

Excel Automation Using RPA

Mrs.Sangeetha M.E.¹, S.Barani², S.Deepika³, M.Gowtham⁴, K.Kishore⁵

¹Assistant Professor, Dept of computer science engineering

^{2,3,4,5}Dept of computer science engineering

^{1,2,3,4,5} KGiSL Institute of Technology, Coimbatore, India

Abstract- Rpa software robots can be programmed to replicate the actions that we perform in a excel sheet like formatting cells, copying the data, inserting and deleting the rows and columns, perform calculations on the excel data and more. We can use excel automation for many tasks like extracting data from excel sheet and filling the online forms, generating graphs and charts using the data, and viewing the particular information based on the given condition data to be filled in a online form. So the excel automation uses the condition in the UiPath and filters the data to online forms. Excel can produce high quality charts and graphs, but it takes a lot of work. The biggest difference between Excel and other systems is the quality of the defaults. I suspect some people are using excel charts, but they have gone to a lot of effort to tide them up. The purpose of the excel automation is to generate the charts automatically.

Keywords: RPA, Excel, Google form, Student details.

I. INTRODUCTION

Robotic process automation (RPA) is that the bring into play of software with computer science and machine learning potential to handle high-volume, errands that previously required humans to perform. These tasks are often comprised of queries, calculations and maintenance of records and transactions. RPA is backend processor to perform the tasks without human interference. RPA technology is mentioned as a software robot or a Bot which mimic a person's action.

UI path is one in all the extensively used robotic process automation tools and it had been founded by the Romanian entrepreneur within the year 2015 to grant software which might eradicate the monotonous time consuming rear works. UiPath Studio may be a complete software mechanism that enables you to automate your side recurring tasks. It converts tiresome tasks into complete UI automation, thus, making your work ease and quicker. UiPath may be a Robotic Process Automation tool which is employed for Windows desktop automation. it's accustomed automate repetitive/redundant tasks and eliminates human intervention. The tool is straightforward to use and incorporates a drag and drop functionality of activities.

1.1 COMPONENTS USED

A. *UiPath Studio* – A tool that authorizes you to style automation processes in a very graphical manner, throughout diagrams. UiPath Studio has an ample style of characteristics which might easily incorporate with any language and stimulate easy use, competence, and scalability.

B. *UiPath Robot* - implements the processes in-built Studio, as an individual's would. The Robot will commence executing the business activities with perfect precision. All robots required are a wonderfully predefined rule and set of accurate data.

C. *UiPath Orchestrator* - a Web/Server-based application that permits you to arrange, schedule, supervise and handle Robots and processes. It acts as a middle platform in managing the performance of the automation. The Orchestrator runs on a server to attach all robots to the current server and passes instructions on different events like whether to attend, unattended, or be idle for a specific event. Browser-based orchestration enables management of many robots through one click.

1.2 UI PATH PROJECTS

There are two styles of standalone projects that are available within the UiPath and that they are process and library.

Process: A process forms an association between an environment and a package. A package may be a predefined pack of services developed using the Jacada Integration and Automation (JIA) application. whenever a package is inserted into an environment, it automatically gets distributed to all or any the robot machines that are associated to the environment.

Library: A library may be a package which contains various reusable components. Libraries are saved within the style of files and may be installed once they are necessary to handle the surplus workflows using the package manager. In Orchester, this is often termed as a consolidate place to store all the libraries, namely the library page. From this destination, the libraries are accessible by the those who have permission or accessibility to that.

A process library is defined as a sequence of endeavour with a well-defined business function, which make them suitable for reusability and sharing. On the Libraries page, you've got an choice to view and delete the libraries that had been used on the UiPath Studio, and also the files that were uploaded manually.

1.3 TYPES OF SUPPORTED WORKFLOW

In UiPath, the Automation is interconnected with multiple aspects and it enables you to automate the rule-based process. to realize effective automation, each work should be assigned to a selected thing and might be performed effectively. Each activity in UiPath needs to undergo small activities like reading a file, clicking a button, writing a log panel, etc.

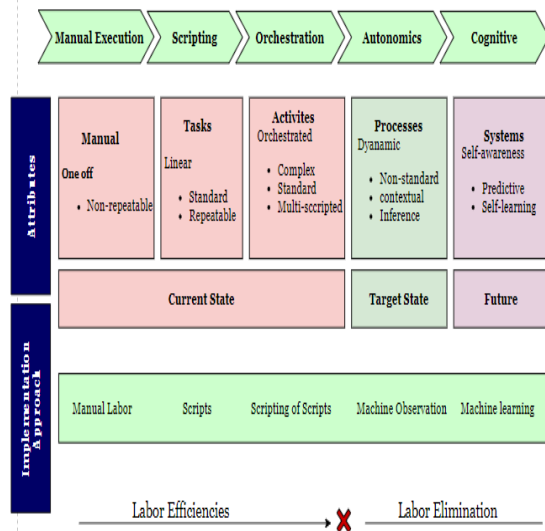


Fig.1: Workflow of UiPath

1.4 LAYOUT DIAGRAMS

A. Sequences: It most closely fits for the linear process in moving from one stage to a different without causing any disturbance to the workflow.

