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தேசிய பயிலுநர் கைத்தொழில் பயிற்சி அதிகாரசபை
NATIONAL APPRENTICE AND INDUSTRIAL TRAINING AUTHORITY

DAILY DIARY
## UNDERGRADUATE / DIPLOMA
INDUSTRIAL TRAINING

WEEK NO : 01

FOR THE WEEK ENDING		**TRAINING LOCATION**
Sunday 16 / 07 / 2023		**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	07 / 10	• First, my desktop computer was set up in the office with the assistance of the ITP Division. Afterward, a welcome meeting was held. • A meeting was conducted with the supervisor to outline our plans. • Subsequently, the Introduction to RPA and Automation Course at Ui Path Academy was commenced.
Tuesday	07 / 11	• Today, the course Introduction to RPA and Automation was completed. • Subsequently, the RPA Developer Foundation course was commenced. Under this course, learning began with the Meet the UiPath Platform (v2021.10) module.
Wednesday	07 / 12	• The Meet the UiPath Platform (v2021.10) module was completed. This module primarily focused on the core RPA components of the UiPath Platform: Studio, Orchestrator, Robot, and Assistant. Subsequently, UiPath Studio was downloaded and set up on my desktop computer.
Thursday	07 / 13	• Today, my first process was built with Studio. Through this experience, a deeper understanding of the components of UiPath Studio was gained. Additionally, my first process was published using UiPath Studio. • Subsequently, the module "A Day in the Life of an RPA Developer" was pursued. This module provided insights into business processes, methods for assessing automation potential, tasks of RPA developers, as well as ownership and collaboration with other roles.
Friday	07 / 14	• Today, knowledge about Variables and Arguments in Studio was acquired. • Additionally, understanding was gained about how the If, While, Do While, For Each, Switch, and Parallel activities are executed in a process or workflow.
Saturday	07 / 15	Weekend Holiday
Sunday	07 / 16	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

This week marked the beginning of my internship journey with Metatechno Lanka, a company renowned for its expertise in developing embedded software and custom software solutions tailored to client specifications, as well as automating business processes. In my role as an Intern Software Engineer specializing in Robotic Process Automation (RPA), I was tasked with automating business processes in alignment with client requirements.

Upon arrival, I was warmly welcomed by the team and swiftly completed the necessary paperwork while familiarizing myself with the company's rules and regulations. Following these administrative tasks, a meeting was organized by our supervisor to outline our future plans. During our discussion, it was agreed that my initial focus would be on completing relevant courses to enhance my understanding of Robotic Process Automation. As part of this plan, I embarked on the UiPath Foundation course available through the UiPath Academy. The course comprised several modules, and a certificate was obtained upon completing the first module. This certificate symbolizes the initial step in my journey to acquire expertise in Robotic Process Automation (RPA) and signifies my commitment to advancing my skills in this field.

- The Certificate of Introduction to RPA and Automation.
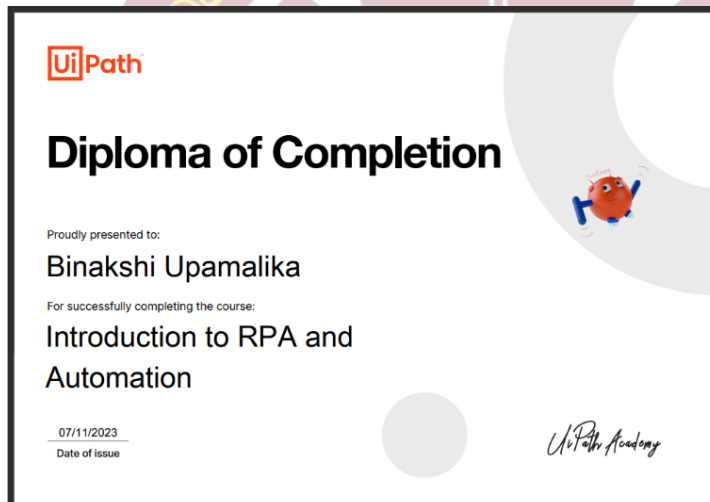
Following the completion of the initial module, progress was made to additional modules such as "Meet the UiPath Platform (v2021.10)," "The Day in the Life of an RPA Developer," and "Variables and Arguments in Studio." These modules provided comprehensive insights into the functionalities and capabilities of UiPath Studio.

At the outset of my internship, my knowledge of robotic process automation (RPA) was minimal. However, it is worth noting that through diligent learning and hands-on experience, a clear understanding of RPA concepts has been developed. Utilizing UiPath Studio, the first workflow was successfully executed, demonstrating the practical application of RPA in streamlining business processes. UiPath Studio is advanced automation software that provides everyone, from business users to advanced RPA developers, with the right automation canvas to build great software robots—and organizations with the right governance tools to manage them all.

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

- My First process with the UiPath Studio and the certificate of the life of an RPA developer.
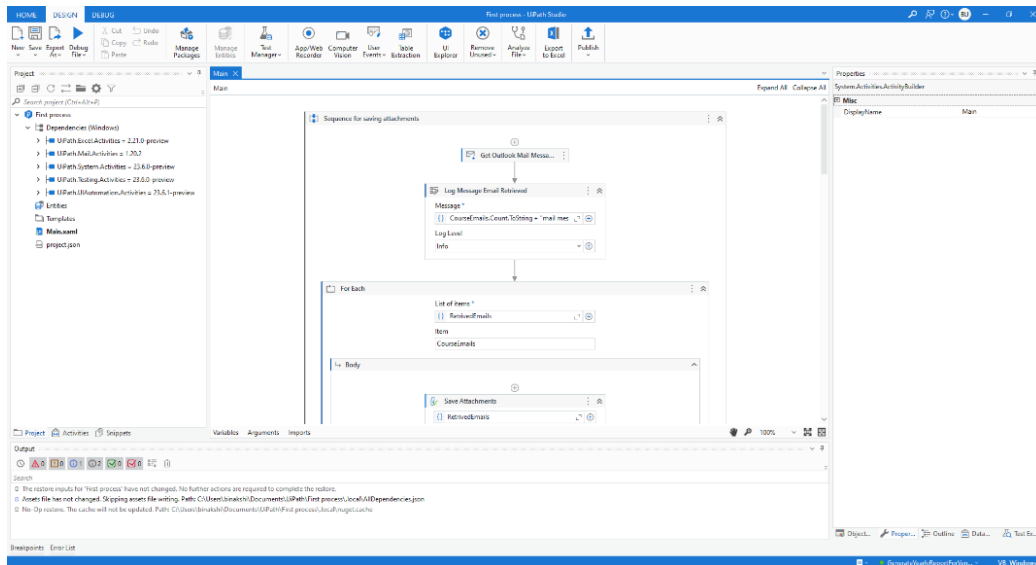
       This marks the beginning of an exciting journey towards mastering RPA and contributing effectively to the company's projects and objectives.

