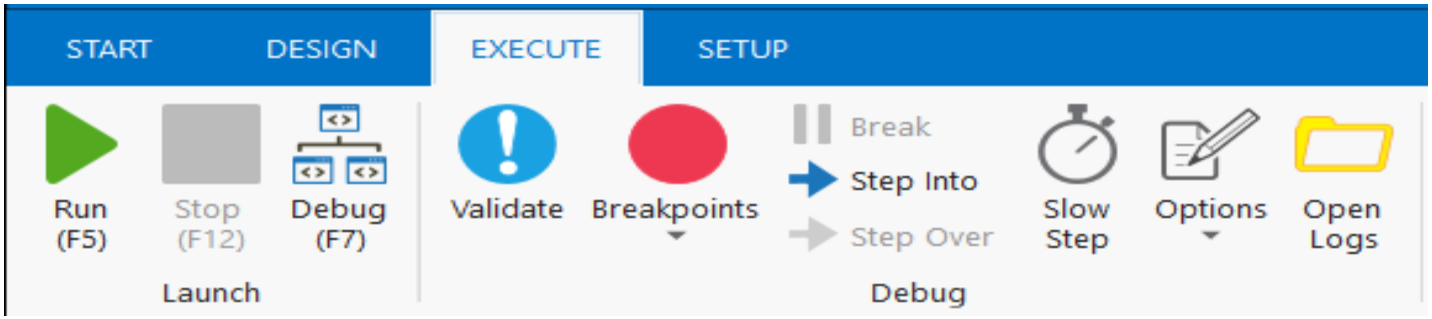
- Start



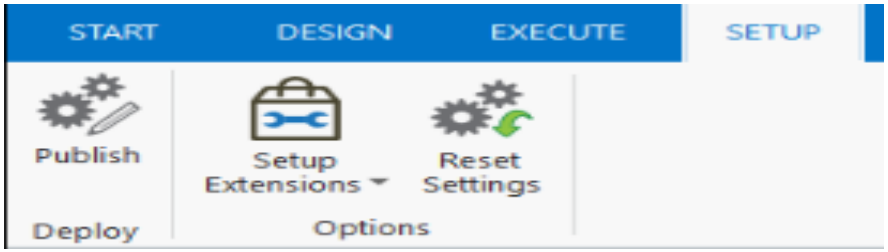
- Design



- Execute



- Setup



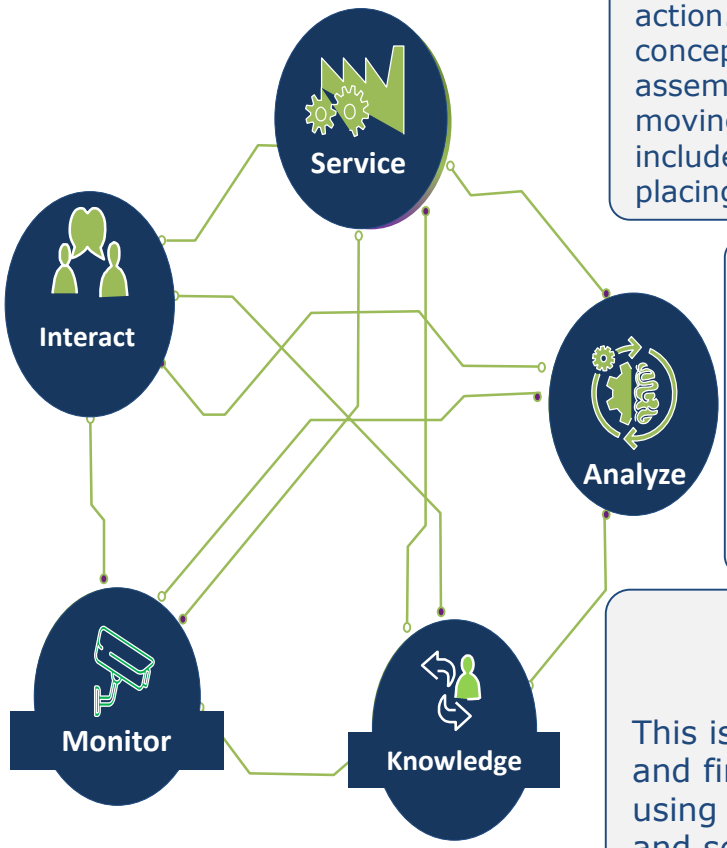
Capgemini Automation Framework

Act

This area uses technology to take action. We are used to the concept of Robots working on an assembly line and now they are moving into the office. Examples include resetting a password and placing a customer order.

