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

Book Chooser

Given an excel file containing a column of authors, the process opens a site for searching books (bookfinder.com) and extracts book recommendations and possible sites to buy them for the lowest prices.

Contents

[1. Introduction 3](#_Toc51682797)

[1.1 Purpose 3](#_Toc51682798)

[1.2 Objectives 3](#_Toc51682799)

[1.3 Key Contacts 3](#_Toc51682800)

[1.4 Minimum Pre-requisites for the Automation 3](#_Toc51682801)

[2. AS IS Process Description 4](#_Toc51682802)

[2.1 Process Overview 4](#_Toc51682803)

[2.2 Applications Used 4](#_Toc51682804)

[2.3 AS IS Process Diagram 4](#_Toc51682805)

[2.4 Detailed AS IS Process Actions 5](#_Toc51682809)

[2.5 Input Data Description 5](#_Toc51682810)

[3 TO BE Process Description 5](#_Toc51682811)

[3.1 TO BE Process Diagram 5](#_Toc51682812)

[3.2 In Scope for RPA 5](#_Toc51682814)

[3.3 Out of Scope for RPA 5](#_Toc51682815)

[3.4 Exception Handling 6](#_Toc51682816)

[3.4.1 Known Business Exceptions 6](#_Toc51682817)

[3.4.2 Unknown Business Exceptions 6](#_Toc51682818)

## Introduction

### 1.1 Purpose

The Process Definition Document outlines the business process chosen for automation. The document describes the sequence of actions performed as part of the business process, the conditions and rules of the process prior to automation (AS IS) as well as the new sequence of actions that the process will follow as a result of preparation for automation (TO BE).

The PDD is a communication document between:

* The RPA Business Analyst and the SME/Process Owner. The goal is to ensure that the RPA Business Analyst has the correct understanding of the process and has represented it accurately.
* The RPA Business Analyst and the Development team (represented by the Solution Architect and RPA Development Lead). The goal is to ensure that the process is documented appropriately and to a sufficient level of detail so that the Solution Architect can then create the solution based on the PDD content.

### 1.2 Objectives

The business objectives and benefits expected by the Business Process Owner after automation of the selected business process are to automate the process of finding book recommendations written by a given author.

### 1.3 Key Contacts

Add here any stakeholders that need to be informed or to approve changes to the process:

| **Role** | **Name** | **Contact Details** (email, phone number) | **Notes** |
| --- | --- | --- | --- |
| Developer | Drețcanu Mihai | mihai.dretcanu@stud.ubbcluj.ro |  |
| Developer | Hăbuc Livius | livius.habuc@stud.ubbcluj.ro |  |

### 1.4 Minimum Pre-requisites for the Automation

1. Filled in Process Definition Document
2. Test Data to support development
3. Microsoft Office Excel must be installed
4. The specified input file must exist
5. Google Chrome browser must be installed
6. Internet connection is necessary
7. The UiPath Web Automation chrome extension must be installed

## AS IS Process Description

In this section the Business Analyst will document the process. This section will serve as the starting point for the re-engineering and automation effort.

### 2.1 Process Overview

Section contains general information about the process before automation.

| **Item** | **Description/Answer** |
| --- | --- |
| **Process Full Name** | ***Book Chooser*** |
| **Process Area** | Automation |
| **Short Description**  (operation, activity, outcome) | ***Given an excel file containing names of book authors, the user accesses bookfinder.com and searches for books written by the given authors. The user then randomly chooses a set number of books from each author and selects the least expensive retail offers. The user then saves in an excel file the author name, the book title, the name and site of the retailer and the price.*** |
| **Role(s) required in applications to perform the process** | n/a |
| **Number of persons performing the process** | ***1*** |
| **Percentage Un-handled exceptions** | ***0%*** |
| **Input data description** | ***An excel file named “authors.xlsx”, where the author names are written on the firs column*** |
| **Output Data description** | ***An excel file named “output.xlsx”, containing the author name, the book title, the name and site of the retailer and the price, in this order in each row.*** |

