|  |  |
| --- | --- |
|  | | Process Definition Document |

PayPowerBill\_ Process

Bot is automating the process of paying power bill

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# Introduction

## I.1 Purpose of the document

The Process Definition Document outlines the business process chosen for automation using UiPath Robotic Process Automation (RPA) technology.

The document describes the sequence of actions performed as part of the business process, the conditions and rules of the process prior to automation and how they are envisioned to work after automating it, partly or entirely. This specifications document serves as a base for developers, providing them with the details required for applying robotic process automation to the selected business process.

## I.2 Objectives

The business objectives and benefits expected by the Business Process Owner after automation of the selected business process are:

* Reduce processing time per item by 80%
* Better Monitoring of the overall activity by using the logs provided by the robots.

## I.3 Process key contact

The specifications document includes concise and complete requirements of the business process and it is built based on the inputs provided by the **process** **Subject Matter Expert (SME)/ Process Owner.**

The **Process Owner** is expected **to review it and provide signoff for accuracy** and completion of the actions, context, impact and a set of process exceptions. The details are to be included in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| ****Role**** | ****Name**** | ****Contact details (email, phone number)**** | ****Notes**** |
| Developer | Yash Shile | Yashshile05@gmail.com |  |

## I.4 Minimum Pre-requisites for automation

1. Signed and Approved Process definition document.
2. Shared Path and Outlook Access.
3. Input And Master File.
4. Test Data for Unit and UAT Testing.
5. As-Is process description

## II.1 Process Overview

General information about the process selected for RPA prior to automation.

|  |  |  |
| --- | --- | --- |
| **#** | **Item** | **Description** |
| 1 | **Process full name** | PayPowerBill\_Process |
| 2 | **Process Area** | Shared Folder |
| 3 | **Department** | Shared Folder |
| 4 | **Process short description (operation, activity, outcome)** | Bot is automating the process of paying power bill |
| 5 | **Role(s) required for performing the process** | Read Write Access |
| 6 | **Process schedule and frequency** | As per user requirements |
| 7 | **# of items processed /reference period** | 100 |
| 8 | **Process execution time** | 38.1 sec. |
| 9 | **Peak period (s)** | Sat-Sun |
| 10 | **Transaction Volume During Peak period** | 500 |
| 11 | **Total # of FTEs supporting this activity** | 3 |
| 12 | **Expected increase of volume in the next reference period** | Depending on volume – Max 5 |
| 13 | **Level of exception rate** | Medium |
| 14 | **Input data** | PDF Files |
| 15 | **Output data** | PDF Files |

\*Add more rows to the table to include relevant data for the automation process. No fields should be left empty. Use “n/a” for the items that don`t apply to the selected business process.

## II.2. Applications used in the process­

The table includes a comprehensive list of all the applications that are used as part of the process to be automated to perform the given actions in the flow.