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FOR THE WEEK ENDING		TRAINING LOCATION
Sunday 23 / 07 / 2023		**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	07 / 17	- In the morning, there was a progress evaluation meeting. - Today, knowledge about UI automation in Studio was acquired through three modules. - Introduction to user interface automation with Studio - UI Automation with the Modern Experience in the Studio - UI Automation with the Classic Experience in Studio Today, the first two modules were completed, and the third module was initiated for learning.
Tuesday	07 / 18	- In the morning, a progress evaluation meeting was held. - Learning about UI automation with the Classic Experience in Studio was completed. - Subsequently, studying about data tables and Excel automation with Studio was undertaken. During this module, an Excel automation demo was conducted, and additional practices were pursued to enhance understanding.
Wednesday	07 / 19	- In the morning, a progress evaluation meeting was conducted. - Knowledge about data manipulation with strings in Studio was acquired. - Subsequently, selectors in Studio were explored. - Following the completion of selectors in the studio, learning about descriptors in the studio was initiated.
Thursday	07 / 20	- In the morning, a meeting was held to evaluate the progress. - Descriptors in Studio were completed. - Project organization in the studio was learned. - Debugging in the studio was followed up on. - A meeting was attended with a software engineer who provides guidance and support to interns. Assistance was received to comprehend challenging concepts, and issues encountered in today's module were resolved with his help.
Friday	07 / 21	- There was a morning progress meeting. - I followed up on Error and Exception Handling in Studio, Introduction to Logging in Studio, Orchestrator Overview for RPA Developers, and Working with Orchestrator Resources.
Saturday	07 / 22	Weekend Holiday
Sunday	07 / 23	Weekend Holiday

During my second week, I delved into UI automation with Studio, which consisted of three modules: introduction to user interface automation with Studio, UI automation with the modern experience in Studio, and UI automation with the classic experience in Studio.

In the initial modules, insights were gained into building user interface automation projects effectively using various activities in Studio, including Application Browser, Click and Type, and Get Text. These activities facilitated seamless automation of user interactions within applications.

The third module expanded my understanding by exploring corresponding input methods such as Chromium API, Simulate, and Send Windows Messages, as well as output methods including full text, native, and OCR. This comprehensive overview equipped me with the necessary tools to address diverse automation scenarios.

Subsequently, delving into data tables and Excel automation with Studio ensued, involving conducting an Excel automation demo and engaging in practical exercises to deepen understanding. While navigating through the exercises, workflow errors were encountered. However, through diligent troubleshooting and leveraging online resources, these issues were successfully resolved, further honing problem-solving skills and technical proficiency.

I learned about data manipulation with strings in Studio. In this part, insights were gained into what data manipulation entails, how to work with strings, and how to utilize the RegEx Builder. To enhance comprehension, a demo process workflow was created. This process was successfully executed.
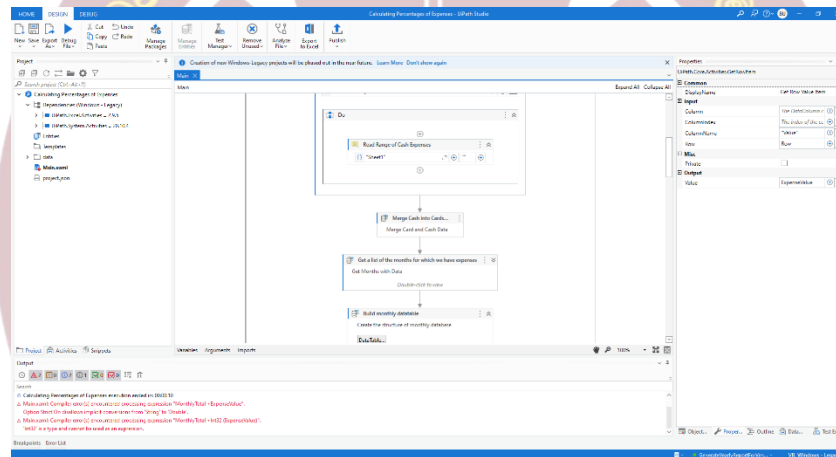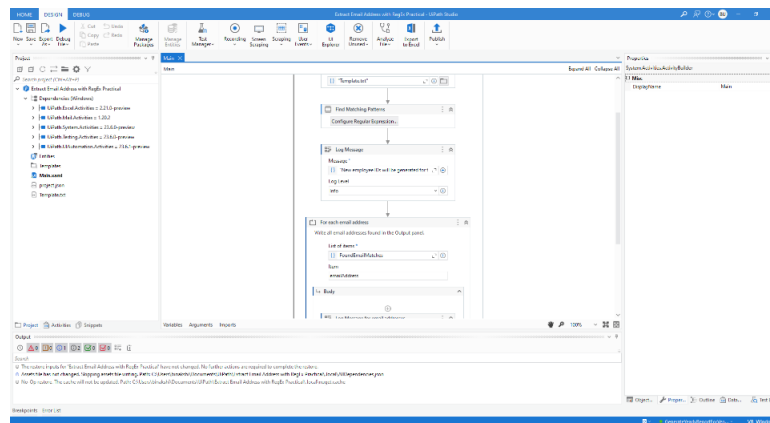
DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

During this period, selectors in UiPath Studio were explored, serving as the primary targeting method for UI automation activities. Subsequently, descriptors, advanced selection window options, and target element validation were delved into, enabling configuration and fine-tuning of descriptors for complex scenarios. Encountering issues and errors in the modules prompted a meeting with a software engineer, who provided invaluable assistance to address challenging concepts and resolve bugs efficiently. In the Project Organization in Studio section, best practices for organizing projects effectively were absorbed, followed by a study of debugging features to identify and rectify workflow errors.

Moving on to Error and Exception Handling in Studio, familiarity with exception handling activities such as TryCatch, Throw, Rethrow, Retry Scope, and Global Exception Handler was gained. This knowledge empowered effective management of errors within workflows.

Transitioning to Introduction to Logging in Studio, establishment of logging in UiPath Studio projects, interpretation of robot execution logs, and optimal utilization of UiPath Log Message activities were learned.

Upon completion, exploration of the utilization of Orchestrator for centralized management of automations, robots, and automation assets consolidated understanding of workflow management in UiPath Studio.

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		FOR THE WEEK ENDING	TRAINING LOCATION
		Sunday 30 / 07 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	07 / 24	• There was a progress evaluation meeting in the morning. • Today I practiced email automation and PDF automation with Studio. • Studied version control system integration in Studio. • Studied RPA testing with Studio.
Tuesday	07 / 25	• Held a progress evaluation meeting in the morning. • Today I start the advanced part of the robotic process automation. • Under that part, first I followed up on State Machines in Studio. • Then I completed Introduction to the Robotic Enterprise Framework.
Wednesday	07 / 26	• There was a progress evaluation meeting in the morning. • Learned about how to build a REFramework project with orchestrator queues. • Started to learn how to build a REFramework project with tabular data.
Thursday	07 / 27	• There was a progress evaluation meeting in the morning. • Learned about building a REFramework project with tabular data. • Then there were two practices from REFramework to do and submit. So I started the first practice.
Friday	07 / 28	• Held a progress evaluation meeting in the morning. • Tried to learn more about REFramework before developing the workflow. • After satisfaction with my REFramework knowledge, I started to develop the first practice of Calculating Client Security Hash.
Saturday	07 / 29	Weekend Holiday
Sunday	07 / 30	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