B. Flowcharts: It is designed to suit the organizations whose automation requires some logical ability. It clears all the issues in a very diversified manner through multiple branching operations.

C. State machines: It uses an infinite number of states in their execution which are triggered by a condition (transition) or task.

D. Global exception handler: it's appropriate for identifying the workflow performance while encountering an execution error.

II. PROBLEM STATEMENT

Automate excel spreadsheet procedures and activities to check data integrity, validation and reduce the data processing time from hours to minutes. Uipath Excel Automation brings you countless automation possibilities, no matter how small or elaborate the tasks you are doing.

III. PROPOSED SYSTEM

The excel automation is used to overcome the entire problem which we are facing currently, and making complete automation of filling details from excel sheet to google form. The process consists out of the selection of the right data in a excel sheet.

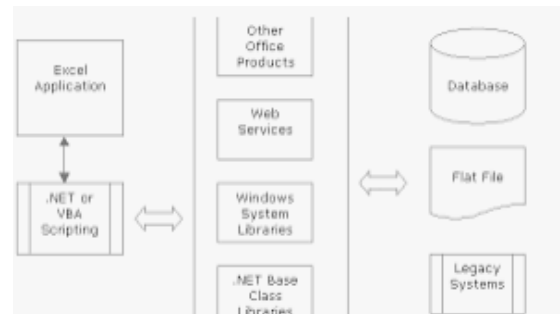


Fig.3.1: Architecture Diagram

IV. OUTPUT AND RESULTS

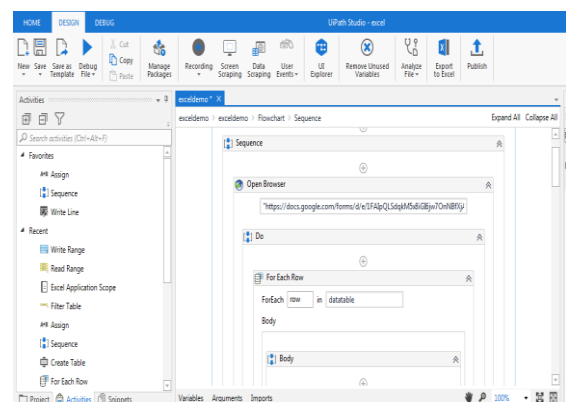


Fig.4.1: Data Scraping

	A	B	C	D	E	F	G	H	I
1	ROLL NUMBER	UNIVERSITY NUMBER	MOBILE NO.	EMAIL ID	10TH%	12TH%	UG%		
2	GOWTHAM M	7.11718E+11	9876543210	gthm@uic.ac.in	96	96	72		
3	ABHI K J	7.11718E+11	8037524662	abhin@uic.ac.in	95	94	74		
4	ARTHI KP	7.11718E+11	9850000000	arthi@uic.ac.in	83	93	78		
5	ANITHA S	7.11718E+11	6760043433	anitha@uic.ac.in	96	94	72		
6	ANUMARTIN	7.11718E+11	9058433300	anumart@uic.ac.in	95	95	73		
7	BARANIS	7.11718E+11	9876543210	barani@uic.ac.in	88	93	74		
8	BHARATHI D	7.11718E+11	9754433560	bhara@uic.ac.in	92	92	76		
9	DEEPIKA S	7.11718E+11	9544566778	deepi@uic.ac.in	94	92	77		
10	KISHORE K	7.11718E+11	9976543347	sybh@uic.ac.in	93	91	72		

Fig.4.2. Excel sheet

Fig.4.2. Google form

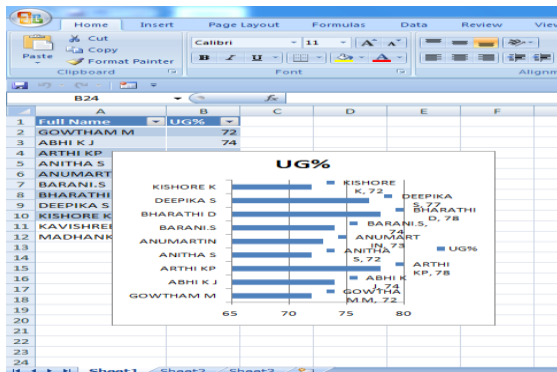


Fig.4.4 Charts

V. CONCLUSION

As the automation reaching every nook and corner of today's world, it's become indispensable vital role for the organizations in choosing the precise tool that most closely fits their organizational needs. The web site is straightforward to shop for products together with comparison of costs. It reduces manpower and supply accurate results for the subsequent searches. Users are given feedback choice to express their views which is able to be sent to the shopping server directly.

VI. FUTURE ENHANCEMENT

This paper is targeted to implement the method by the servers and databases maintained by the corresponding online sites on the actual account of the customer. The bot will

display the shipping price together with the particular price of the merchandise in future.

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