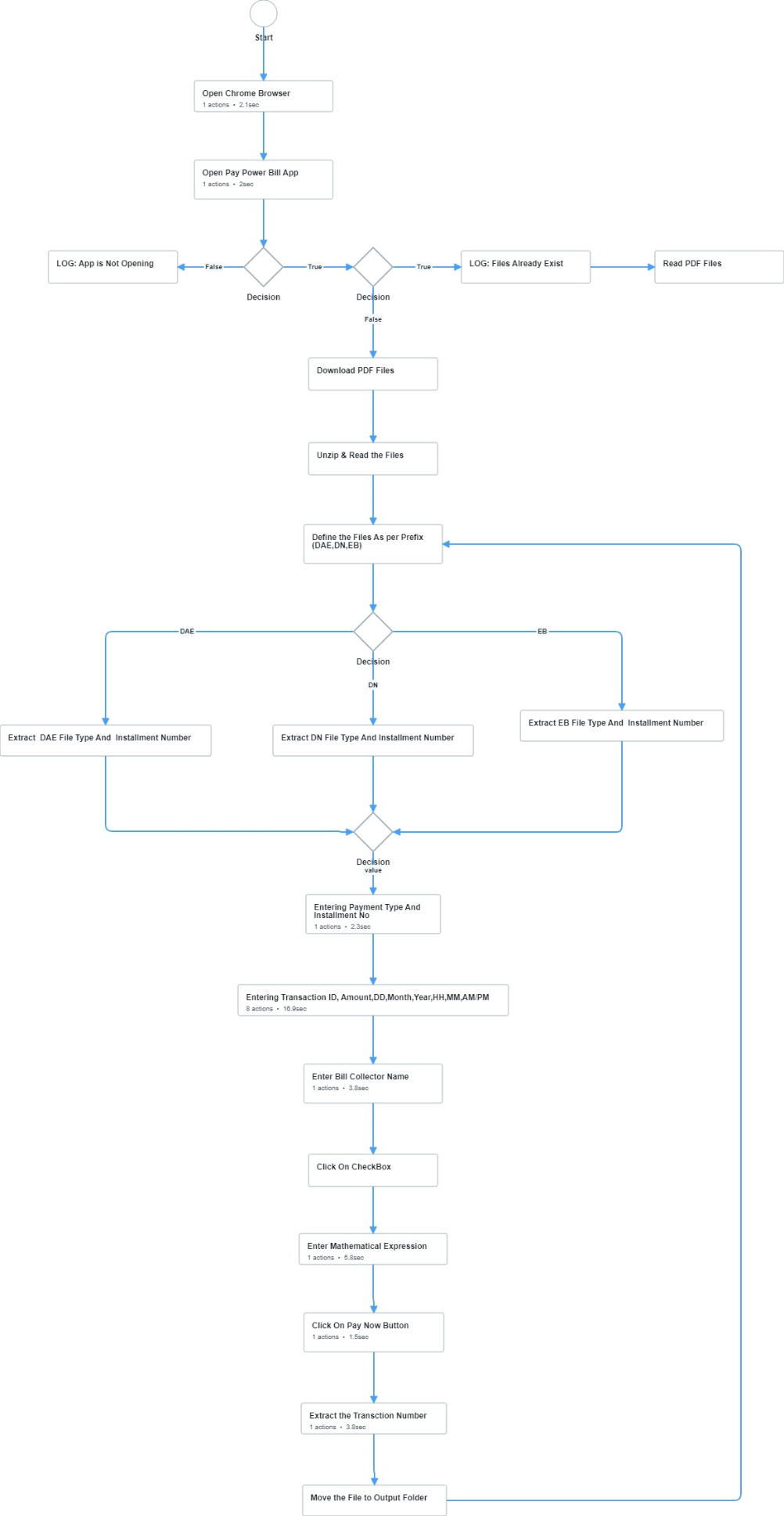
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Application name & version | System Language | Thin/Thick Client | Environment/ Access method | Comments |
|  | MS-PDF | English | Thin | DevEnv |  |

\*Add more rows to the table to include the complete list of applications.

## II.3 As-Is Process map

### High Level As-Is Process Map:

This chapter depicts the As-Is business process at a High Level to enable developers to have a high-level understanding of the current process.



## II.4 Process statistics

### High level statistics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Processes** | **Windows** | **Actions** | **Mouse clicks** | **Keys pressed** | **Text entries** | **Hotkeys used** | **Time** |
| 1 | 3 | 15 | 15 | 0 | 0 | 0 | 38.1 sec. |

### Detailed statistics

|  |  |  |  |
| --- | --- | --- | --- |
| Window name | Mouse Clicks | Text entries | Keys pressed |
| New Tab - Google Chrome | 1 | 0 | 0 |
| botsdna.com/PayPowerBill/ - Google Chrome | 13 | 0 | 0 |
| botsdna.com/PayPowerBill/Thanks.html - Google Chrome | 1 | 0 | 0 |

## II.5 Detailed As-Is Process Actions

#### Open Chrome Browser

|  |  |
| --- | --- |
| Opening the chrome browser. | **Est. time: 2.1 sec.** |

##### Chrome Browser

|  |  |
| --- | --- |
|  | **Est. time: 2.1 sec.** |
| image | Action: Click |

#### Open Pay Power Bill App

|  |  |
| --- | --- |
| Opening the Pay Power Bill App | **Est. time: 2.0 sec.** |

##### Pay Power Bill App

|  |  |
| --- | --- |
|  | **Est. time: 1.10 sec.** |
| image | Action: Click |

#### Decision

|  |  |
| --- | --- |
| If 'True' then go to '4. Decision'  If 'False' then go to '23. LOG: App is Not Opening'  Check Power Pay Bill App Open Or Not | **Est. time: 0.0 sec.** |

#### Decision

|  |  |
| --- | --- |
| If 'False' then go to '5. Download PDF Files'  If 'True' then go to '21. LOG: Files Already Exist'  Check Pdf Files Exist or Not | **Est. time: 0.0 sec.** |

