ELECTRONIC-KNOW YOUR CUSTOMER (E-KYC) USING RPA

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Abstract:

Electronic-Know Your Customer (E-KYC) processing is basically a time consuming and excruciating process because each candidate's personal details have to be checked manually, cross checked, send for approval and so on. The entire process take time and is prone to errors due to multiple levels of human scrutiny. Generating the KYC for every candidates can be handed over to a RPA solution which can do this activity automatically and without even any manual intervention during the process. The system is planned to be built using UI path studio and triggered using UiPath Robot.

Keywords- RPA, UiPath, KYC, Excel Sheet, Manual intervention

I. AREA INTRODUCTION

RPA (Robotic Process Automation) is a technology, where robots have been replaced the human in the workforce. The business process requires human intelligence to complete the whole task, so that whole process is given to the bot which insist the bot to do the repetitive work of human without any manual intervention.

RPA is used to do the similar task with great efficiency, error free and with lower cost. RPA is cost effective and is more easy to use than application programming interface (API). RPA uses user interface, which is less dependent on IT as many business components are used.

II. LITERATURE SURVEY

KYC (Know your customer) is used as the identity verification for banks, aadhar, passport verification, hospitals etc. KYC became a very important verification process even in getting a sim card. Approval for any bank account transaction is given only if the KYC process is done. The existing system of KYC needs a manual assessment to approve the candidate personal details. The consultancy should collect the candidates details and the details are stored in the excel sheet. After that the KYC form is filled, which may be liable to mistakes and lot of time consumption and man power. The existing system is a block chain based decentralized KYC system which is used as identity verification in banks, hospitals etc. This system can be used to validate the identity of the individual person. Other existing system is financial service for authentication. Financial services over the internet are running under various threats like fraudulent practice of sending emails, cyber attack, malware, and evolving sophistication of compromise techniques. MFA is used to reduce the risk in this system and to make secure.

The project "**Electronic- Know Your Customer** (E-KYC)" is about how to automate the manual process of filling the KYC form. Computer software or a "robot" to capture and interpret existing applications for collecting details of candidates from the Excel sheet, reading the Excel data, generating the template, exporting to pdf. Website is also created for filling the form and then sending a mail to particular candidates.

The manual process of KYC needs a human to assess and approve the requests, which is liable to mistakes and lot of time consumption and man power. Our proposed system reduces them by automating the whole complete process using a software robot which will be much faster than the manual process, also reduces the time and man power consumption.

In existing system, basically the KYC form is generated manually and it takes much time to complete the whole process. Usually each candidate's informations are collected by the consultancy and is stored in the Excel sheet. Then each candidate's informations are filled in the KYC form. This process is fully done with the manual intervention, which takes much time to fill individual form.

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III. PROPOSED METHOD

The Proposed System is planned to implement using the RPA tools. This proposed system is to overcome the time consumption, and to reduce the manual work. The bot does the whole process without any manual intervention. In this proposed system, it is not necessary to fill the form manually. The website is being created so that the bot fills the KYC form automatically by fetching the details from the excel sheet and then then form is being submitted. The submitted forms are kept in the separate folder. The link is created for that particular folder and then the link is given to the agent or higher officers to verify the candidate details for any approval.

Advantages of proposed method:

The major advantages for proposed system is as follows

- Its takes less time to complete the whole process.

- No manual intervention is needed.

IV. PROCESS FLOW

The dataset is being collected from the candidates and separate excel sheet is maintained for particular fields. The word file is being generated with the fields mentioned in the excel sheet. Then the bot reads the data from the Excel sheet and then it is written in the word template which is being created. Then the word file is exported to pdf. The pdf file is being kept in the separate folder for any verification. Then the website is created to upload the details which are mentioned in the excel sheet. The bot is processed and then the bot fetches the details from the excel sheet. The details are written in the website and then the form is submitted. The link is created for the submitted forms. Then the link is being given to the particular agent or to the higher officers for their verification.

The process flow is modularized as

A) Collecting Candidates details

Consultancy should take the responsibility to collect the details (i.e. personal details, Aadhar card, pancard, Licence number) from the candidates. The details are stored in the excel sheet.

B) PDF Automation

After collecting the data's from the candidates, the form should be filled automatically. Before that, the template has to be created to write the details in the word file. In the word file, the bookmark is set to notify where the details should be written. By using the bookmark content, the bot fetches the information from the excel sheet and fills the word template. After writing the data's in the word file, the word file is converted to pdf. Separate folder is maintained for word documents and pdf documents. Those files are then send as mail to that particular person for their verification.

C) Creating a website to upload the files

Instead of filling the form by the particular officer, the separate website is created for filling the form automatically by the bot. After creating the website, the bot fetches the details from the excel sheet and then the KYC form is filled by the bot automatically. After filling the form, the form is submitted and the database is maintained at the backend.
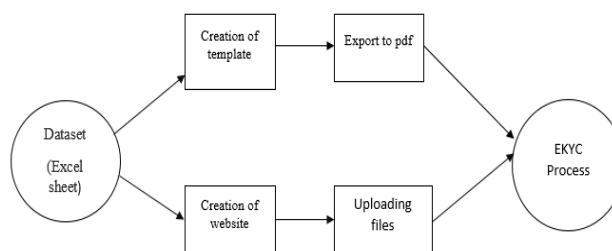

Fig.1.process flow

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INPUT:

The input is an Excel sheet, containing details of candidates, which are collected from the consultancy.

