

RPA Engineer Task

Zentist 2022

Task requirements:

Platform to use	UiPath (Community\Enterprise edition): Studio, Orchestrator	
Average time to complete	~3-5 hours	
Basic requirements	 The robot must correctly handle all types of exceptions. The robot must generate an event log. The robot is obliged to "clean" files/folders which are no longer in use. The robot must inform the process administrator by e-mail in case of a critical error. (The e-mail must be entered to an external configuration file) (optional) The robot must process all files in the project folder location. The result of the process work should be a correctly formed final file of BIC check report in .xlsx format. 	
Advanced requirements	 Use external libraries\packages if applicable. Use Re:Framework for robot development. Use separate workflows for activities related to both systems and the invoke them. Use Orchestrator assets to store website links and any other information necessary. Use Orchestrator queues to process BIC list. (optional) Run\Explain what steps need to be taken in order to run this robot in unattended mode using Orchestrator. 	

Description:

Robot is required to conduct verifying procedure of BIC (Bank Identification Code) using a third-party public website which is used to verify banks by their BIC. BIC report can be downloaded daily form Central Bank of Russia website.

The task involves working with data tables and text data as well as .zip and .xml files, processing them, extracting data from websites and generating final summary reports.

Steps to implement*:

*There are several implementation variations of this task, use the one that you consider more convenient and correct. General steps are listed below

Step	Description	Comment
1	Open to the CBR website https://www.cbr.ru/PSystem/payment_system/#a_44305 . Navigate to the "BIK Handbook" download link.	"BIK Handbook" (Справочник БИК)
2	Download the "BIK Handbook" for the current date as a .zip archive.	
3	Unzip the archive and extract the directory file with the extension.xml.	To the sales
4	Read the file and collect "BIC" and "NameP" positions for each bank. Regular expressions can be used for parsing .xml.	It is also recommended to pay attention to the encoding (such files do not use UTF-8)
5	Make a data slice and select only lines from 200 to 450 from the data table formed in step 4 for further processing.	
6	Open the website https://bkip.ru/searchbic.aspx	
7	For each item in data table generated in step 5 run a search on website opened in step 6.	"BIC" numbers, for which no information was found in the search, are excluded from processing. Should be logged.
8	Capture the following data from the search results: 1. Name, 2. City, 3. Address, 4. OKPO, 5. Intermediary Account, 6. Entered.	Название I Индекс Город I Адрес ! Телефоны ОКПО КоррСчет : Введен Удален
9	For the "BIC" numbers found in the search perform the following checks: a. Compare "Name" with "NameP" field obtained earlier at step 4, if field data is different - exclude BIC from the processing. b. If the year specified in the "Entered" field is less than 2000 - exclude BIC from processing.	Excluded cases must be logged.
10	Create a summary report in .xlsx format for BICs checked by all rules: a. The order of Headings should be as follows: Name, City, Address, Intermediary Account, OKPO, BIC. b. The name of the summary report should be formed in the following format: SummaryReport_BIC_[current_date(DD_MM_YYYYYY)].xlsx.	File should be generated in robot project folder in any appropriate subfolder