#### Download PDF Files

|  |  |
| --- | --- |
| Downloading the PDF Files | **Est. time: 0.0 sec.** |

#### Unzip & Read the Files

|  |  |
| --- | --- |
| Unzip and Read the PDF File | **Est. time: 0.0 sec.** |

#### Define the Files As per Prefix (DAE,DN,EB)

|  |  |
| --- | --- |
| Define the Files As per Prefix. | **Est. time: 0.0 sec.** |

#### Decision

|  |  |
| --- | --- |
| If 'EB' then go to '9. Extract EB File Type And  Installment Number'  If 'DAE' then go to '19. Extract  DAE File Type And  Installment Number'  If 'DN' then go to '20. Extract DN File Type And Installment Number'  Check File Type | **Est. time: 0.0 sec.** |

#### Extract EB File Type And  Installment Number

|  |  |
| --- | --- |
| Extract the EB file type and Installment Number. | **Est. time: 0.0 sec.** |

#### Decision

|  |  |
| --- | --- |
| If 'value' then go to '11. Entering Payment Type And Installment No' | **Est. time: 0.0 sec.** |

#### Entering Payment Type And Installment No

|  |  |
| --- | --- |
|  | **Est. time: 2.3 sec.** |

##### Installment Number

|  |  |
| --- | --- |
|  | **Est. time: 2.3 sec.** |
| image | Action: Click |

#### Entering Transaction ID, Amount,DD,Month,Year,HH,MM,AM/PM

|  |  |
| --- | --- |
|  | **Est. time: 16.9 sec.** |

##### Transaction ID

|  |  |
| --- | --- |
|  | **Est. time: 2.7 sec.** |
| image | Action: Click |

##### Amount

|  |  |
| --- | --- |
|  | **Est. time: 4.1 sec.** |
| image | Action: Click |

##### DD

|  |  |
| --- | --- |
|  | **Est. time: 1.9 sec.** |
| image | Action: Click |

##### Month

|  |  |
| --- | --- |
|  | **Est. time: 1.6 sec.** |
| image | Action: Click |

##### Year

|  |  |
| --- | --- |
|  | **Est. time: 2.0 sec.** |
| image | Action: Click |

##### HH

|  |  |
| --- | --- |
|  | **Est. time: 1.6 sec.** |
| image | Action: Click |

##### MM

|  |  |
| --- | --- |
|  | **Est. time: 1.5 sec.** |
| image | Action: Click |

##### AM/PM

|  |  |
| --- | --- |
|  | **Est. time: 1.5 sec.** |
| image | Action: Click |

#### Enter Bill Collector Name

|  |  |
| --- | --- |
| Entering Bill Collector Name | **Est. time: 3.8 sec.** |

##### Bill Collector

|  |  |
| --- | --- |
|  | **Est. time: 3.8 sec.** |
| image | Action: Click |

#### Click On CheckBox

|  |  |
| --- | --- |
| Click on Check Box | **Est. time: 0.0 sec.** |

#### Enter Mathematical Expression

|  |  |
| --- | --- |
| Enter the Math Calculation | **Est. time: 5.8 sec.** |

##### Mathematical Expression

|  |  |
| --- | --- |
|  | **Est. time: 5.8 sec.** |
| image | Action: Click |

#### Click On Pay Now Button

|  |  |
| --- | --- |
| Click on pay now button | **Est. time: 1.5 sec.** |

##### Pay Now Button

|  |  |
| --- | --- |
|  | **Est. time: 1.5 sec.** |
| image | Action: Click |

#### Extract the Transction Number

|  |  |
| --- | --- |
| Extract the Transaction No | **Est. time: 3.8 sec.** |

##### Transction No

|  |  |
| --- | --- |
|  | **Est. time: 3.8 sec.** |
| image | Action: Click |

#### Move the File to Output Folder

|  |  |
| --- | --- |
| Move the files to output folder | **Est. time: 0.0 sec.** |

##### Go to: Define the Files As per Prefix (DAE,DN,EB)

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |
|  | Action: NONE |

#### Extract  DAE File Type And  Installment Number

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |

##### Go to: Decision

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |
|  | Action: NONE |

#### Extract DN File Type And Installment Number

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |

##### Go to: Decision

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |
|  | Action: NONE |

#### LOG: Files Already Exist

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |

#### Read PDF Files

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |

#### LOG: App is Not Opening

|  |  |
| --- | --- |
|  | **Est. time: 0.0 sec.** |

## II.6 Exceptions Handling

# To-Be Process Description

This chapter highlights the expected design of the business process after automation.