My internship had been going on for a period of three weeks. I gained knowledge about email and pdf automation. To better understand those components, I examined out some sample process workflows and practices. When doing email automation with Gmail, an error occurred in my workflow, as shown below.
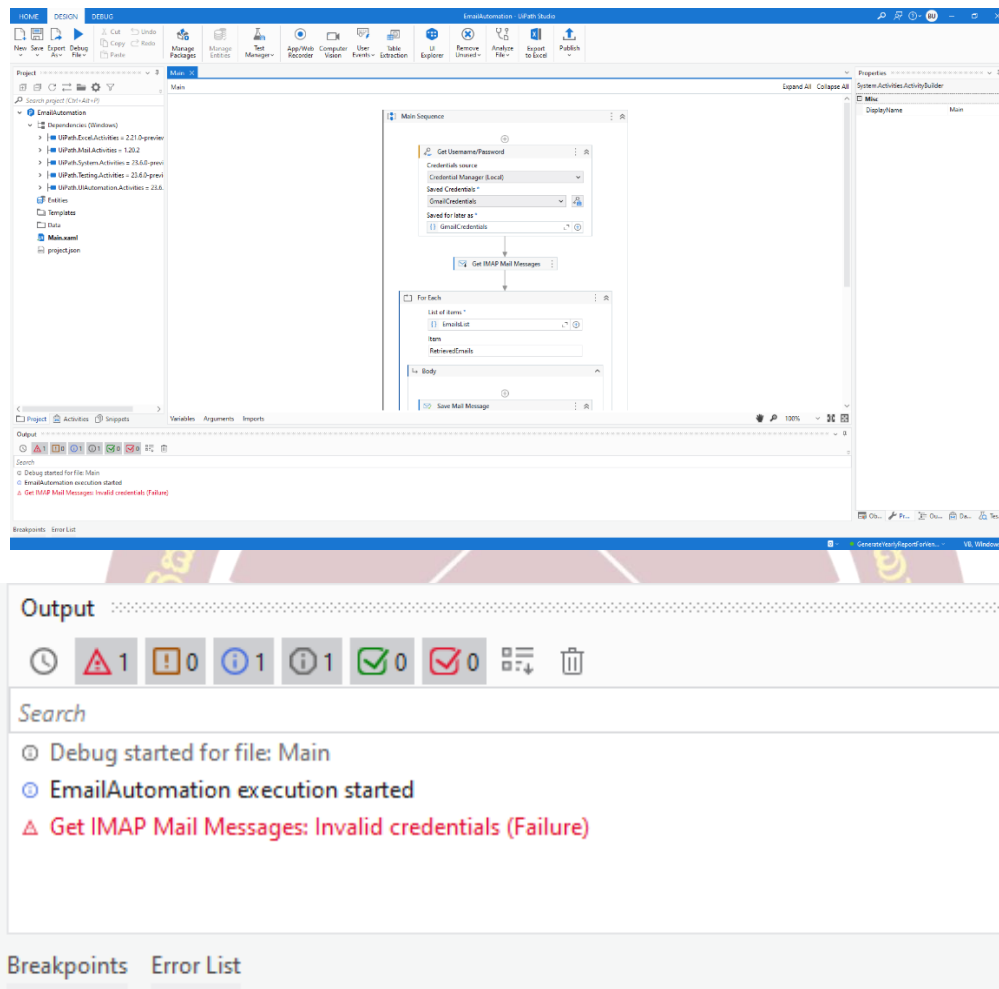
I tried many ways to solve this error. But I couldn't find any solutions. So I requested to arrange a meeting to ask about that from a senior. Since the meeting was arranged, I practiced PDF automation. Also, there were some difficult parts. I listed down all of the issues that I had to ask from senior and skipped them to move forward. On the next day, he arranged a meeting to help us solve our issues, according to my request. Then I found out the solutions to all the issues that I had. In Version Control Systems Integration in Studio, I learned about the version control systems that can be used with UiPath Studio, with a focus on the main actions you can perform with Git. Then I learned about RPA testing in the overall automation process and covered in depth the relevant features for testing in UiPath Studio.

I began the advanced part of robotic process automation. The first part was State Machines in Studio. I learned when and how to use the State Machine workflow layout and its specific activities. I understood it was key to using the REFramework template and automating complex processes. After completing this, I studied REFramework.

Then I practiced building a reframework project with orchestrator queues. To best understand, I tried practicing an example. It was successfully executed without any errors. Then we practiced the REFramework Project with tabular data.

There were two practices to do and submit to check in REFramework. So I started to do the first practice. I had to calculate client security hashes from RPA. I had to use REFramework for that. They provided a process design document for that, and I had to develop the workflow according to that. It was tricky for me because I had no experience with it. So I went through the Process Design Document, and I tried to get a better idea of REFramework by referring to the internet and YouTube.

After feeling satisfied with my knowledge of REFramework, I started to develop workflow according to the Process Design Document. As the first step, I created a new project using REFramework and provided a name and a proper description.

There were many process workflows, and we had to whiteboard those workflows. But I have already given it because those were my first REFramework practice. I began to develop the first sequence, called System1_Login.

Module Name	Description	Pre-condition	Post-action	Arguments
System1_Login	Opens an Edge browser to the input URL	N/A	Opens Edge System 1 Dashboard if credentials are correct.	in_System1URL - String in_System1Credential – String
System1_Close	Closes System1 Edge Browser	System 1 Opened, Log Out button accessible	Logs Out and Closes Edge	N/A
System1_Navigate To_Dashboard	Navigates to Dashboard from ANY page in System1	Logged into System 1. Any page open.	Navigates to the Dashboard	In_System1URL – String
System1_Navigate To_WIDetails	Navigates to the WI Details Page using the WIID input argument	System 1 open at any page	WI Details open	in_WIID - String in_System1_URL - String
System1_Navigate To_WorkItems	Navigates to WorkItems Page	System 1 Dashboard Open	Work Items Page open	N/A
System1_ExtractW IsDataTable	Extracts the entire Table of all Work Items in the output argument	WorkItems page Open	None	out_TransactionData – DataTable
System1_ExtractCli entInformation	Extracts the ClientID, ClientName and ClientCountry and writes to the output arguments	WorkItem Details Page open	None	out_ClientID - String out_ClientName - String out_ClientCountry - String
System1_UpdateW orkItem	Updates the Work Item to the Status and Comment input arguments. Status can be "Open", "Completed" or "Rejected"	System 1 WI Details Page open	None	in_Comment - String in_Status - String
SHA1_Open	Opens SHA1 generator website from the URL argument	None	Opens Edge SHA1 generator	in_SHA1URL – String
SHA1_Close	Closes SHA1 generator	SHA1 generator Main Page open	Closes Edge SHA1 generator	N/A

SHA1_ProcessHash	Retrieves the HashResult based on the input HashFormula	SHA1 generator open	None	in_HashFormula - String out_HashResult - String
SendEmail	Sends Exception Email using Outlook and the Input Arguments	None	None	in_To - String in_Subject - String in_Body - String

REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

	FOR THE WEEK ENDING	TRAINING LOCATION
	Sunday 23 / 07 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	07 / 31	• A progress evaluation meeting was held in the morning. • The first sequence in Practice 01, named system1_Login, was completed. • Other workflows, including System1_Navigate_To_Dashboard, System1_Navigate_To_WIDetails, System1_Navigate To_WorkItems, System1_ExtractW IsDataTable, System1_ExtractClientInformation, and System1_UpdateWorkItem, were developed.
Tuesday	08 / 01	Full Moon Poya Day
Wednesday	08 / 02	• The progress evaluation meeting was held in the morning. • Another sequence was developed in Practice 1, including SHA1_Open, SHA1_Close, SHA1_ProcessHash, and SendEmail. • The configuration file (Config.xlsx) was edited to store important settings. • The TransactionItem data type was changed to Data Row. • Sequences previously built were invoked to open, close, and kill workflows.xaml files. • Transaction data and process workflows were edited. • The project was executed, and errors were encountered.
Thursday	08 / 03	• In the morning, a progress evaluation meeting was conducted. • Attempts were made to solve errors that occurred during practice. After various methods were tried, assistance was sought from a senior to resolve those errors. • The practice test was then submitted. • Following that, the development of a second practice was initiated. The task of generating a yearly report, consisting of two parts: the dispatcher and the performer, was undertaken. Initially, efforts were directed towards developing the dispatcher process.
Friday	08 / 04	• The progress meeting was held. • The dispatcher process was completed, and there were some errors in the dispatcher. • Attempts were made to solve those errors by browsing the internet.
Saturday	08 / 05	**Weekend Holiday**
Sunday	08 / 06	**Weekend Holiday**

I created three new folders called System1, SHA1, and Common. The System1_Login sequence was put in the System1 folder. Then I created other sequences in the relevant folders with relevant variables and arguments. Then I edited the configuration file of the 'config.xlsx' file, storing important settings. The settings that I edited in the config file were given below.

- The URL for System1
- The System1 credentials stored in Orchestrator
- The URL for SHA1 generator
- The Business Process Name
- Max Retry number – 2

Then, the transactionItem data type was changed to a DataRow. The applications used were modified by invoking the System1_login and SHA1 open sequences in the InitiAllApplications.xaml workflow. Furthermore, the System1_Close and SHA_1Close sequences were invoked in CloseAllApplication.xaml. Additionally, a kill process activity was added to the KillAllProcesses.xaml workflow.

The transaction data workflow was edited by changing the data type for the out_TransactionItem argument from QueueItem to DataRow and deleting the Get Transaction Item activity. The DataTable was filtered using a FilterDataTable activity or the Select method to retain only the items with the Type WI5 and the Status Open.

Workflows were invoked in Process.xaml to navigate to the Work Item Details page, extract client information, process the hash code, update the work item, and navigate back to the Dashboard.

The process was executed, resulting in some errors. Despite attempting various solutions, a solution could not be found independently. Therefore, the error was resolved with the assistance of a senior.

Finally, the project was submitted, and the results are detailed below.

Calculate Client Security Hash - Upload Assignment

REQUIRED

COMPLETED | 1/1 | 100 / 100
FINAL GRADE | GRADED | AVG. POINTS

Learner Instructions

Compress your Calculate Client Security Hash workflow and upload it below.
Your results will be displayed as soon as your workflow is processed.
Evaluation criteria: Number of correct items divided by the total number of processed items.

 * Do not reset the test data if the results of your evaluation on one of the assignments are still pending!
 * When registering on http://www.acme-test.com, make sure you use the SAME email address you used to create the Academy account!
 * All users need to install UiPath Studio (the Trial or the Community version) prior to the course

The evaluation of the assignments in the UiPath Academy 2.0 is an automatic process, checking the results of the robot running on **your** system. The assignment should be submitted after all items are completed by the robot, while **NOT** resetting the test data until getting the grade. The
Grading Criteria

Grading criteria

GRADER
UIPATH ACADEMY | 100 / 100 Points
GRADED ON: 08/04/2023 01:01 AM UTC

FEEDBACK
No Comments Found

> SUBMITTED BY YOU ON: 08/04/2023 01:00 AM UTC

Then, the development of a second practice was initiated. This practice consisted of two parts: the dispatcher and the performer. First, the dispatcher was created. The whiteboard workflows were given in the document relevant to the dispatcher.

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Module Name	Description	Pre-condition	Post-action	Arguments
System1_Login	Login into Acme with the desired account	N/A	Browser opened to the required URL Logged in with the credentials provided	in_System1URL - String in_System1Credential – String
System1_Close	Close browser	Browser open to ACME page	Browser is closed	N/A
System1_NavigateTo_WI	Navigate to the WI URL	Be logged into the ACME website	Navigated successfully to the desired URL	in_URL - String
System1_ScrapeDataTable	Extract data from the work items datatable	Data exists and be on the work items page	All data table data is extracted	out_DataTable - Datatable
System1_FilterWIDatatable	Filters the input Datatable	Datatable exists	The filtered datatable is passed to the	in_Type – String in_Datatable – DataTable
	for rows with the desired Work Item		PopulateQueue workflow.	out_FilteredDatatable – DataTable in_Status - String

The above workflows were developed. Close and open sequences were invoked in the InitiAllApplications.xaml workflow and the CloseAllApplication.xaml workflow. Additionally, a kill activity was added to the kill workflow.

The configuration file was set up by adding important settings. Next, the business process was modified. The Retry Get Transaction Item activity was deleted. An Element Exists activity was used to determine if there is a page number UI element on the Work Items page equivalent to the current TransactionNumber value. If so, the TransactionNumber value was assigned to out_TransactionItem; otherwise, 0 was assigned to out_TransactionItem. For the following IF activity, the condition was set to out_TransactionItem > 0.
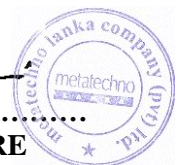
The browser's status was determined if it was on the Work Items page indicated by the TransactionItem. If so, the data was scraped, filtered by type, and the corresponding queue items were added. Then the dispatcher was executed. It encountered some errors, which were resolved by browsing the internet.

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REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 13 / 08 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	08 / 07	• The progress evaluation meeting was held in the morning. • Subsequently, the performer part in the second practice was started to be developed.
Tuesday	08 / 08	• In the morning, a meeting was held to evaluate the progress. • The development of the Performer in this practice was completed. • Some errors were encountered, which were resolved with the assistance of the internet. Following the resolution of the errors, it was successfully executed and submitted.
Wednesday	08 / 09	• The progress evaluation meeting was held in the morning. • Advanced Data Manipulation with Studio, Activity Project Settings in Studio, and Workflow Analyzer in Studio were learned. • Orchestrator triggers and monitoring were started to be learned.
Thursday	08 / 10	• A progress evaluation meeting was held in the morning. • Orchestrator triggers and monitoring were studied and completed. • Following that, the attended automation features in Studio were completed.
Friday	08 / 11	• The progress meeting was held. • The invoke method and invoke call in Studio were studied today. • Excel automation with the Modern Experience in Studio was then completed.
Saturday	08 / 12	Weekend Holiday
Sunday	08 / 13	Weekend Holiday

It was the fifth week of my internship. Last week, the development of a second practice was initiated, and the dispatcher part of that practice test was completed. This week, the next challenge of my internship was tackled with excitement. With the dispatcher part completed, the implementation of the performer part was begun. As before, when the Dispatcher was developed, there was also a workflow table.

