

Configuration Manual

MSc Research Project MSc AI for Business

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Configuration Manual

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1 Introduction

This manual configuration guide contains step-by-step instructions for setting up and configuring the RPA and AI-based document processing system. This document is designed to ensure efficient and effective use of the system by its users.

2 System Requirements

The minimum technical requirements for setting up this system are shown in Figure 1. Additionally, the latest versions of software such as UiPath, RapidMiner, and DBeaver should be installed.

Device specifications Сору DESKTOP-VVL64PV Device name Processor Apple Part 000 r0p0 2.00 GHz Installed RAM 4.00 GB CDABAB09-89E1-4774-B85D-42EFD5B0E6EC Device ID 00330-80000-00000-AA521 Product ID 64-bit operating system, ARM-based processor System type Pen and touch No pen or touch input is available for this display Related links Domain or workgroup System protection Advanced system settings Windows specifications Сору Edition Windows 11 Pro 22H2 Version Installed on 24/10/2023 OS build 22598.1 Windows Feature Experience Pack 1000,22598,1.0 Experience Microsoft Services Agreement Microsoft Software License Terms

Figure 1: System Requirements





Figure 3: RapidMiner Logo

RAPIDMINER



Figure 4: Dbeaver Logo

DBeaver

3 Data Requirements

This section addresses the data requirements necessary for configuring our RPA and Albased document processing system using the DBeaver database. Ensuring the following data properties is crucial for the system to function effectively and accurately:

Database Content:

Our database should contain information such as employee names, the departments they are associated with, their experiences, and the business units they are registered in. This information is essential for the system to correctly assign tasks to the appropriate personnel.

Data Format and Structure:

Data should be stored in the DBeaver database in an appropriate format and structure. In particular, XML and HTML invoice data should be organized in a way that the system can read and process them effectively. The database design should facilitate data integration and querying, allowing for efficient data management and access.

Data Integrity and Accuracy:

The integrity and accuracy of data in the database are critical for the reliability of the system's outputs. Data entry processes should be carefully managed to ensure data integrity and accuracy.

Security and Privacy Standards:

Appropriate security measures should be in place in the database to protect sensitive data and ensure privacy. Data management and storage should comply with data protection and privacy standards.

Figure 5: Database

WorkLoad

Work_id

Work_description

Work_employee

Work_department

But work_department

But work_department

But employee_gender

But employee

But

3

Figure 6: Database

employee	employee_	_departm	employee	employee	work	work	emplo	work_dep	work_is_
_id	name ~	ent 🔻	_gende ~	_age	_id ~	description $\ \ \ \ \ \ \ \ \ \ \ \ \ $	yee 💟	$artment \boxed{ }$	comple
1	Employee1	Accountin	Female	30	6	Sample6.xml	1	Marketing	1
2	Employee2	Accountin	Female	31	26	Sample26.xml	2	Accounting	1
3	Employee3	Accountin	Female	22	3	Sample3.xml	3	Legal	1
4	Employee4	Accountin	Male	24	2	Sample2.xml	4	Research ar	1
5	Employee5	Accountin	Female	29	1	Sample1.xml	5	Business De	1
6	Employee6	Accountin	Female	23	4	Sample4.xml	6	Product Ma	1
7	Employee7	Accountin	Male	23	12	Sample12.xml	7	Human Res	1
8	Employee8	Accountin	Female	36	864	Sample864.xml	8	Research ar	1
9	Employee9	Accountin	Female	30	8	Sample8.xml	9	Training	1
10	Employee10	Accountin	Female	33	13	Sample13.xml	10	Sales	1

4 Installation Steps

The installation process includes the following steps:

Download and install UiPath from the official website. Download and install Rapid-Miner from official website. Acquire DBeaver and configure it according to the system requirements.

5 Configuration Options

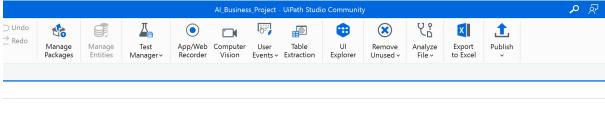
In RapidMiner, configure the Naive Bayes model by following these steps in Figure 7.

Retrieve practicum_... Read Database Statistics Select Attributes res out sta con exa ori res (Split Data Set Role Naive Bayes Apply Model mod ori mod (unl

Figure 7: RapidMiner Steps

In UiPath, set up the invoice processing workflow as follows in Figure 8, Figure 9, Figure 10, Figure 11, Figure 12.

