

Development Specifications Document (DSD)



Process Name: < Phone Types search engine in Amazon >

Table of Contents

Document Overview	1
Automated Master Project Details	1
Runtime Guide	2
Runtime Diagram	2
List of Packages	2
Master Project Runtime Details	2
Project Details	4
Project Name: < Phone Types search engine in Amazon >	4
Workflow(s) specific to the Project	5
Compliance Considerations and Reporting Requirements	6
Other Details	6
Future Improvements	6
Post UAT Specifications	6
Glossary	6

Version Control

Date	Version	Role	Name	Organization Department	Function	Comments
11/12/2021	1.0	Author	Ahmed Hazem Ahmed	Vodafone	Assignment	N/A

I. Document Overview

The Development Specifications Document (DSD) is created for every business process automated using RPA. The DSD needs to be reviewed and updated for every change requested and applied to the automated process. This document provides a technical snapshot and must always reflect the latest design and key features of the automated workflow.

The document naming convention will follow the naming convention and the version of the automated process. This can be "business process name version" or it can be defined, case by case, as part of the larger RPA project design.

This document is completed by the RPA Solution architect and RPA developer who automates the business process. It is reviewed by the business process owner, application owner, and CoE design authority.

This document is meant to assist the RPA COE, IT operations and process owners by providing a snapshot of the automated process details and components. It can also serve developers to have a quick glance at the setup, before diving into the code, to troubleshoot or update changes. The purpose of the document is to record the outcome specific to the automated master project and its subcomponents: projects, workflows, sequences etc.

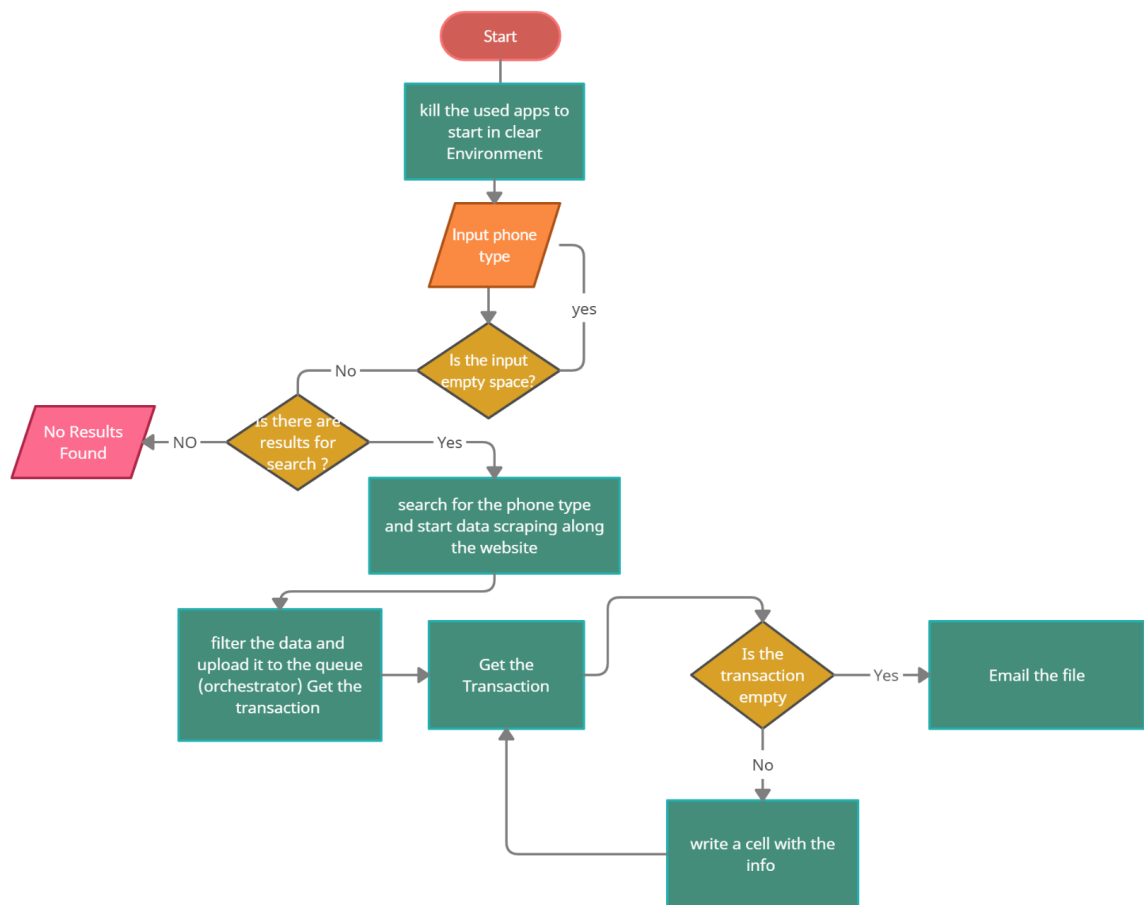
II. Automated Master Project Details

Details filled in by the developer reflect the actual information for the master project released for production.