Module Name	Description	Pre-condition	Post-action	Arguments
System1_Login	same as in Dispatcher			
System1_Close	same as in Dispatcher			
System1_NavigateTo	same as System1_NavigateTo_WI in Dispatcher			
System1_GetClientDetails	Get the client information: tax id	Logged in and on the work item WIID page	Got all the client information : taxID	out_TaxID - String
System1_DownloadMonthlyReports	Enter tax ID, enter year and for each month download report if exists (treat exceptions)	Logged in and on the download monthly report page, report directory exists	Downloaded all available reports for a given TaxID and a given year into a given location	in_TaxID - String in_Year - String in_ReportDirPath - String
System1_MergeMonthlyReports	Merge the downloaded csv from a given TaxID and a year, located into a certain folder, into one excel file - yearly report	Monthly reports exist into a certain folder	Constructed the merged excel file and save it with name format "Yearly-Report-year-taxid.xlsx"	in_TaxID - String in_Year - String in_ReportDirPath - String out_YearlyReportPath - String
System1_UploadYearlyReport	Upload a given yearly report to the upload yearle report page for a given tax id and a given year	Yearly report excel file exists into the specified folder and we are on the upload yearly report page Post Report uploaded successfully and retrieved confirmation id	Report uploaded successfully and retrieved confirmation id	in_TaxID - String in_Year - String in_YearlyReportPath - String out_Confimation - String
System1_UpdateWorkItems	Add hash into comment section and change status to "Completed"	Be on the update work item page	Hash added to the comment section and status changed to "Completed", popup closed	in_Comment - String in_Status - String

According to the workflow table above, every sequence was created by me. The configuration file was edited with all the important settings for this project. Then, the InitiAllApplications.xaml, CloseAllApplication.xaml, KillAllProcesses.xaml, GetTransactionData.xaml, and process.xaml workflows were customized, invoking relevant sequences. At this stage, all the processes were successfully developed. However, there were a few errors, mainly due to incorrect data entry and a lack of thorough validation. To rectify the situation, each sequence was carefully reviewed, and the internet was browsed for solutions. After locating the error locations and finding the solutions, necessary changes were implemented, and the system was retested to ensure the errors were resolved. Subsequently, the project was submitted. The result is provided below.

After completing those two practices, advanced data manipulation with Studio was followed up on. In this module, understanding was gained on how to work with the DateTime variable and how to utilize the Select method for filtering DataTables. Additionally, learning about Activity Project Settings in Studio allowed for understanding how to set global runtime and debug values for Activity properties. Knowledge about the workflow analyzer in Studio was also acquired, helping to identify how to use the UiPath Workflow Analyzer to ensure that files and automation projects adhere to the same standards and best practices.

Knowledge of orchestrator triggers and monitoring was acquired, followed by learning about the attended automation features in Studio. This module taught how to use key features in the automation toolkit and build a process to enhance automation capabilities and user experience.

Further, the invoke method and invoke call in Studio were followed up on, learning how to enhance the capabilities of automation projects by using VB.Net and C# code. Excel automation with the Modern Experience in Studio was a new course module that was started and completed.

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REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

Carrying out assigned work well.

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 20 / 08 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	08 / 14	• A progress evaluation meeting was held in the morning. • The requirements for the actual upcoming project were gathered.
Tuesday	08 / 15	• In the morning, a meeting was held to evaluate the progress. • Requirement gathering was completed by me. • A meeting was held to review the requirement gathering.
Wednesday	08 / 16	• The progress evaluation meeting was held in the morning. • The Process Definition Document was started to be created. • A meeting was convened to address and resolve some issues in the Process Definition Document.
Thursday	08 / 17	• A progress evaluation meeting was held in the morning. • The Process Definition Document was created.
Friday	08 / 18	• The progress meeting was held. • Efforts were made to complete the Process Definition Document. • A meeting was convened to review the Process Definition Document.
Saturday	08 / 19	Weekend Holiday
Sunday	08 / 20	Weekend Holiday

Six weeks into my internship journey, and with the completion of the advanced course last week, a new challenge awaited me. As part of our training and practical experience, a full client project was entrusted to me by my supervisor, tasking me to devise a valuable solution. This project had been on hold until approval was received from our clients. It was the first time I contributed to finding a solution for a real client's problem. As a starting point, requirements had to be gathered. For that process, meeting recordings were received to mine for requirements. I was tasked with analyzing the meeting and extracting key information. I was excited to put my skills to the test and contribute to the project's success. I eagerly started listening to the recording and taking notes.

Dedicating hours to careful analysis, the necessary requirements gathered from the recording were documented. Once the requirements were documented, a meeting with my supervisor and software engineer, who coordinated interns, was scheduled to discuss and receive feedback. During the meeting, each requirement was gone over in detail, and any necessary adjustments or additions were made. This experience allowed me to gain a deeper understanding of the actual client project and showcased my ability to effectively gather and document requirements.

