Project Report on

Web Application Automation

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This project is done under the Guidance of **Mr.Hemanth Kumar Gahlot**

Robotic Process automation:

- **Robotic Process Automation** (RPA) is a type of automation technology currently transforming the way businesses operates.

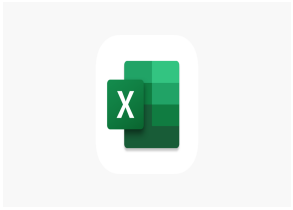
Blue Prism:

Blue Prism is the trading name of the **Blue Prism Group**, a UK multinational software corporation that pioneered and makes enterprise robotic process automation (RPA) software that provides a digital workforce designed to automate complex, end-to-end operational activities.

Tools used for the Web Application:

- The tool used for this project is Blue Prism.

- The application used for this project is Microsoft Excel and we perform the task Currency Converter.



- A **Currency converter** is an app or web tool that allows for the quick conversion of any currency into any other currency.

Web Application Automation:

INTRODUCTION

Overview:

Web automation tools allow you to optimize and automate a lot of processes that almost every office employee must perform from time to time.

Automating these web tasks can allow you to spend time on more valuable work and outsource the tedious parts to bots. Let's see how you can use RPA tools for web automation and what practices to apply to ensure success.

- When it comes to web automation, there are several common approaches, depending on the task, the resource you need to automate and your coding skills (or lack thereof). In this post, we will focus on the codeless automation capabilities, which don't require any programming skills and are available for business users who want to automate their web tasks.

Imagine if each action and operation listed below was a building block that you could connect to make up visual workflows representing web-based processes.

- Operating browsers to navigate the web
- Interacting with web elements, both static and dynamic
- Inputting/outputting data, text, and numbers

Purpose of Web Automation:

- People use their browsers to access information and perform a wide variety of tasks. Browser automation tools can automate your Web browser to perform repetitive and error-prone tasks, such as filling out long HTML forms. Various skill levels will need to be accommodated by the automation tool.

By Using Web applicatio Automation,we can easily browse the required application by just creating a code that will take us directly to the application we want to search.

So, by

The Achievements that can be obtained from this project are:

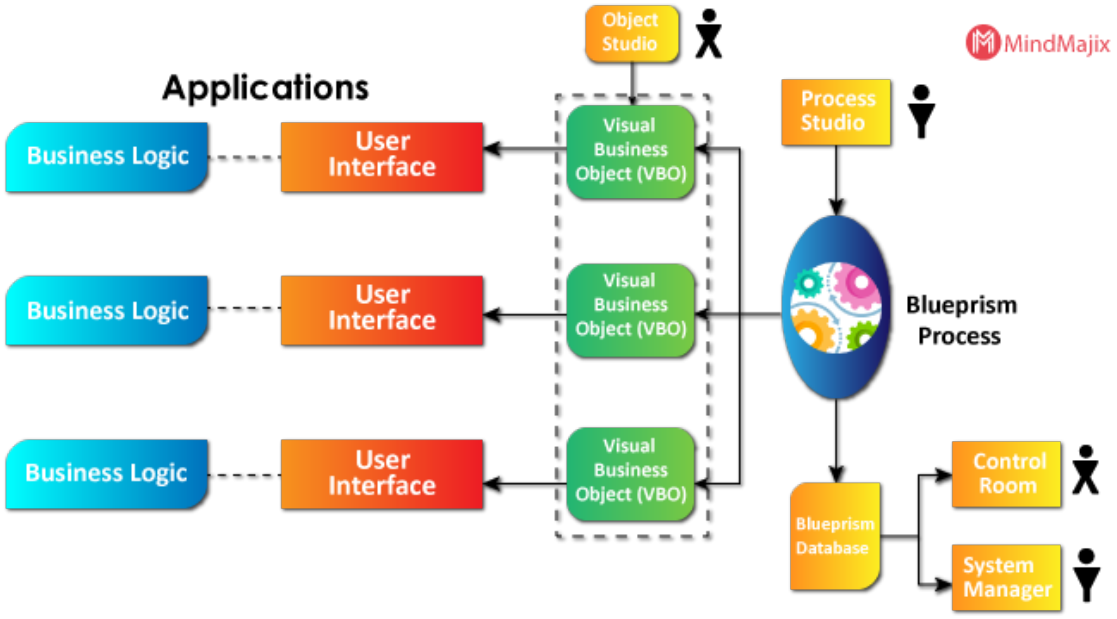
- Filling in online forms.
- Scraping data from web pages.
- Generating and downloading online reports.