Listen/Talk

The ability to listen, read, talk, write and respond to users of the IA solution. The aim here is for technology to ensure that the interaction feels intuitive and the customer is happy. Examples in this space include chatbots and voicebots.



Think

This the ability to detect patterns and recognise trends. It applies algorithms to knowledge to determine appropriate action or predict future consequences.

Watch

Here technology is used to watch and record key business data. It is used to create knowledge. This would include CCTV and IoT sensors.

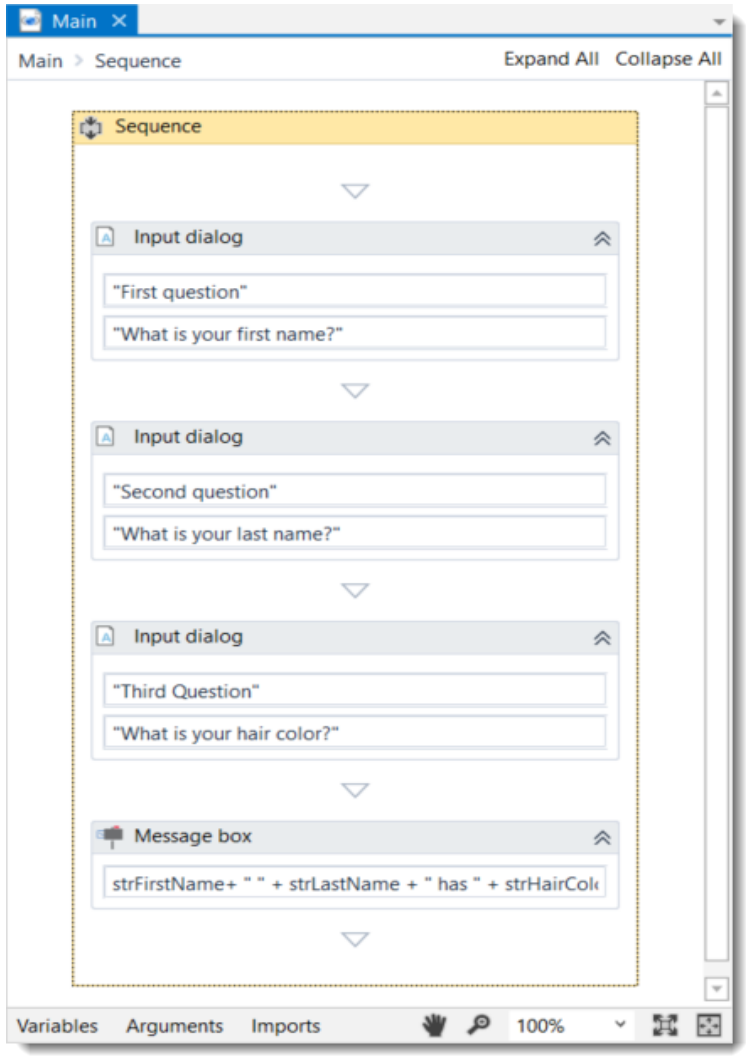
Remember

This is about being able to store and find information effectively using components like databases and search engines. This is probably the least developed area within corporations, but examples include Wikipedia and employee's hard drives.