*\*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.*

### 2.2 Applications Used

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** | **Application Language** | **Thin/Think Client** | **Comments** |
| --- | --- | --- | --- | --- |
| **Microsoft Office Excel** | Any UiPath compatible version | English | Thick Client | n/a |
| **Google Chrome** | Any UiPath compatible version | English | Thick Client | n/a |

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

### 2.3 AS IS Process Diagram

See **UPTH7\_AsIs.png**

### 2.4 Detailed AS IS Process Actions

| **#Action** | **Input** | **Description** | **Exception Handling** | **Possible Actions** |
| --- | --- | --- | --- | --- |
| Write input to file | authors.xlsx | *The user types the desired authors’ full name into a row* | n/a | n/a |
| Create output file | books.xlsx | The user creates a file for storing the results | n/a | n/a |
| Open the input file | authors.xlsx | The user opens the input file for reading the author names | n/a | n/a |
| Open browser | n/a | The user opens the Google Chrome browser and navigates to BookFinder website | n/a | n/a |
| Read author names from input file | authors.xlsx | The user reads each author name from the input file | n/a | n/a |
| Search all books written by an author | Author name | The user searches books written by the given author | n/a | n/a |
| Choose some random books | n/a | The user chooses some random book recommendations from the given results | n/a | n/a |
| Access book link | n/a | The user accesses the link for each chosen book | n/a | n/a |
| Extract the least expensive offers from unique retailers | n/a | The user chooses the least expensive offers from the results, skipping the repeating appearances of the same retailer | n/a | n/a |
| Append the results to the output file | n/a | The user appends the results to the output file | n/a | n/a |

### 2.5 Input Data Description

The following table should contain details regarding the inputs that every action of the process takes.

| **#Action** | **Sample** | **Input Type** | **Location** | **Are inputs Natively Digital\*?** | **Are the inputs Structured\*?** |
| --- | --- | --- | --- | --- | --- |
| Read input from excel file | See authors.xlsx | *Excel file* | Root folder of the project | Yes | Yes |

*\* Native Digital: This is data that was originally created digitally e.g. excel, database or application reports etc. The non-native digital inputs are usually scanned images.*

*\* Structured Data: has a predictable format and exists in fixed fields (e.g. an excel cell or a field in a form) and is easily detectable via search algorithms.*

## TO BE Process Description

In this section the proposed improvements to the process, actions to the process will be outlined as well as the actions proposed for automation and the type of robot required. **This will be cross-checked by the Solution Architect.**

### TO BE Process Diagram

See **UPTH7\_ToBe.png**

### 3.2 In Scope for RPA

All of the actions are in the scope for RPA, besides writing the input data.

### 3.3 Out of Scope for RPA

The actions **out of scope** for RPA should be listed in the table below together with the reasoning.

| **Activity/Action\*** | **Reason for out of scope** | **Impact on the TO BE** | **Possible measures to be taken into consideration for future automation** |
| --- | --- | --- | --- |
| *Writing the input data* | *Input is manually written* | *There is no input data if the data is not manually inserted* | *n/a* |

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

### 3.4 Exception Handling

The Business Process Owner and Business Analysts are expected to document below all the business exceptions identified in the automation process. Exceptions are of 2 types and both need to be addressed:

**Known exceptions** = previously encountered. A scenario is defined with clear actions and workarounds for each case.

**Unknown** = New situation that was not encountered before. It cannot be predicted and in case it happens it needs to be flagged and communicated to an authorized person for evaluation.

#### 3.4.1 Known Business Exceptions

Details regarding how the robot should handle the exceptions.

| **Exception Name** | **Action** | **Parameters** | **Actions to be taken** |
| --- | --- | --- | --- |
| *No input file exists* | *Opening the input file* | *n/a* | *Process is ended and a message box is displayed* |
| *No results have been found for a given author* | *Searching books by given author name* | ***AuthorName*** | *The author is skipped and the failure is mentioned in the output file* |

#### 3.4.2 Unknown Business Exceptions

For all other cases which do not follow the rules defined an e-mail should be sent to one of the email addresses mentioned at section **1.3**.