- Checking information online.

Finally by using Web Automation we are able to convert one currency to another currency.

THEORITICAL ANALYSIS

Block diagram:



The Given Image is the block diagram of a Currency converter.Here we use a Process Studio and an Object studio for the Project.

Hardware/Software Designing

The softwares used are:

- Installation and Setup Guide for Blue Prism
- Installation and Setup Guide for MS Excel

- Blue prism Version: 6.10.1
- Blue prism License File
- Blue prism installation Software 64 bit
- MS Excel
- Windows 10

Experimental Investigations

In this Experiment,we will need an object studio and a process studio.
In the object we first work on launching the **Currency conveter** application starting from Launch,From,To,Button,Result and Terminte.Which means we frst open the Appliction Modeller.in which we create the elements:

Launch

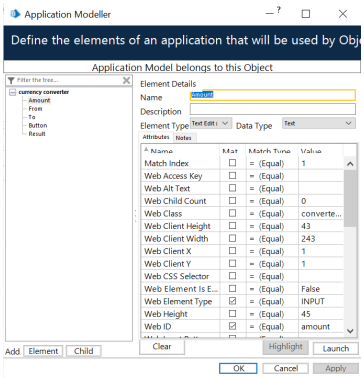
From

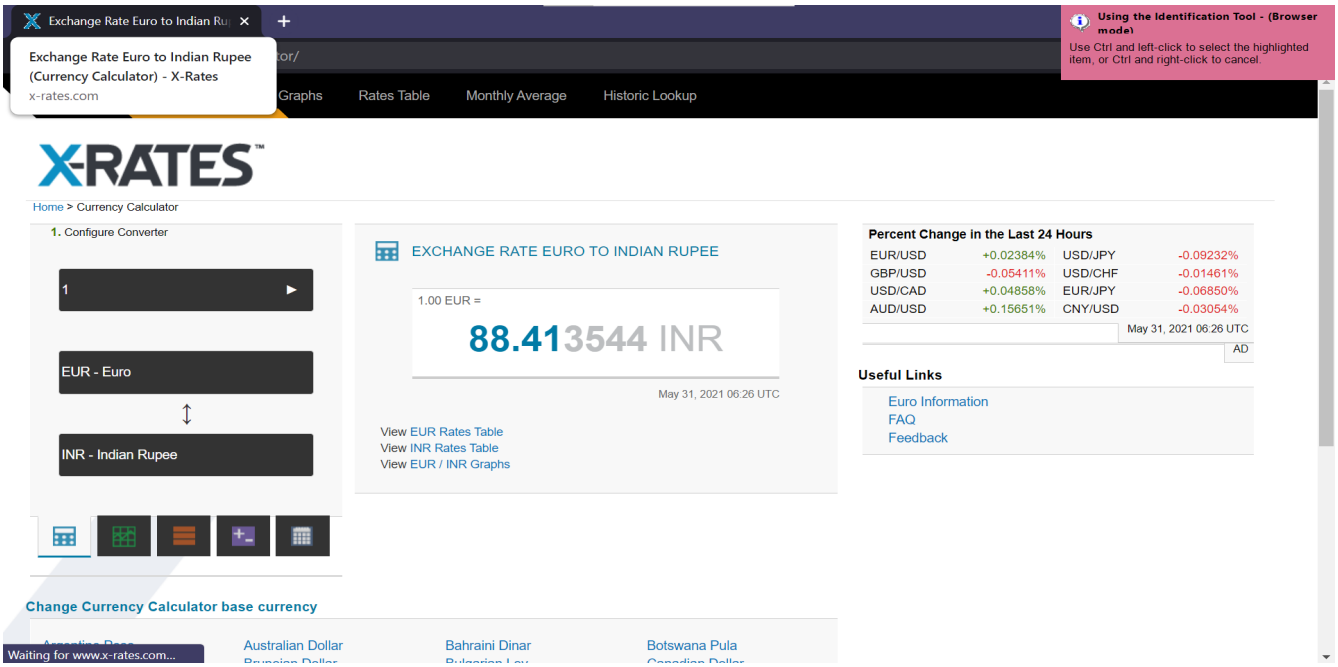
To

Button

Result

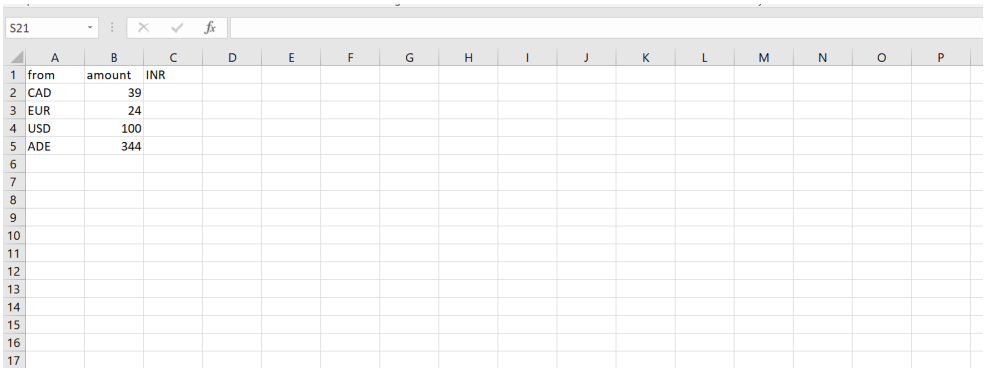
Terminate