Variables, Data Types, Control Flows & Data Manipulation

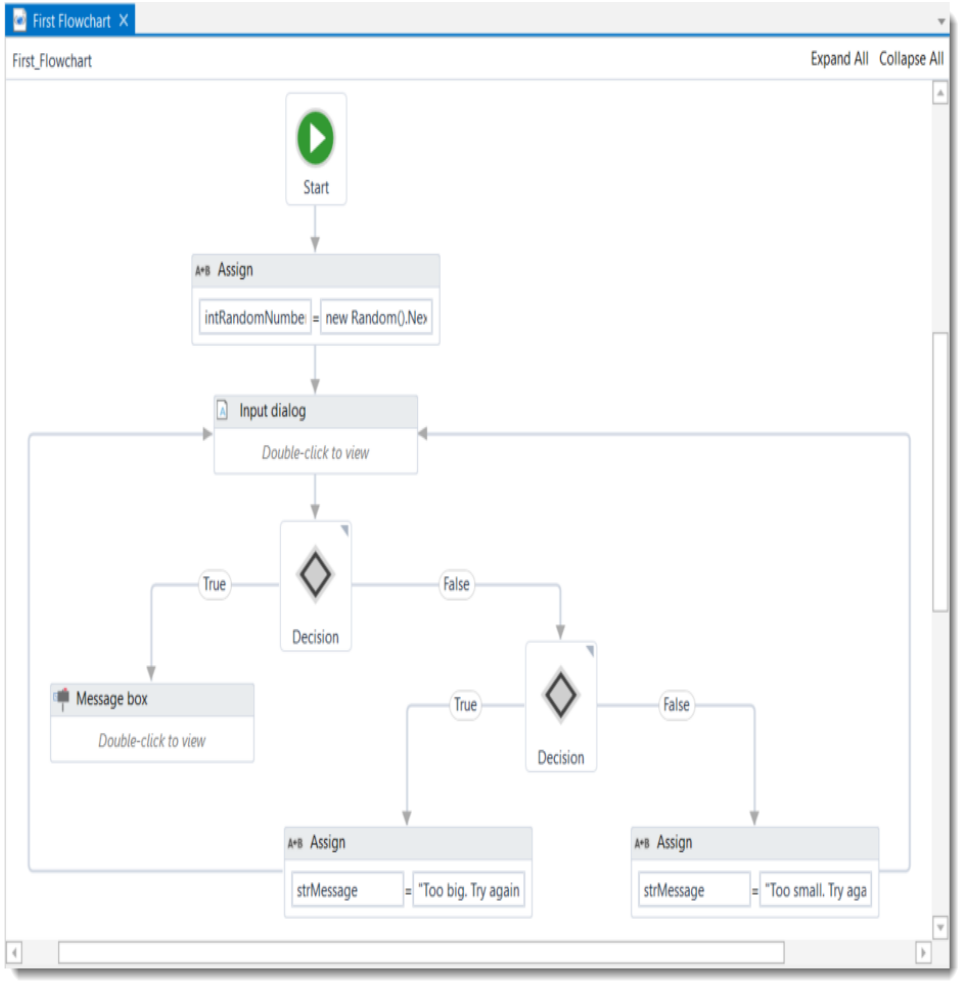
Sequences

- Sequences are the smallest type of project. They are suitable to linear processes as they enable you to go from one activity to another seamlessly, and act as a single block activity
- One of the key features of sequences is that they can be reused time and again, as a standalone automation
- For example, you can create a sequence to take information from a .pdf file and add it to a spreadsheet, and reuse it in a different setting, while changing just a few properties.



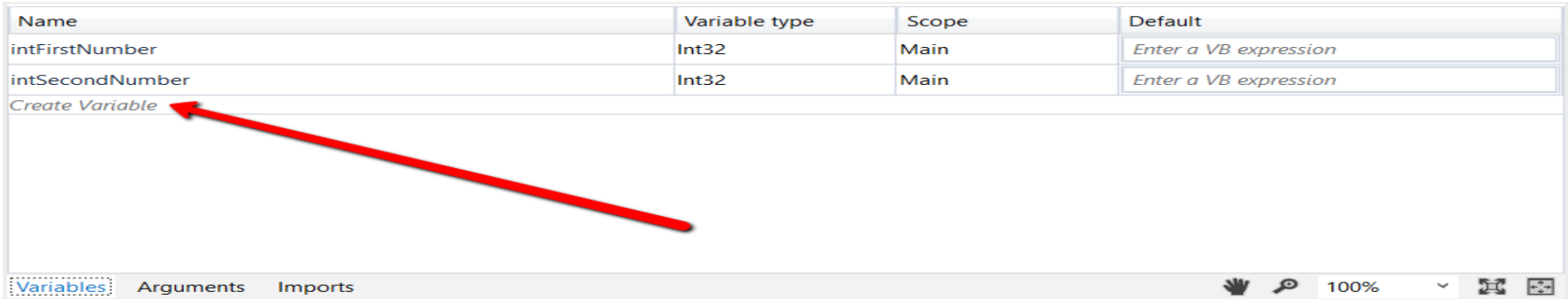
Flowcharts

- Flowcharts can be used in a variety of settings, from large jobs to small projects that you can reuse in other projects
- The most important aspect of flowcharts is that, unlike sequences, they present multiple branching logical operators, that enable you to create complex business processes and connect activities in multiple ways.