Figure 8: UiPath Step 1



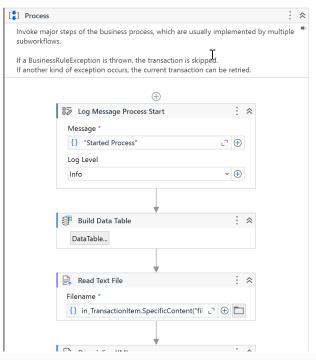


Figure 9: UiPath Step 2 Al_Business_Project - UiPath Studio Community ή I. 0= ⊃ Undo \bigotimes X 1 16 Manage Packages App/Web Computer Recorder Vision User Table Events > Extraction UI Explorer Manage Entities Test Manager v Analyze File v Export to Excel Publish Deserialize XML : ☆ {} readTextOutput רֻ ⊕ [SupplierName 2 action(s) Double click to View (x) Assign Save to Value to save $\{\}$ outputDT.Rows(0).ltem(0) \oplus = $\{\}$ supplierName רֻ ⊕ [SupplierAddress : × 2 action(s) Double click to View V (x) Assign Value to save $\{\}$ outputDT.Rows(0).Item(1) \oplus = $\{\}$ supplierAdress רֻ ⊕

Figure 10: UiPath Step 3 Al_Business_Project - UiPath Studio Community 일 I. ⊃ Undo 0-4 \bigotimes X 1 16 User Table Events > Extraction UI Explorer Manage Packages Manage Entities Test Manager v App/Web Computer Recorder Vision Remove Unused v Analyze File v Export to Excel Publish [CustomerName 2 action(s) Double click to View (x) Assign $\{\}$ outputDT.Rows(0).ltem(2) \oplus = $\{\}$ customerName רֻ ⊕ [CustomerAddress 2 action(s) Double click to View (x) Assign Save to Value to save $\{\}$ outputDT.Rows(0).ltem(3) \oplus = $\{\}$ customerAddress רֻ ⊕ V [InvoiceDate : × 2 action(s) Double click to View

Figure 11: UiPath Step 4Al_Business_Project - UiPath Studio Community I. ٢٩ ⊃ Undo 0-4 \bigotimes 16 X 1 → Redo UI Explorer Manage Packages Manage Entities Test Manager v App/Web Computer Recorder Vision User Table Events > Extraction Analyze File v Export to Excel Publish (x) Assign $\{\}$ outputDT.Rows(0).Item(4) \oplus = $\{\}$ invoiceDate רֻ ⊕ [InvoiceNo 2 action(s) Double click to View (x) Assign Save to $\{\}$ outputDT.Rows(0).Item(5) \oplus = $\{\}$ invoiceNo רֻ ⊕ [PaymentDate Double click to View R (x) Assign Save to Value to save $\{\}$ outputDT.Rows(0).Item(6) \oplus = $\{\}$ paymentDate רֻ ⊕

Figure 12: UiPath Step 5Al_Business_Project - UiPath Studio Community **,** ₽ 녆 <u>I</u> 0-4 ⊃ Undo \bigotimes X 1 16 ightarrow Redo UI Explorer Manage Packages App/Web Computer Recorder Vision User Table Events > Extraction Manage Entities Test Manager v Remove Unused v Analyze File v Export to Excel Publish [Total Amount 2 action(s) Double click to View (x) Assign Value to save {} outputDT.Rows(0).Item(8) \oplus = {} totalAmount רֻ ⊕ : × Service Details 3 action(s) Double click to View Append Range Workbook : ☆ {} in_outputPath רַז ⊕ 🗀 {} "output" רֻ ⊕ {} outputDT רֻ ⊕ V \oplus

6 Security Recommendations

Security plays a crucial role in the successful use of RPA and AI-based systems. It is essential for users to be mindful of data protection, regularly update software, and apply strict user authorization practices. Secure network connections and strong passwords should be used, along with regular data backups. Additionally, educating users about security protocols and emergency procedures is vital to prepare for potential security breaches.

7 Conclusion

This manual configuration document comprehensively presents all necessary steps and guidelines for setting up and managing our RPA and AI-based document processing system. The information detailed here is designed to enable users to efficiently and effectively install and manage the system. Security recommendations and solutions to common problems are crucial for maintaining the safe and smooth operation of the system.

Users are encouraged to use this document as a resource for better understanding the system and for finding quick solutions when encountering any issues. Additionally, this document will serve as a reference point for future versions and updates of the system.

Finally, the continuous improvement of this document and the system relies on being open to user feedback and industry innovations. Suggestions and feedback for enhancing the user experience are highly valued. We hope this document plays a significant role in the effective and efficient use of our RPA and AI-based document processing system.