#	Item	Details Fill in with free text. If not applicable, mark the field as "N/A". No empty fields.
1	Master Project Name and Version	Phone Types search engine in Amazon
2	Robot Type (attended/unattended/mix)	Attended
3	Is Orchestrator used? (Yes/No)	Yes
4	Scalable? (Yes/No) Can the process be run by multiple robots in parallel?	No

III. Runtime Guide

1. Runtime Diagram



2. List of Packages

Include **the list of packages and the high level description** for each of them, to explain each one's purpose:

#	Package Name	High-Level Description
	Mail package	Using it to use the send messages to protocol (SMTP)

3. Master Project Runtime Details

Details of the automated process:

#	Item	Details (Fill in with free text. If the section does not apply to your automation, mark the field as "N/A". No empty fields.)
1	Production Environment Details	N/A
2	Prerequisites to run	N/A
3	Input Data	Mobile phone type
4	Expected Output (output data)	Excel sheet with the desired mobile phone type without any accessories
5	How to start the automated process?	By trigger by clicking run (attended)
6	Manual Error Handling	If it doesn't write on google chrome just reinstall the chrome extension
	A. How to resume the process in case of error	If it doesn't write on google chrome just reinstall the chrome extension
	B. How to manually fix transactions with error	If it doesn't write on google chrome just reinstall the chrome extension
7	Use of Orchestrator	Yes
	A. Password Policies specific compliance requests?	N/A
	B. Stored Credentials Never hard code credentials in the workflow	Use mail and password Get credential
	C. List of Asset Names	Asset (Mail and password)
	D. List of Queues Name	Mobile Phones
	E. Schedule Details	N/A
10	Recommended Resolution	N/A

IV. Project Details

In this section describe all the projects that compose the automated process.

For each project, describe the workflow(s) in the logical order that they are called in.

If the workflow is a flowchart, also include the exported image from Studio.

If the automated process is composed of multiple projects, copy paste and fill in the table below for each project with its specific details (there are 2 here already, assuming a dispatcher and performer project)

1. Project Name: < *Phone Types search engine in Amazon* >

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

#	Item Name	Details Fill in with free text. If not applicable, mark the field as "N/A". No empty fields.
1	Environment used for development name, location, configuration details etc	UiPath Studio
2	Environment prerequisites OS details, libraries, required apps	Chrome with UiPath extension
3	Logging level	Trace/Warn
4	Details about automation if the apps were automated using UI Automation, Image & Text	Automation done using UiPath studio and google chrome with UiPath extension
5	In case of attended bot, can the user operate the computer while the robot is running?	Yes all the activities done using Simulate Click feature
6	Repository for project where the developed project is stored	N/A
7	List of reused components	Kill Process workflow
8	Custom logs defined in the workflows where Throw Activity was used or custom log message was defined	N/A
9	Frequent errors found in the development phase	<ul style="list-style-type: none">STMP server block user for few minutes if he sends too many mails

10	Workarounds used in the automation phase	N/A
11	Configuration method assets, excel file, json file	N/A
12	Configuration details path for input files, configuration Orchestrator assets used	N/A
13	Workflow File Export List Use the project mapping tool	N/A

1.1 Workflow(s) specific to the Project

Define below all the workflow files (.xaml files) used in the project, with the Input and Output data.

#	Workflow File Name	Description	Arguments	Comments
1	Kill All Apps	Use the Kill Process activity to force the termination of the Windows processes representing applications used in the business process being automated. Note that killing processes might have undesirable outcomes, such as losing unsaved changes to files.	N/A	N/A
2	Initialize apps	Initializing the input dialog to allow the user to enter the phone type and then open applications used in the process and do necessary initialization procedures before data scraping	Out_Mobile_Type (String)	The internet must be connected
3	Get Data	Check if bot found results or not. if it founds results then it get the data from multiple page up to 100 result then it will filter the data to find the handsets only. Once the data is ready then the bot will prepare it to next phase.	In_mobile_Type (String) Out_empty (Datatable) Out_No_Results (Boolean)	The internet must be connected

4	Mail the file	Mail the file if it is ready using SMTPProtocol (using non-personal email to make the bot works from different users)	In_mobile_Type (String) In_empty (Datatable) In_No_Results (Boolean)	The internet must be connected
---	---------------	---	--	--------------------------------

V. Other Details

1. Future Improvements

- Using more keywords related to the input can focus only on the desired phone type.
- If this is productive project, then the Robotic Enterprise Framework will be suitable to handle more exceptions.

VI. Glossary

- **Master project** - the overall output of the development, containing one or multiple projects that together cover the scope of the robotic process automation.
- **Project** - a UiPath Studio project containing one or multiple workflow files. A project can be converted to a package and run independently, covering a particular scope within the master project. The project is used when defining the development and support phase of the automation.
- **Package** - the output of compiling a project. A package can be deployed on the robot machine and be executed by the robot service. Only one package can be executed at a given time by a robot. The package is used when defining the running phase of the automation
- **Workflow** - a component of the package, the workflow encapsulates a part of the project logic. The workflow can be of type: sequence, flowchart or state machine. a workflow is saved as an .xaml file inside the project folder. A workflow file can be invoked from another workflow and by default there is an initial workflow file that will run when executing the package.
- **Activity** - an action that the robot executes.
- **Sequence** - a workflow where activities are executed one after another, in a sequential order
- **Flowchart** - a workflow where activities are connected by arrows and the logic of the workflow can be easily followed in a visual manner. The flowchart can also be exported as an image from UiPath studio
- **State machine** - a more advanced way of organizing a workflow, similar to a flowchart.
- **BOR** - Back office robot
- **FOR** – Front office robot
- **Orchestrator** – Enterprise architecture server platform supporting: release management, centralized logging, reporting, auditing and monitoring tools, remote control, centralized scheduling, queue/robot workload management, assets management.