Web-Application-Automation

Implemented as a part of RPA-Build-A-Thon

Prepared by

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1. Introduction

A robot is a machine that mimics the human user in performing various tasks, such as clicks, navigations, typing, etc. Sequence of meaningful activities that may involve multiple systems or applications make up a process. Automation is the sequence of steps which are performed without any human interference (once configured).

Robotic Process Automation

Robotic process automation (RPA) allows using software robots instead of people to drive the business. It is used to automate regular tasks so the user can concentrate on accomplishing complex tasks rather than routine work manually. This would in turn reduce the human errors.

2. Proposed Solution :

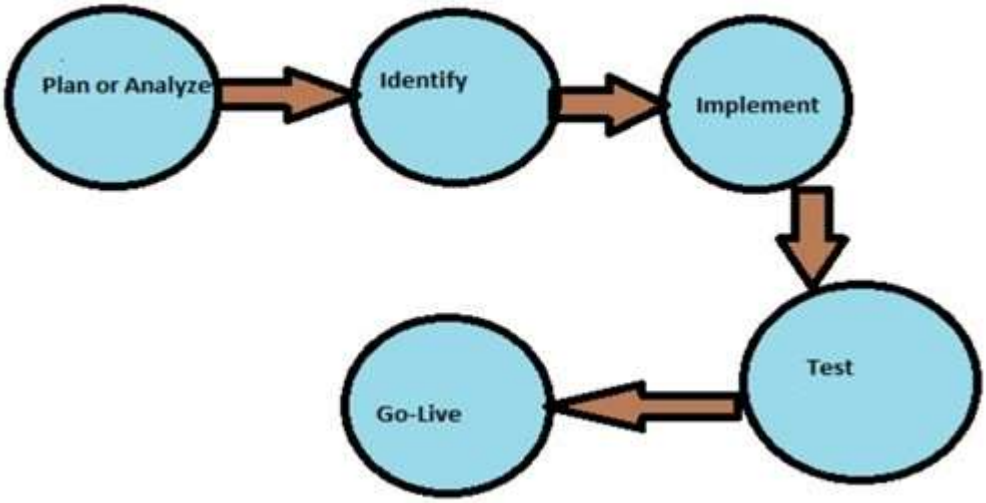
Project Description:

In this project , we will build an process to automate an currency converter web application using blue prism. The excepted outcome of this project are

- Should launch the web application
- Should able to take the values automatically from the Excel Sheet
- Should be able to store the values back to the excel in the result column

Tool to be used: Blue Prism

3. Block Diagram:



3.1 Life Cycle of RPA

Analyze and Identify

Step one of RPA life cycle is to analyze a business problem for RPA development. This is usually done by business analysts and RPA architects. Processes which can be automated are identified, timelines for the development are decided, approach is documented, and approval is obtained from stakeholders to start the development.

Implement

RPA developers work on the requirements in development environment to automate the manual processes. Development is done in wizard and these is a limited requirement to perform coding in developing the bots.

Testing

In this phase, bots are tested to evaluate the quality and to correct errors if any.

Go Live

After the bot is tested thoroughly, it would be deployed into the live environment where users start using it. It enters maintenance phase where support and change requests for the bot are entertained and defects are fixed with immediate effect.

3.2 Hardware and Software Designing

Blue prism is a UK-Based Software Company and is one of the leading robotic process automation tools. It is used to automate mundane tasks such that they could operate without any manual intervention. Blue prism has gained edge over its competitors as it has better security, flexibility, scalability, compliance, and resilience.

