Process Design Document

**Process Design Document History**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Version Role** | | **Name** | **Organization** | **Function** | **Comments** |
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# Introduction

## 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.

## Objectives

The process has been selected for automation as part of RPA exercise folder and does not link to any other processes or automations.

The objective of this process automation is linked to the project business case and is mainly intended to:

* Deliver faster processing
* Reduce redundant activities
* Improve allocation of product items and maintanability

## 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.

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Date of action** | **Notes** |
| Process SME |  | TBD | Point of contact for questions related to business exceptions and passwords |
| Reviewer / Owner |  | TBD | POC for process exceptions |
| Approval for production |  | TBD | Escalations, Delays |

# AS IS Process Description

## Process overview

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

|  |  |
| --- | --- |
| **AS IS process details** | |
| Process full name | Amazon Toaster search |
| Function | - |
| Department | - |
| Process short description (operation, activity, outcome) | Populate two workbooks with toasters under and over $40 dollars, from Amazon query. |
| Role required for performing the process | - |
| Process schedule | - |
| # of item processes / day | 100 items |
| Average handling time per item | 30 seconds per product |
| Peak period (s) | No peak period |
| # of FTEs supporting this activity | - |
| Level of exception rate | No expected exceptions |

|  |  |
| --- | --- |
| Input data | - |
| Output data | Toasters under forty dollars and toasters over forty dollars |

* + 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.
    1. **Out of scope for RPA**

There are no activities out of scope for RPA

### 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 the Amazon Homepage <https://www.amazon.com/> . |
| **1.2** | Type “toaster” in search bar and submit. |
| **1.3** | **While products table does not exceed 100 items**, perform the following: |
| **1.3.A** | Table-Extract the products in the page and append to products table |
| **1.3.B** | Scroll down to “Next Page” button |
| **1.3.C** | Click the “Next Page” button |
| **1.4** | Remove all products with no “toaster” in their title |
| **1.5** | Remove all products with no price displayed |
| **1.6** | **For each product**, perform the following: |
| **1.6.A** | Append title, price, and rating to appropriate workbook (.csv file) |

## 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 action description** | **Screenshot** | **Expected result** | **Remarks** |
| 1.1 | Open the Amazon Homepage |  | The display of the Amazon homepage | Possible exception:  - Handl exception if Web app not  available |
|  |  |  |  |  |
|  |  |  |  |
| 1.2 | Search for “toaster” | Successful query |  |
|  |  |  |  |  |
|  | **While products table does not exceed 100 items**, perform the following: |  |
| 1.3 |  |  |
|  |  |  |
|  | Table-Extract the products in the page and append to products table |  | All details (title, price, and) are retrieved | Possible exception: - |
|  |  |
|  |  |
| 1.3.A |  |
|  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1.3.B** | Scroll down to “Next Page” button |  |  |  |
| **1.3.C** | Click the “Next Page” button |  |  |  |
| **1.4** | Remove all products with no “toaster” in their title |  |  |  |
| **1.5** | Remove all products with no price displayed |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1.6** | **For each product**, perform the following: |  |  |  |
| **1.6.A** | Append title, name and price, to appropriate workbook (.csv file) |  |  |  |

## 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 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Step where**  **Exception**  **# name exception is Parameters Action to be taken**  **encountered** | | | | |
| **1** | - | Step # **-** | - | - |
| **2** |  |  |  |  |

For any other unanticipated or unknown exceptions, the robot should send an email notification at [exceptions@acme-test.com](mailto:exceptions@acme-test.com) with the original email and error message screenshot attached.

## 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.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **E #** | **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 |

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

## 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 | Amazon Homepage | EN | Web | Web | Web Browser |  |

# Development details

## 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.

## Password policies

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

## Credentials and asset management

Login details (user IDs and passwords) should be stored under **Windows Credential Manager** or

##### UiPath Orchestrator Assets.

# Document Approval Flow

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Version** | **Flow** | **Role** | **Name** | **Organi zation (Dept.)** | **Signatur e and Date:** |
| **1.0** | Document prepared by: | Business Analyst | Name Surname |  |  |
| **1.0** | Document Approved by: | Business Process Owner | Name Surname |  |  |
| **1.0** | Document Approved by: | Dev/Automati on  Solution Architect | Name Surname |  |  |

# Appendix

## 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**: Back Oﬃce Robot

##### 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.