	A	B	C	D	E	F
	Id	First Name	Last Name	DOB	Gender	E-Mail
	51101	Anisha	B	03.09.1996	F	anisha@gmail.com
	51102	Bowya	H	04.08.1993	F	bowya12@gmail.com
	51103	Bhavani	J	08.10.1998	F	bhavani23@gmail.com
	51104	Ganga	P	06.11.1992	F	ganga398@gmail.com
	51105	Godhavari	J	11.11.1991	F	godhavari897@gmail.com
	51106	Harini	R	07.07.1998	F	harini78@gmail.com
	51107	Harish	G	06.11.1998	M	harish4563@gmail.com
	51108	Harish	U	11.03.1999	M	harish5432@gmail.com
	51109	Siva	S	01.09.1998	M	siva0987@mail.com

Fig.2.Input file

OUTPUT AND RESULTS:

UiPath Studio

Level 0

This is the starting page for Uipath studio. It is to register Mail ID. After registration, the process will be activated.
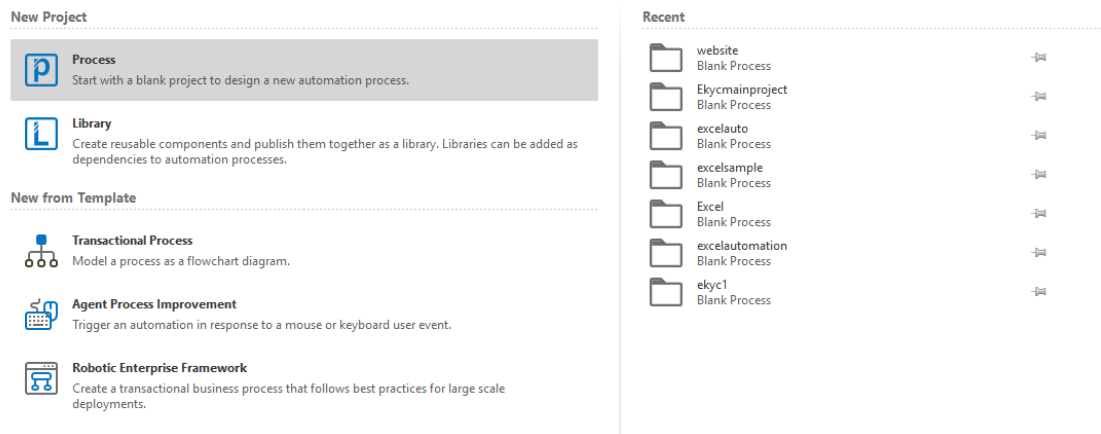

Fig.3.Start page

Level 1

This is the flowchart for the EKYC process. Excel application scope is used to read the excel sheet in which the details are collected by the consultancy. After that for each row activity is used to read each and every row from the excel sheet.
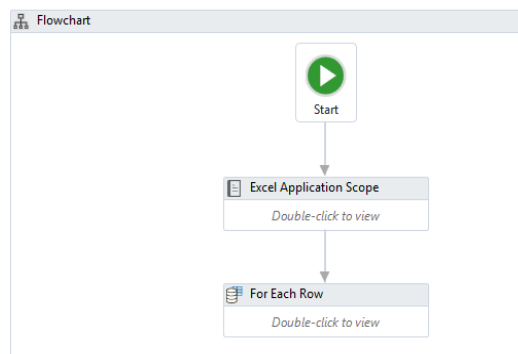

Fig. 4. Importing Excel sheet

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Level 2

Clicking the excel application button in the activity body opens the **read range activity** window, which reads the whole data from the excel sheet.
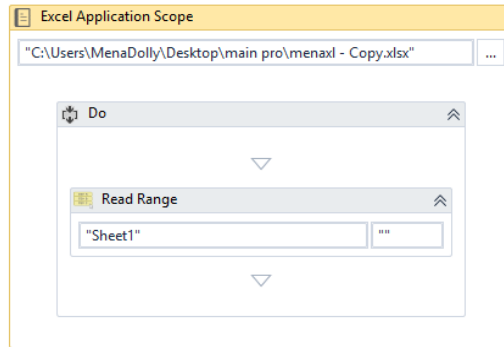

Fig.5.Read range activity

Level 3

The copy file activity is used to give the path of word template, which is been created already. Then the bookmark content is used to write the data's in the word file. After this export to pdf activity is used to convert the word file to pdf file. The word files and pdf files are kept in separate folder.
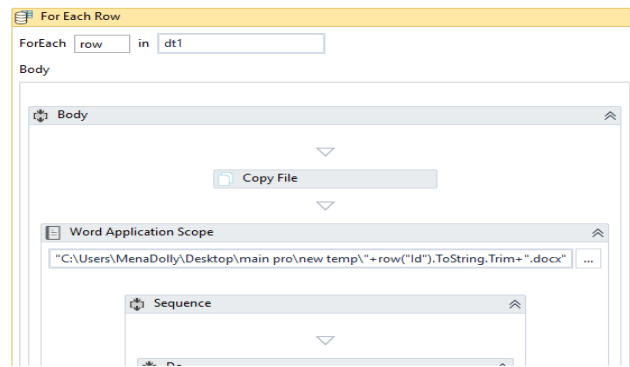

Fig. 6.Importing Word application scope

The final output will be in the form of pdf and this is the template that specifies it.

ID	: 51101
First Name	: Anisha
Last Name	: B
DOB	: 03.09.1996
Gender	: F
E-Mail	: anisha@gmail.com
Age	: 27
Blood Group	: O+ve
Address	: Coimbatore
Ph.no	: 9489898913

Fig.7. Output

V. CONCLUSION AND FUTURE ENHANCEMENT

The main aim of this paper is to reduce the manual work for filling the KYC form. Usually the candidate or agent takes much time to fill the KYC form and they can also make error. But in proposed system, the bot can read the input file from the Excel sheet automatically and it writes the data in the website with required fields. The form is being submitted and then separate link is created for the pdf files. The link is given to the agent for their verification.

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