## III.1 To-Be Detailed Process Map

Highlight Bot interventions/ To-Be automated actions with different legend/ icon (purple)

\*Mention below if process improvements were performed on the To-Be design and provide details.

|  |  |
| --- | --- |
| Legend | Description |
|  | Action number in the process. Referred to in details or Exceptions and Errors table |
|  | This process action is proposed for automation |
|  | This process action remains manual (to be performed by a human agent) |

## III.2 Parallel Initiatives/ Overlap (if applicable)

This chapter covers the proposed Business, Process & System changes to be made in the near future and their impact.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No | Initiative Name | Process Acion(s) where it is identified | Impact on current automation request? How? | Expected Completion Date | Contact person for more details |
|  | n/a |  |  |  |  |

## III.3 In Scope of RPA

The activities **In scope of RPA**, are listed here:

1. Actions 1-10

## III.4 Out of Scope of RPA

The activities **Out of scope of RPA**, are listed here:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sub-process (if applicable) | Activity (action) | Reasons for Out of scope\* | Impact on the To-Be | Possible measures to be taken into consideration for future automation |
| 1.1 | 1.1.1 | Input: handwritten form | After processing action 1.1.2, an email is sent to the user to perform action 1.1.3 in a csv file  In order to go to action 1.1.4, the robot will read the csv file | Collect the form in an editable pdf format and electronically signed |

\*Add more rows to the table to reflect the complete documentation provided to support the RPA process.

## III.5 Business Exceptions Handling

The Business Process Owner and Business Analysts are expected to document below all the business exceptions identified in the automation process. These can be classified as:

|  |  |
| --- | --- |
| Known | Unknown |
| Previously encountered. A scenario is defined with clear actions and workarounds for each case. | New situation never encountered before. It can be caused by external factors. Cannot be predicted with precision, however if it occurs, it must be communicated to an authorized person for evaluation. |

### Known Exceptions

The table below reflects all the business process exceptions encountered during the process evaluation and documentation. These are **known exceptions** that occurred before. For each of these exceptions, define a corresponding expected action that the robot should complete if it encounters the exception.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| BE # | Exception name | Action | Parameters | Action to be taken |
|  |  |  |  |  |

### Unknown Exceptions

For all other unanticipated or unknown business (process) exceptions, the robot should:

## III.6 Application Error and Exception Handling

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

Errors identified in the automation process can be classified as:

|  |  |  |
| --- | --- | --- |
| Area | Known | Unknown |
| Technology/Applications | Experienced previously, an action plan or a workaround available. | Never encountered before, or may happen independently of the applications used in the process. |

### Known Errors or Exceptions

The table below reflects all the errors identified in the process evaluation and documentation.

For each of these errors or exceptions, define a corresponding expected action that the robot should complete if it is encountered.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Error name | Action | Parameters | Action to be taken |
| 1 | Application Crash / Internal Server Error | Any action | Error message | Recover & retry for maximum 3 times. Close the applications and run the sequence again |

### Unknown Errors and Exceptions

For all the other unanticipated or unknown application exceptions/errors, the robot should:

## III.7 Reporting

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Report type | Update frequency | Details | Monitoring Tool to visualise the data |
| 1 | Process logs | Daily | How many times was this process run since the beginning of the month and what was the average run duration? | Kibana |
| 2 | Process logs | Monthly | How many robots worked on this process per each month? | Csv file posted daily on share drive |
| 3 | Transaction logs | Daily | How many transactions were run by this process since the beginning of the month and what was the average transaction duration? | Kibana |
| 4 | Error logs | Daily | Average number of errors by type per day | Kibana |
| 5 | Error logs | Daily | All errors per month grouped by type | Csv file posted daily on drive |

\* For complex reporting requirements, include them into a separate document and attach it to the present documentation

# Other Observations

Include below any other relevant observations you consider needed to be documented here.

Example: Specific Business monitoring requirements (audit and reporting) etc.

# Additional sources of process documentation

If there is additional material created to support the process automation please mention it here, along with the supported documentation provided.

|  |  |  |
| --- | --- | --- |
| Additional Process Documentation | | |
| Video Recording of the process (Optional) | ACME-System1-Process-WI5-Manual-Walkthrough | Insert any relevant comments |
| Standard Operating Procedure (s) (Optional) |  | Insert any relevant comments |
| Business Rules Library (Optional) | Insert link to Business rules library | Insert any relevant comments |
| Other documentation (Optional) | Insert link to any other relevant process documentation (L4, L5 process description, fields mapping files etc.) | Insert any relevant comments |

\*Add more rows to the table to reflect the complete documentation provided to support the RPA process.