Which means that we are **Spying** these elements using Application Modeller that is by doing that we will able to launch the Currency converter,the we can give a language and then another language to convert i.e.,**From** EUR **To** INR which means we are converting the given amount from EUR currency to INR currency and then we run the flow.After the Object is completed we move to Process studio where we complete the process of copying the currency converter to an Excel Sheet.For that we also need to create an Excel sheet,and we even add a recovery stage and an alert stage.The Recovery Stage is used whenever an Exception occurs,and the Alert Stage gives us a pop-up of whatever we give the

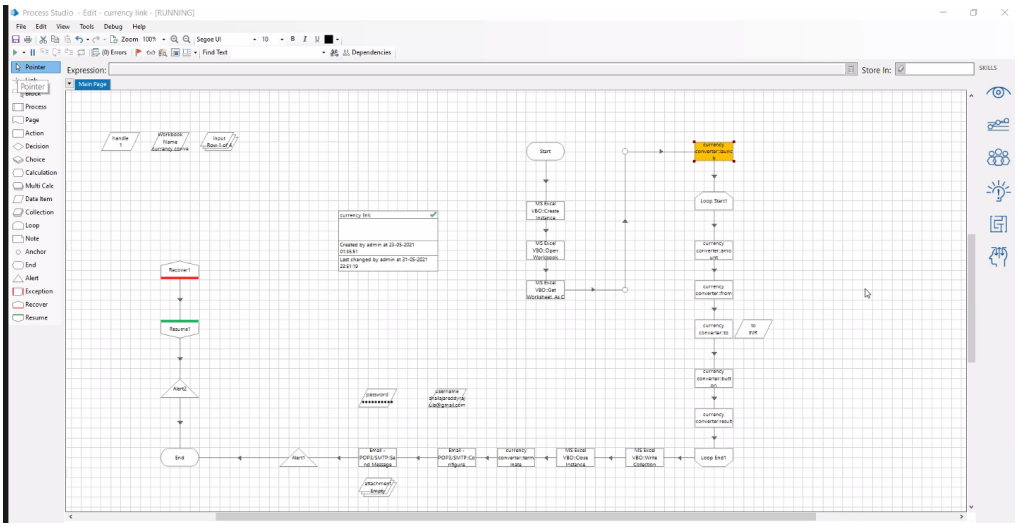
Command.



	A	B	C
1	from	amount	INR
2	CAD	39	
3	EUR	24	
4	USD	100	
5	ADE	344	

we link the Excel Sheet with the process studio and then we create the process whose result will be launching the currency converter and finding the Result and storing the values back to the Excel in the Result column.