Pre-requirements for Blue Prism

The following are the pre-requisites for the Blue Prism. It is the only software which −

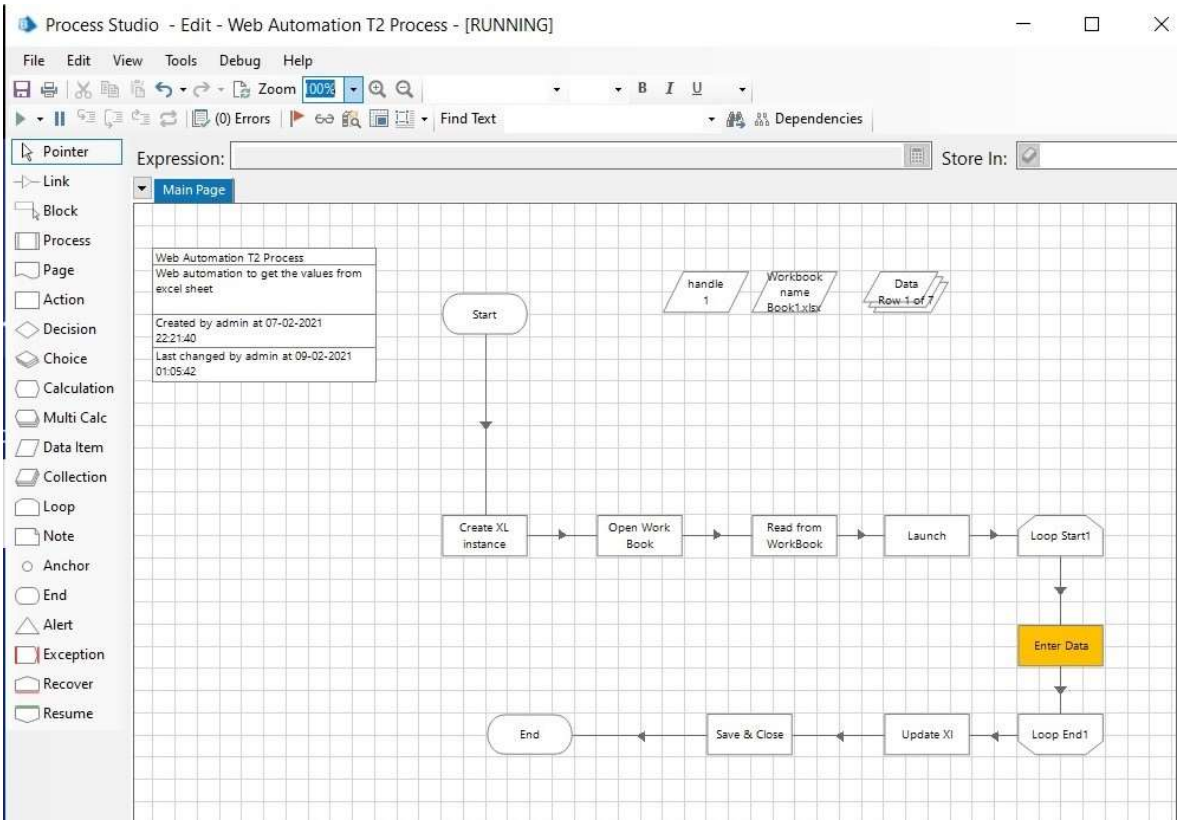
- Creates and supports a digital workforce of industrial strength and enterprise scale
- Does not require IT skills to implement
- Can be implemented in sprints of 4 to 8 weeks (Start to finish)
- Is very low cost compared to the TCO of alternative solutions
- Provides tremendous payback with self-funding returns and an ROI that has been as high as 80%
- Can be managed within IT infrastructure and processes