Then, the next step was taken, which involved creating a Process Definition Document. The Process Definition Document outlines the business process to be developed. Various steps were followed to create this document. As one of those steps, a Detail Process Map was developed to be included in this document.
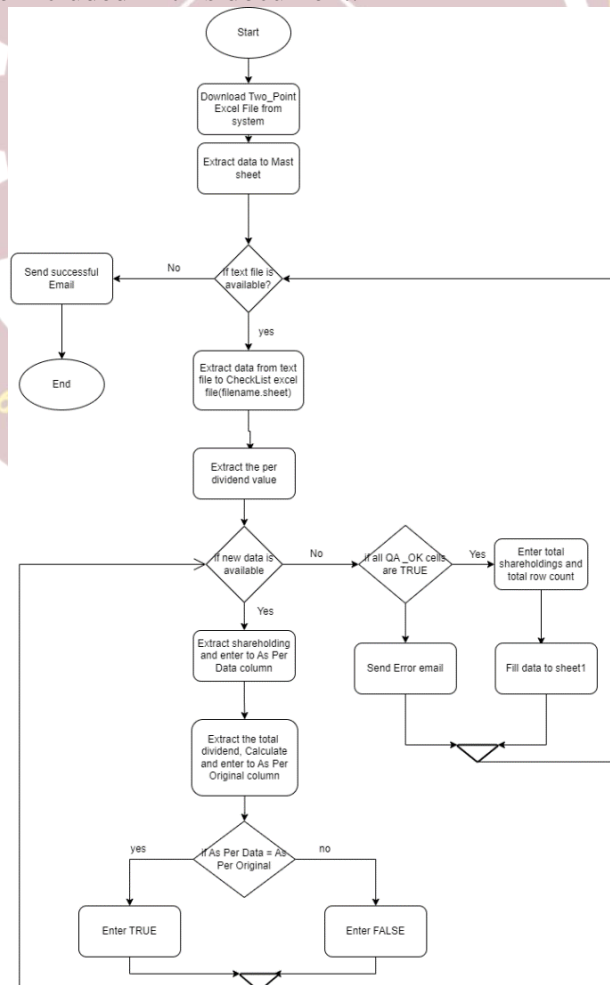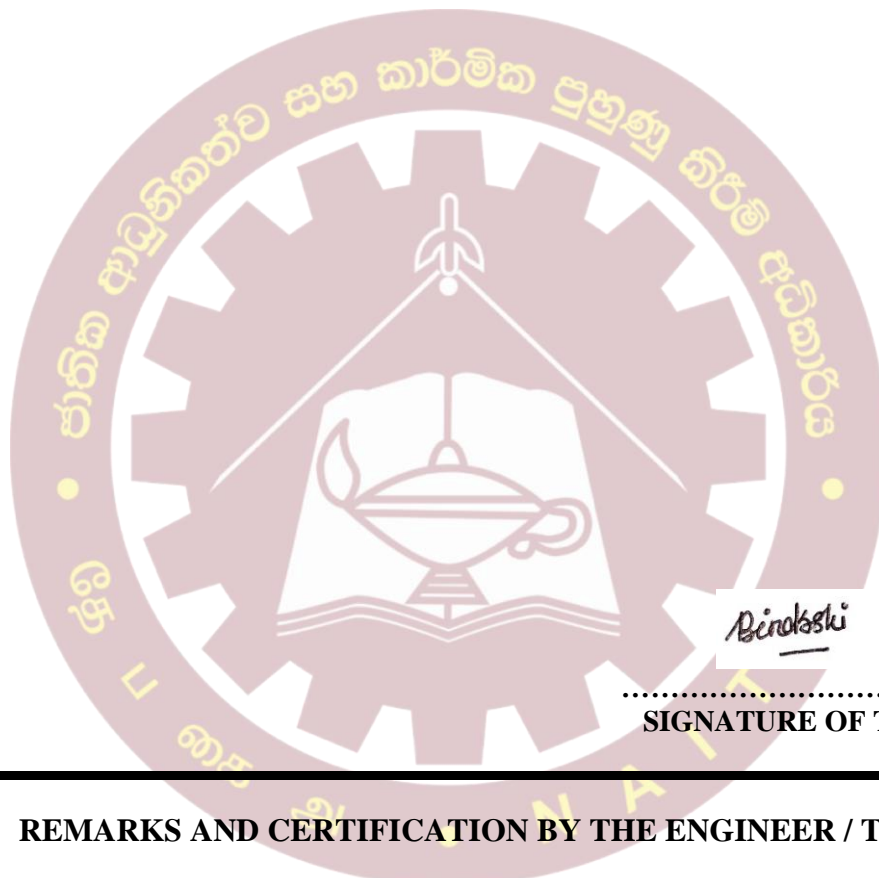
DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

        In accordance with the procedural steps outlined for creating the Process Definition Document, I completely incorporated all processes and pathways essential to the project.

        Upon completion, a second meeting was convened to review and finalize the Process Definition Document with the supervisor and our coordinator. During this session, valuable insights were shared, and constructive feedback was provided by them. They pointed out some points when creating the Process Definition Document, and some changes had to be made.

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REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

Carrying out assigned work well

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	FOR THE WEEK ENDING	TRAINING LOCATION
	Sunday 27 / 08 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	08 / 21	• A progress evaluation meeting was held in the morning. • The Process Definition Document was completed, incorporating some changes that were pointed out in the review meeting. • The creation of an overall design diagram was started.
Tuesday	08 / 22	• In the morning, a meeting was held to evaluate the progress. • The overall design was finished by me. • A meeting was convened to review the overall design. • In this meeting, some changes were pointed out, and those things were changed by me.
Wednesday	08 / 23	• The progress evaluation meeting was held in the morning. • The creation of a Detailed Design Document was initiated. • As the first step, all processes were listed down according to REFramework stages in the Detailed Design Document. • After the first two stages were completed, a meeting was arranged and the processes were discussed.
Thursday	08 / 24	• A progress evaluation meeting was held in the morning. • Changes were made according to the feedback given on the last day. • The next stages were progressed to. • Another two stages were completed and sent for review.
Friday	08 / 25	• The progress meeting was held. • A meeting was convened to discuss changes in the Detailed Design Document. • The Detailed Design Document was completed by me and sent to be finalized.
Saturday	08 / 26	Weekend Holiday
Sunday	08 / 27	Weekend Holiday