Flow Chart



To accomplish this, we must complete all the activities and tasks listed below:

1. Configure the Process Model

    a. Import MS Excel VBO

b. Process Model binding with MS Excel VBO

2. Adding Process Stages

    a. Create Instance

    b. Open Excel file

    c. Get to collection

    d. Loop module

    e. Multi Calculation module

    f. Write collection

    g. Save Excel file

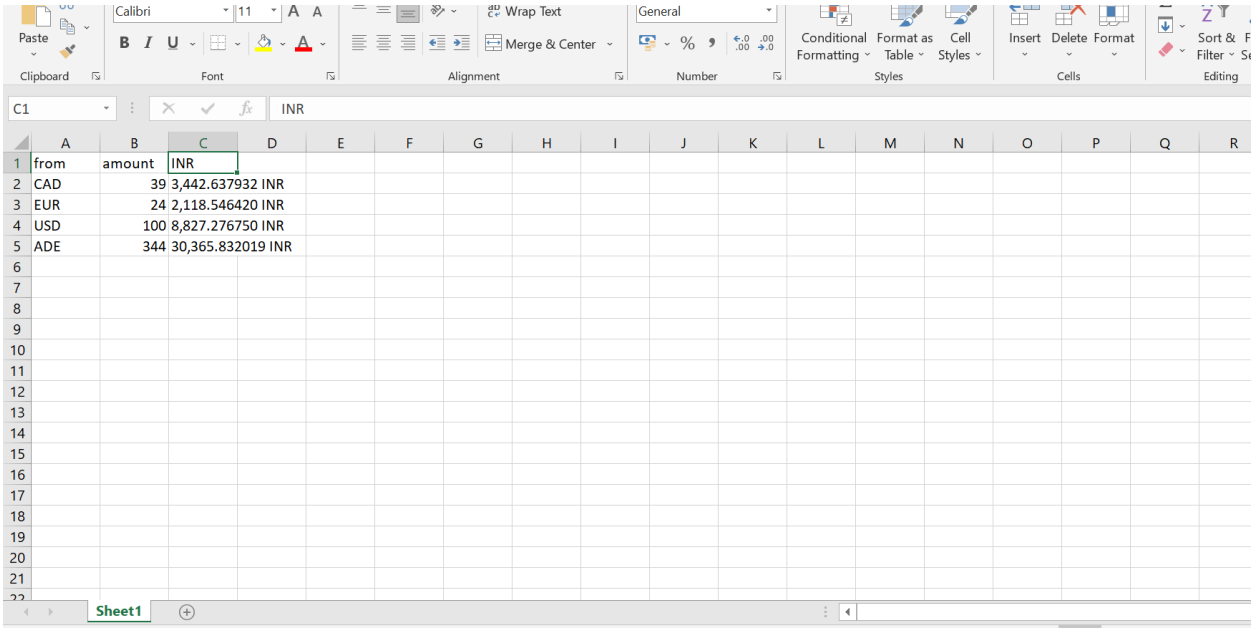
    h. Close workbook

3. Test the Model

    a. Test Process Model

Result

In the Result we will be able to store the final values of Currency Converter into the Excel sheet in the result column.



Advantages of Web Application

- A Better User Experience – With responsive design, it's a lot easier and cheaper to make a web based system user friendly across multiple platforms and various screen sizes.
- Flexible Access – Employees can work from anywhere with internet access.
- Client Secure Login – Impress clients with a modern web portal and improve customer service with automated processes.
- Easy Setup – It takes a couple of minutes to setup a new user; provide a URL, username and password and they're away.
- Always Up To Date – As everyone is accessing the same version of the web app via a URL, they will always be accessing the most up-to-date version of the software.

Disadvantages Of Web Application

- Internet connection – Whilst 4G & Wi-Fi internet access is available in many locations, if you happen to lose connection you will not be able to access your web app.
- Security – Whilst many business people may believe that data is less secure in a cloud environment.There are ways in which you can reduce risk of a data breach, such as SSL enforcement for a secure HTTPS access to your app.
- Reduced Speed – It's likely that a web app will operate at a slightly slower speed than one hosted on a server locally.
- Browser Support – Unfortunately, we don't all use the same browser. This means during development you'll need to ensure your app is supported across a variety of browsers.

Applications

Web Applications can be used in the areas like Gmail,Google Docs,Google Sheets,Online storage and more.Online sharing of Documents also uses web application.

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