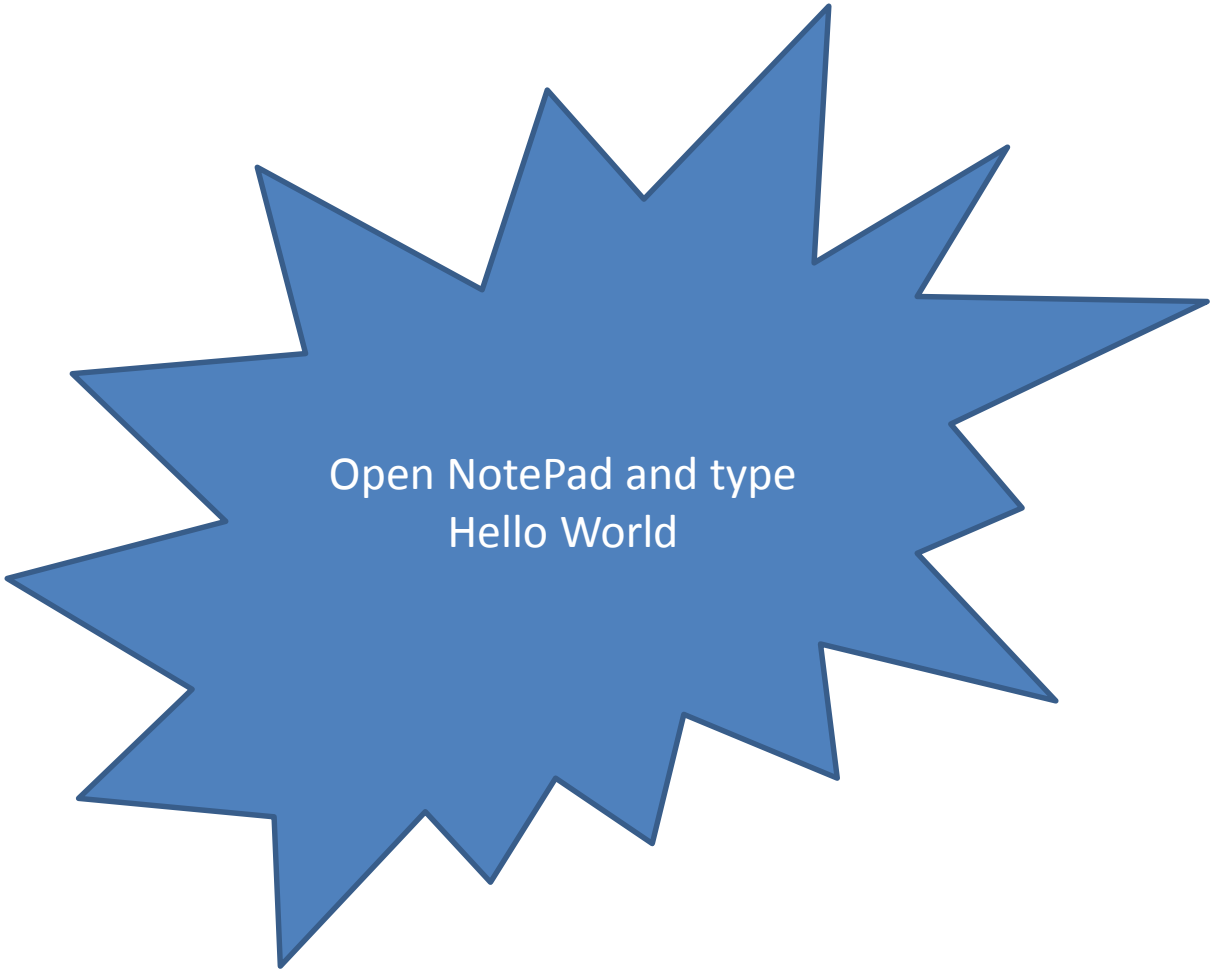


Variables

- variables are used to store multiples type of data. Another key aspect of variables is that their value can change
- In UiPath, we support a large amount of types, ranging from generic value, text, number, data table, time and date, UiElements to any .Net variable type.
- Trim(), Replace(), Substr and many more String Operations.



Build Robot using the learnings

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