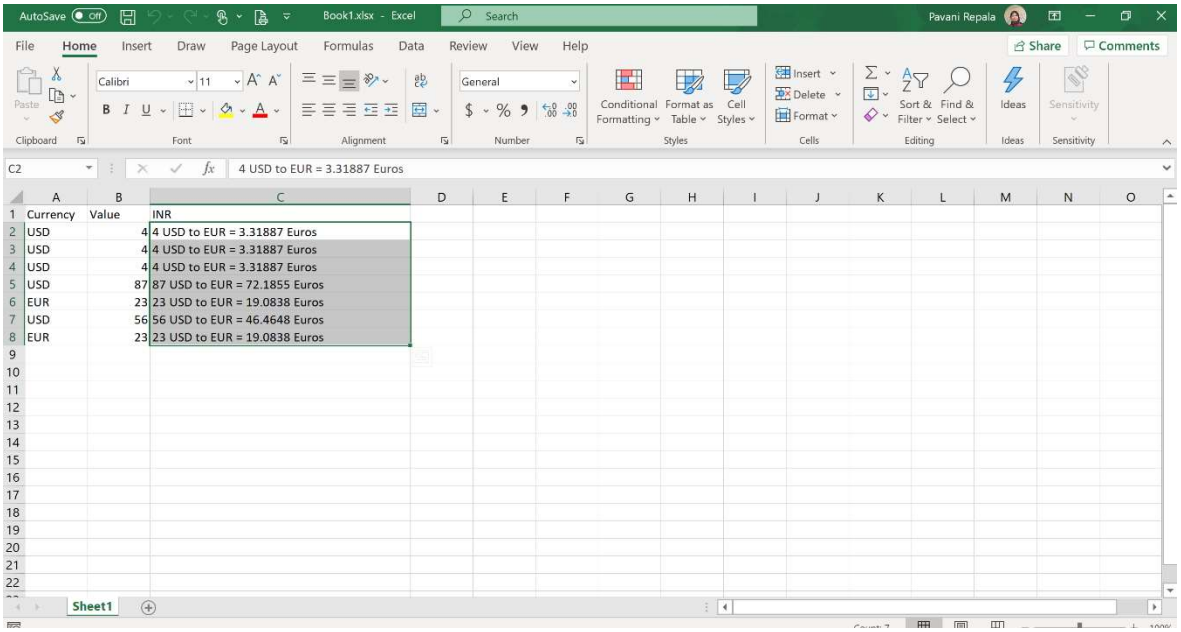
Installation of Blue Prism

The following are the installation requirements for Blue Prism −

- Windows 10 (Preferred) OS, 64 bit
- Blue prism installation Software, 64 bit
- Blue Prism License File
- SQL Server Express Edition, 64

4. Experimental Results:





5. Advantages and Disadvantages

RPA Benefits

The following are the advantages of RPA −

Building a unified view of the customer

Increased customer satisfaction

Increased employee productivity

More accuracy and quality

Cost effective

Up to 80% reduction in AHT (Average Handle Time)

Up to 90% reduction in ART (Average Resolution Time)

Increased ROI (Return on Investment) within 3 months on an average.

6.Applications

1. **Dual data entry scenarios**

Data manually entered in one system need not be reentered into another system. RPA replaces such dual human effort since invoices are indexed in the workflow and then manually reentered in ERP.

2. **Straight-through processing**

Inputs arriving from various systems such as web pages for customer orders, workflow for invoices, emails or excel files must be entered into ERP. However, if the input is clean and the rules are well laid out that data entry can be done through RPA.

3. **Virtual integration between different systems**

Standalone, Legacy, ERP or workflow systems often do not communicate with one another and integrating them would cost millions of dollars and precious IT time, RPA can provide light weight integration connecting disparate systems at the user interface level.

4. **Responding to data extraction and responding requests**

When data and report requests come from multiple process owners, vendors, and even end customers, employees log into a system to extract the data, format it, and send an email to the requestor. RPA lends itself well to such rule-based tasks.

5. **Rule based decision making**

RPA can execute decision-based tasks provided the rules driving those decisions are well laid out. For instance, on an invoice coming from a utility vendor, RPA can change payment terms to "immediate" from whatever is on the invoice.

7. Conclusion

The web application automation project successfully implemented using Blueprism automation tool. Also learn the process studio, object studio,application modeller and various tools available in Blueprism.

8. Future Scope

We have used the robotic process automation (RPA) in various business sectors to improve the business growth. Robotic process automation (RPA) allows using software robots instead of people to drive the business. It is used to automate regular tasks so the user can concentrate on accomplishing complex tasks rather than routine work manually. This would in turn reduce the human errors.