**UiPath Demo**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date | Version | Role | Name | Organization | Function | Comments |
| 19.11.2019 | 0.1 | Author | Vitaly Pustobaev | IBA Group Inc. | RPA Developer | Creation |
|  |  |  |  |  |  |  |
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Process Design Document History

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1. Introduction

1.1 Purpose of the document  
The Process Design Document describes the business processes chosen for automation using the UiPath Robotic Process Automation (RPA) technology.  
  
This document describes the sequence of steps performed as part of the process, as well as the conditions and requirements prior to its automation. This design document serves as a base documentation for developers to collect the details required for robotic automation of the same business process.

.1.2 Objectives  
The process has been selected for RPA as part of Demo initiatives.  
The objective of this process automation is linked to the project business case and is mainly intended to:

* Deliver faster processing.
* Reduce the duration of time-consuming activities.
* Leverage automation to improve the overall performance and reliability of the department

1.3 Process key contacts  
The design document includes a brief, but comprehensive set of requirements for the process. Its structure is based on the input provided by the Subject Matter Expert (SME) in the process.  
For escalation points, please review the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| Role | Name | Date of action | Notes |
|  |  |  |  |
|  |  |  |  |

1. AS IS Process Description

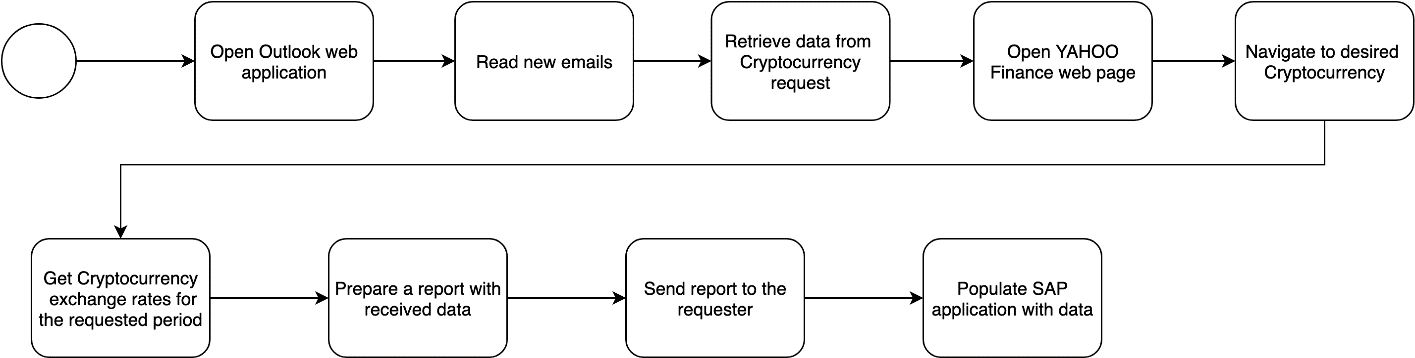
2.1 Process overview  
General information about the process selected for RPA implementation, prior to its automation:

|  |  |
| --- | --- |
|  | AS IS process details |
| Process full name | Finance Yahoo Cryptocurrency Extractor |
| Function | Reporting |
| Department | Finance and Accounting |
| Process short description  (operation, activity, outcome) | Read particular Emails  Get cryptocurrency exchange range based on a given period. |
| Role required for performing  the process | - |
| Process schedule | By request from an Outlook email |
| # of item processes / day | - |
| Average handling time per  item | 10 min / email |
| Peak period (s) | No peak period |
| # of FTEs supporting this  activity | 0 |
| Level of exception rate | - |
| Input data | Incoming emails |
| Output data | Generated report – Excel File sent to a recipient.  Updated records in SAP application |

2.1.1 In scope for RPA  
The activities and exceptions in this process that are in the scope for RPA, are listed below:

➢ Full Scope for RPA - the process is to be 100% automated.

2.1.2 Out of scope for RPA  
There are no activities out of scope for RPA.

2.2. Detailed Process map  
This chapter presents the chosen process in detail, which enables the developer to build the automated process.  
  


|  |  |
| --- | --- |
| Step | Short Description |
| 1.1 | Open Outlook web application page |
| 1.2 | Log into email account. Required input data: email and password. |
| 1.3 | Check new emails, which request Cryptocurrency exchange rates. |
| 1.4 | Retrieve required information from emails |
| 2.1 | Open Yahoo Finance web page |
| 2.2 | **For each email**, perform the following steps: |
| 2.2.A | **For each Cryptocurrency from email**, perform the following steps: |
| 2.2.A.A | Open Cryptocurrency description, click “Historical Data” and choose the desired “Time Period”. |
| 2.2.A.B | Fetch data and prepare for the following report generation. |
| 2.2.A.C | Generate report in the requested format. |
| 2.2.B | Merge generated reports for all requested Cryptocurrencies in one. |
| 2.2.C | Send reply email to the Requester with the attached report. |
| 2.2.D | Open SAP application and authorize as it’s user |
| 2.2.E | Fill in required data on page “Page” and attach generated report. |

