**AVAALI SOLUTIONS PVT. LTD.**

**Process Design Document (PDD) –**Lab Test Results Automation

Version 1.0

**Document Revision History**

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| 1.0 | 22nd July 2024 | Sameer Ahmed Shariff |  | 1st Draft |

**Document Distribution Details**

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# **Introduction to the document**

As per Avaali’s consultants' process deep-dive discussion with process owners, the process seems to have substantial scope for automation. All the automation avenues for the process have been captured in detail and have been presented in this document.

**Intended Audience:** The intended audiences for this specification include:

**Avaali RPA – Team Members** (especially members of the Implementation Team):

* Jaideep MS - Practice Director
* Shivakumar R - Project Lead/ Architect
* Sameer Ahmed Shariff – Business Analyst
* Sameer Ahmed Shariff - Developer

**Document Overview: The contents of the specification document which are detailed out in the forthcoming sections are:**

* Overview, which provides a brief, high-level overview of the business background and the proposed process for the project.
* Functional Requirements, which specify the requirements of the user.
* Non-Functional Requirements, which specifies the non-behavioral aspects of the system.
* Assumptions and Acceptance Criteria

# **Process Overview**

# Business Requirement

Automating Lab Test Results Automation involves fetching patient data files from dated directories, copying them to an output folder with timestamped filenames. Extracting patient names from reports, matching them with an Excel database for email retrieval, and composing Outlook emails with report summaries as body. This RPA workflow streamlines data handling, ensuring accuracy in patient identification and timely communication of lab results to doctors and patients. It integrates file management, data extraction, and email automation to enhance efficiency and reliability in medical reporting processes.

# **User Management**



# Login and Authentication

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Serial No** | **Application Name** | **Username** | **Password** | **Department** | **Contact Person** | **Email ID** |
| 1 | MS-Excel | - | - |  |  |  |
| 2 | MS Outlook | - | - |

# Systems Used

|  |  |  |
| --- | --- | --- |
| **Application Name** | **Application Type** | **URLs** |
| MS-Excel | Desktop | NA |
| MS Outlook | Desktop | NA |

# Process Business Requirements

# Pre-requisites:

* Office applications installed & configured.
* Access to the Listed portals and utilities
* Authorization
* Read, Write emails.
* Download & store attachments in the Shared folder.

**Input File Saving Location:** D:\Lab Test Results Automation\Input\YYYY\MM\DD

* **YYYY-MM** is the year and month for which the report must be processed.
* **DD** – transactions related to the current working day.

**Output File Saving Location:**

D:\Lab Test Results Automation\Output\YYYY\MM\DD\RPAOutput\_ddmmyyyy\_hhmmss.xlsx

* **YYYY-MM** is the year and month for which the report must be processed.
* **DD** – transactions related to the current working day.

|  |  |
| --- | --- |
| **BR #** | **Business Requirement Description** |
| **BR1** | The collection and distribution of lab test results to patients and doctors.  This is a daily activity.  To – be Process flow:  A diagram of a patient  Description automatically generated  *Lab Test Results Automation– The collection and distribution of lab test results to patients and doctors.*  Steps to be executed by the bot:   1. Fetch Input file placed in the Shared Folder under <working directory>/ Lab Test Results Automation/Input/<yyyy>/<mm>/<dd>. Place a copy of Input file in Output folder with naming convention as <working directory>/ Lab Test Results Automation/Output/<yyyy>/<mm>/<dd>/RPAOutput\_ddmmyyyy\_hhmmss.xlsx. Add column ‘Status’ to output file. 2. Extract Name of the patient from the input file.      1. Fetch Input file placed in the Shared Folder under <working directory>/ Lab Test Results Automation/Input/<yyyy>/<mm>/<dd> containing the patient details like name, email.  1. Now match the patient name from their medical report to that of the excel database file . 2. Fetch the email addresses of patient and doctors from the excel database file.      1. Send Outlook mail with subject as <patient name> Lab Report and body containing the summary of the lab report. |
| **BR 2** | **Reporting**  **Steps to be executed by the bot:**   1. The output file that will be placed in the output folder is < Patient Name> Lab reports.xlsx.      1. Share the summary in the body of outlook to [<groupID>@avali.com](mailto:cbfcentral@icicibank.com).   **Note : - If the outlook is not working, bot shouldn’t throw exception.**   * **Save all the Output files, exception screenshots in shared folder.** |

# **Non-Functional Requirements**

This section specifies the required system quality factors that are not related to the specific functional requirements documented.

# Security

|  |  |
| --- | --- |
| **NFR#** | **Requirement Description** |
|  | Access control to all the relevant application portals, file folders, share drives shall be provided All the information extracted is entered accurately. |
|  | All the Credentials are stored in an Encrypted form |

# Compliance Requirements

|  |  |
| --- | --- |
| **NFR #** | **Requirement Description** |
|  | Based on the requirements to be defined in the Interfacing Business Requirement document |

# **Assumptions and Acceptance Criteria**

# Acceptance Criteria

The following criteria need to be met before the application is being rolled out.

* A set of test requests will be used to test the application. These will be shared, discussed, and frozen with mutual consent post-sign-off of the last reviewed version of the requirements specification document.
* The authorized person in the Business/ Operation to give a sign-off after user testing.

# **Business Blueprint Sign-off**

|  |  |
| --- | --- |
| **Project:** | **Lab Test Results Automation** |
| **Company Name:** | **Avaali Solutions Pvt. Ltd.** |
| **Release:** | **1.0** |

# Acceptance Sign-off

Signature by authorized user representative hereby acknowledges the receipt and acceptance of the “Business Blueprint” to be comprehensive, conclusive and within the scope of work agreed with Avaali Solutions Private Limited.

ICICI Bank Limited hereby also confirms its agreement to proceed with the next stage of the project.

|  |  |  |
| --- | --- | --- |
| **Review and approved by** | **Date** | **Signature** |
|  |  |  |