By the seventh week of my internship, some changes were pointed out in the Process Definition Document during the previous week. After making those changes, the next step, creating the Overall Design Diagram, was undertaken. This diagram visually represented the steps involved in the process and helped identify any potential bottlenecks or inefficiencies. Once the Overall Design Diagram was completed, it was shared with my seniors for feedback and further refinement. Some adjustments were made to the overall design diagram to address their suggestions. The overall design document is provided below.
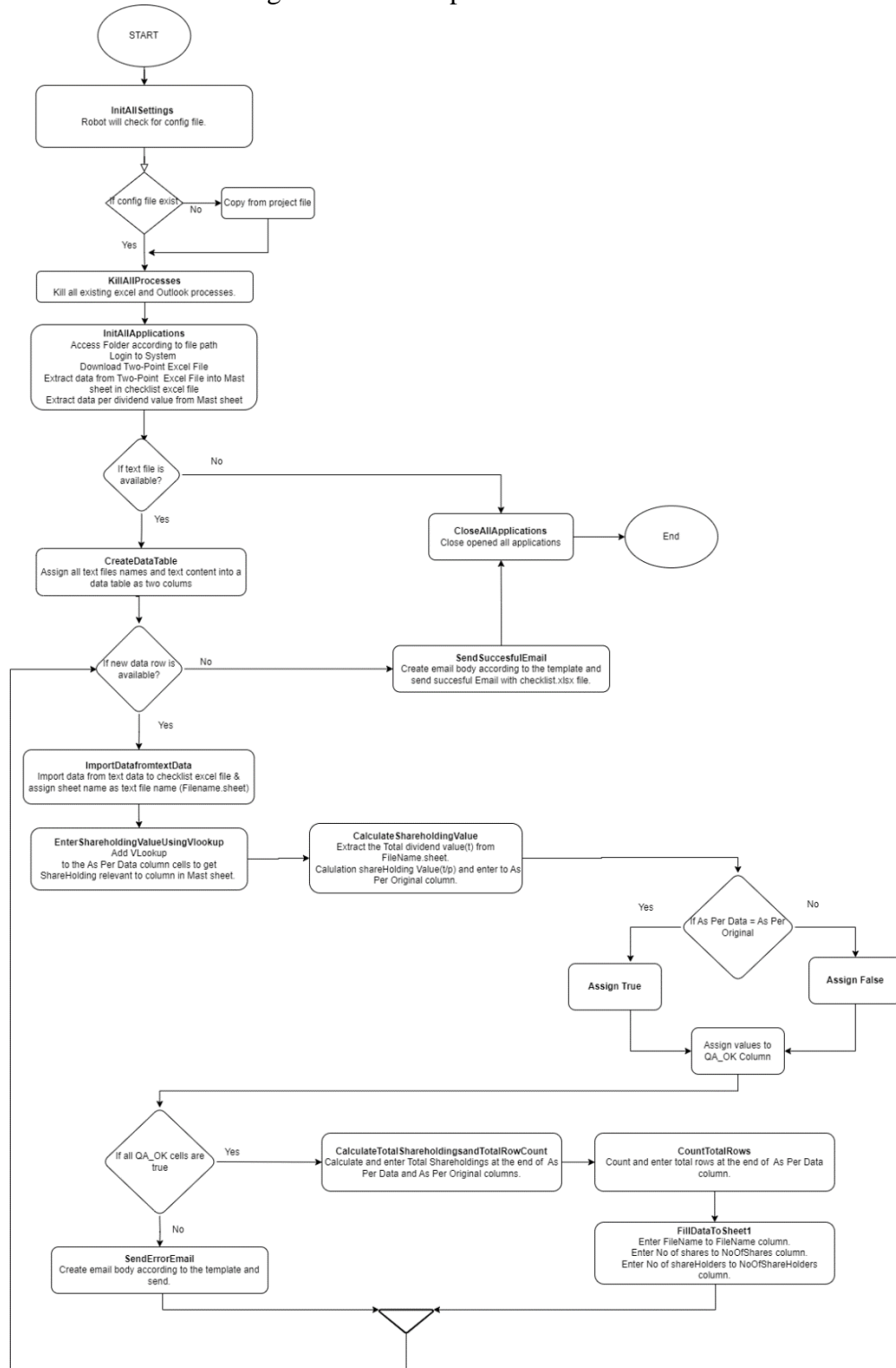
DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Then the creation of a detailed design document commenced. A detailed design document (DDD) in Robotic Process Automation outlines how the automation solution will be implemented. It includes process steps, technical architecture, data flow, error handling, UI design, integrations, security, testing, and deployment procedures. As a first step, the detailed design document was reviewed, and all processes were listed down according to REFramework stages. Subsequently, detailed processes for each stage were developed. After finishing the first two stages, a meeting was arranged, and those processes were discussed. Changes were pointed out, which were addressed, and then the process moved forward to the next stages. All stages were completed and sent to be finalized. After completing all stages and sending them to be finalized, positive feedback on the work was received.
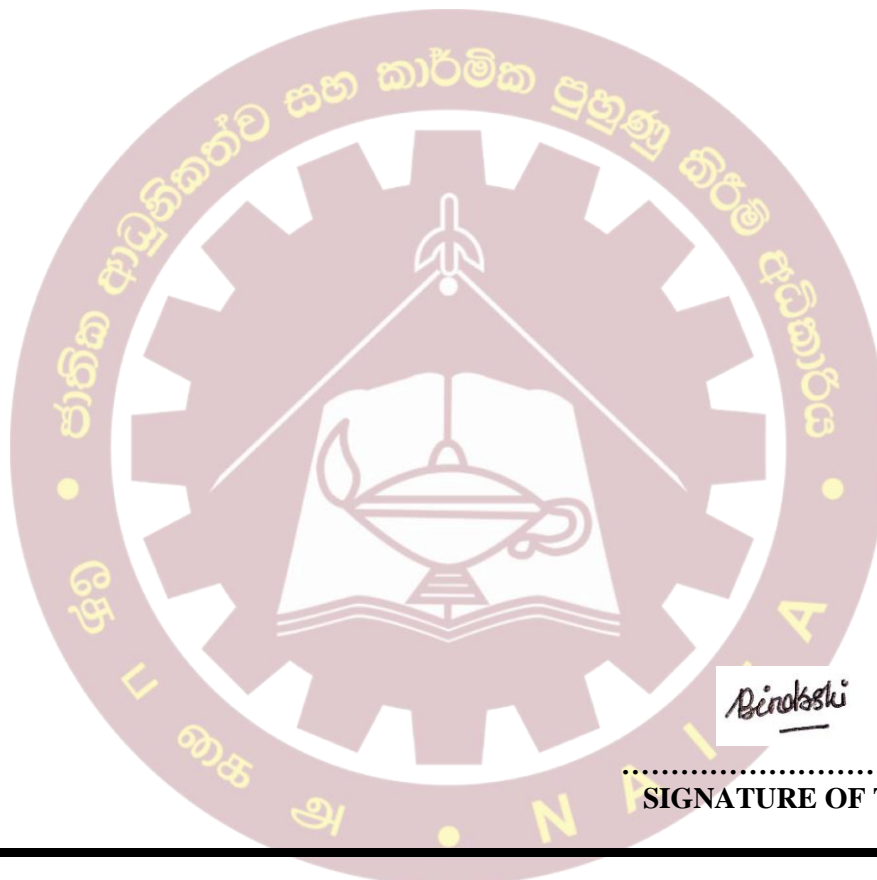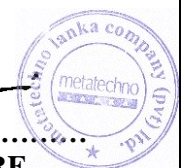
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REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

Carrying out assigned work well.

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WEEK NO : 08

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	FOR THE WEEK ENDING	TRAINING LOCATION
	Sunday 03 / 09 / 2023	**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	08 / 28	• A progress evaluation meeting was held in the morning. • The finalized Detailed Design Document was reviewed. • Sample data for this project was created to develop workflows. • Initial steps to develop workflows were started to be gone through.
Tuesday	08 / 29	• A meeting was held in the morning to evaluate the progress. • REFramework initial configurations were completed by me. • Gitlab and Source tree were set up. • The project was pushed to my branch in the Gitlab.
Wednesday	08 / 30	Full Moon Poya Day
Thursday	08 / 31	• A progress evaluation meeting was held in the morning. • Two workflows in the 'InitAllApplications' process were finished being created. • I was assigned to the ongoing project. • Three meetings were conducted to explain the scope, my part, and the Gitlab training.
Friday	09 / 01	• The progress meeting was held. • Training was conducted to learn how to develop workflows according to my part. • Study materials about the best practices that need to be followed when working on this project were provided. • Git Lab, Source Tree, Studio, and the necessary files were set up on my computer to start development.
Saturday	09 / 02	Weekend Holiday
Sunday	09 / 03	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

This was the eighth week of my internship. The finalized Detailed Process Document was reviewed by them. Subsequently, sample data was created according to this project to commence the development of workflows. To clarify, the creation of sample data for this project, although an actual scenario, was done to simulate the expected scenarios and facilitate workflow development before the project officially starts. This allowed for a better understanding of the requirements and ensured a smooth transition into the implementation phase. The assignment of this project was intended to provide experience and understand how to work on real projects.