2.3. Detailed Process steps  
The complete set of steps in the process, including keystrokes and clicks, are to be defined with screenshots. If there are any data restrictions, mask the sensitive information, such as Policy Number, Customer ID, bank account number, etc.).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Step | Short Description | Screenshot | Expected result | Remarks |
| 1.1 | Open Outlook web application page |  | Outlook authentication page is opened | Possible  exception:  Web app is not available |
| 1.2 | Log into email account. Required input data: email and password. |  | Outlook dashboard is opened | Possible  exception:  Email or password is incorrect |
| 1.3 | Select only Unread emails, which request Cryptocurrency exchange rates. |  |  |  |
| 1.4 | Retrieve data from those emails that meet particular requirements (subject contains text “Cryptocurrency ”, request for cryptocurrency is present in the email body) |  |  | Possible  exception:  The requested data is not in proper format |
| 2.1 | Open Yahoo Finance web page |  | Yahoo Finance main page is opened | Possible  exception:  The page is not available |
| 2.2 | **For each email**, perform the following steps: |  |  |  |
| 2.2.A | **For each Cryptocurrency from email**, perform the following steps: |  |  |  |
| 2.2.A.A | Open Cryptocurrency description, click “Historical Data”, and choose “Time Period” according to relevant data from an email. |  |  | Possible  exception:  There is no historical data for that request |
| 2.2.A.B | Fetch data and prepare for the following report generation. |  |  |  |
| 2.2.A.C | Generate report in the requested format. |  |  |  |
| 2.2.B | Merge generated reports for all requested Cryptocurrencies in one. |  |  |  |
| 2.2.C | Send reply email to the Requester with the attached report. |  |  | Possible  exception:  The page is not available |
| 2.2.D | Open SAP application and authorize as it’s user |  |  | Possible  exception:  Credentials are incorrect |
| 2.2.E | Fill in required data on page “Page” and attach generated report. |  |  |  |

2.4. Exceptions handling  
The types of exceptions identifiable in the automation process can be classified according to the table below.

|  |  |  |
| --- | --- | --- |
| Area | Known | Unknown |
| Business | Previously encountered situation.  A Business possible scenario is defined, and clear actions and workarounds are provided for each case. | A situation never encountered before.  It can be caused by external factors. |

Based on the above criteria, the table below should reflect all the known exceptions identified throughout the process and map the expected action the robot needs to take in each case. Insert as many rows as required in the table, to capture all exceptions in a comprehensive list.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Exception name | Step where exception is encountered | Parameters | Action to be taken |
| 1 | Incorrect email or password | Step # **1.2** | If message for incorrect username or password is displayed |  |
| 2 |  |  |  |  |

2.5. Error mapping and handling

A comprehensive list of all the errors, warnings, or notifications should be consolidated here with the description and action to be taken by the Robot in each case.

The errors identified in the automation process can be classified according to the table below.

|  |  |  |
| --- | --- | --- |
| Area | Known | Unknown |
| Technology | Previously encountered situation - action plan or workaround available. | A situation never encountered before, or may happened independent of the applications used in the process. |

Based on the above criteria, the table below should reflect all the identifiable errors in the process and map the expected action of the Robot in each case.

Insert as many rows as required in the table, to capture all the errors in a comprehensive list.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Error Name | Step where error is encountered | Parameters | Action to be taken |
| 1 | Application unresponsive / page not loading | Any step | No response / blank page | Retry 2 times.  Close application and run the sequence again |
| 2 |  |  |  |  |

\*Feel free to insert an additional error mapping table for more complete explanation.

2.6. In-Scope application details  
The table below lists all the applications that are used as part of the automated process.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | Application name & Version | Syst. Lang. | Login module | Interface | Environment/ Access method | Comments |
| 1 | Application unresponsive / page not loading | EN | Web | Web | Web Browser |  |
| 2 | Microsoft Excel | EN | n/a | Client | Local desktop |  |

1. Development details

3.1 Prerequisites for development

* Development or testing environment are to be provided for development purposes.
* The provided development and testing environments are exact replicas of the production environment.
* Dedicated system and application access are given to developers with the adequate permissions.

3.2 Password policies  
Users manage their own passwords. There are no special policies in place.

3.3 Credentials and asset management  
Login details (user IDs and passwords) should be stored under Windows Credential Manager or UiPath Orchestrator Assets.

1. Document Approval Flow

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Version | Flow | Role | Name | Organization (Dept.) | Signature and Date: |
| 0.1 | Document prepared by: | RPA Developer | Vitaly Pustobaev |  |  |
|  | Document updated by: |  |  |  |  |
|  | Document approved by: |  |  |  |  |
|  | Document prepared by: |  |  |  |  |

1. Appendix

5.1 UiPATH automated process details  
**Note: this step is to be filled in after automation process is complete**

**Automation** **overview**: (time to dev, test, etc)

**Robots** **type**: Unattended/Attended/Studio

**Level** **of** **human** **intervention** **required**:

**Use of Orchestrator**:

**Exceptions recorded in automation process**:

**Errors identified in the automation process**:

**Challenges identified in the automation process**:

**Lessons Learned**:  
  
**Any adjustments** made to facilitate the automation process and any steps taken to shift from the human way of working to the automatic one. Any activity performed to improve the As Is process and to enable higher rates of automation of the process:

➢ Process Assumption

➢ Input data assumption

➢ Number or types of input to be received

➢ Skipping the login interface and collecting backend details

➢ Extracting backend data without opening the file

➢ Data conversion / formatting

**Reporting**: The details and format of the logging mechanism available in the workflow have to be specified here, whether it is a local log report or the Orchestrator log).

The format should be specified by the business users.

**Workflow and scripts**: A brief overview of each workflow and the sequence in which it is executed should be provided here.