Next, a new project was created, and initial steps, including REFramework configuration, were performed before developing workflows. Git Lab and Source Tree were set up on my computer to manage version control and collaboration effectively. The project was pushed to my branch in the Git Lab repository, and a merge request was sent. Two workflows in the 'InitAllAplications' process were created and committed to GitLab. Overall project and the main functions shown below.
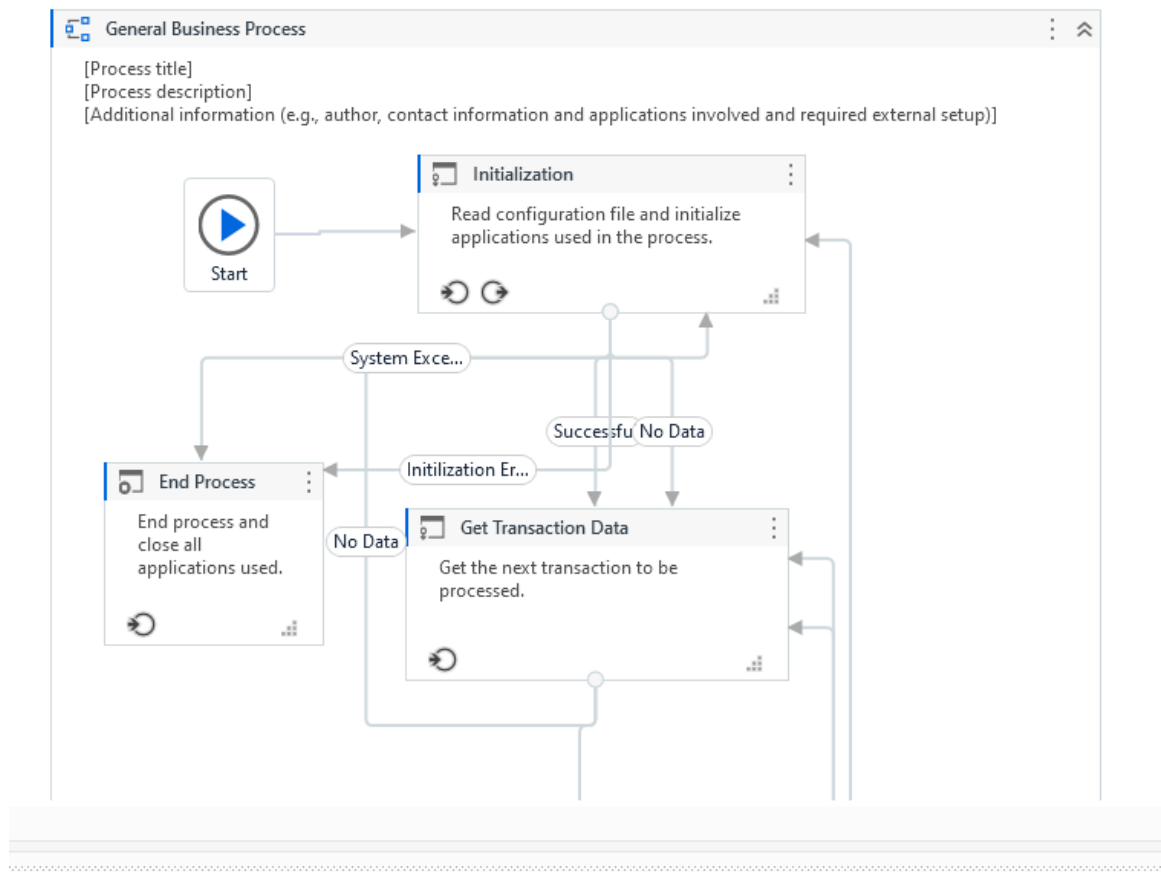
Subsequently, I was assigned to an ongoing project, requiring me to pause my current project. Before pausing, a readme file was created, and the current status of the project was added and committed to GitLab to facilitate a smooth restart or handover in the future.

Three meetings were held to explain the scope of the project, my role, and Git Lab training. The project aimed to automate data extraction from various invoices. The client company invents most items and handles many invoices daily, involving manual data extraction processes prone to errors and time-consuming. Our project aimed to automate this process by developing a software solution for accurate and efficient data extraction. My role involved implementing necessary workflows and testing for troubleshooting issues.

Initially, best practices were studied, and the existing codebase and documentation were familiarized with. With the assistance of a senior software engineer, Git Lab, Source Tree, Studio, and necessary files were set up on my computer to begin development.

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REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

Carrying out assigned work well.

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WEEK NO : 09

	FOR THE WEEK ENDING	TRAINING LOCATION
	Sunday 10/ 09 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	09 / 04	• A training session was conducted regarding my new project and its associated responsibilities. • Another session was held to set up the studio according to the requirements of the project. • The developed workflow was studied before starting my part in the project.
Tuesday	09 / 05	• A new workflow for data extraction from invoices for a new vendor was developed by me. • After the development phase, a review meeting was conducted. • Following the review of the new workflow, unit testing for it was performed.
Wednesday	09 / 06	• A new workflow for data extraction for a new vendor was developed by me. • Some unclear points arose during the development phase, which I sought clarification on from the Senior software engineer. • A review meeting was held to analyze the new workflow. • Subsequently, the workflow was committed to GitLab.
Thursday	09 / 07	• The development of a new data extraction workflow for the new vendor was initiated by me. • Upon completing the development phase, unit testing for that vendor was conducted. • Subsequently, this workflow was committed to GitLab.
Friday	09 / 08	• Daily sync-up meetings were held in the morning. • The development of a new extraction workflow for the new vendor was initiated by me.
Saturday	09 / 09	Weekend Holiday
Sunday	09 / 10	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

I have just completed my ninth week of internship. Last week, I was assigned to an ongoing project, and I was eager to contribute to the team and deepen my understanding of the project. Training sessions were conducted to clarify my role and responsibilities. My task in the project is to implement the necessary workflows for data extraction and to ensure testing and troubleshooting throughout the implementation process. Moreover, once the developed workflows are deployed into the production environment, it is my responsibility to ensure their proper functioning and adherence to performance standards. Additionally, ongoing support and maintenance for the implemented workflows are part of my duties, which involve troubleshooting issues and implementing necessary updates, improvements, and enhancements.

Other members of the project team assisted me in setting up my studio to commence development. The objective of this project is to automate a complex business process involving the extraction of details from numerous invoices received by our client's company. The robot needs to be trained vendor by vendor due to the varying formats of the invoices. It is crucial to train the robot extensively to accurately classify and process invoices based on their specific formats and requirements, ensuring 100 percent accuracy, efficiency, and reliability to handle any type of invoice received.

Initially, I studied a workflow developed by a senior software engineer in our team. After successful analysis, I began developing new workflows for a new vendor. Daily sync-up meetings are conducted every morning to discuss the progress of the project and the work completed the previous day. During the workflow development, I encountered some unclear points for which I sought clarification from my supervisor to ensure understanding. Upon completing the development, unit testing was performed using invoices. Subsequently, the workflow was reviewed by another senior software engineer to confirm its correctness before merging it into GitLab for QA testing.

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WEEK NO : 10

FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 17/ 09 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	09 / 11	- The daily sync-up meeting was held in the morning. - The extraction workflow that I had started developing last Friday was completed by me. - Subsequently, unit testing was conducted, and it was committed to Git Lab. - Then, another extraction workflow was started to be developed by me.
Tuesday	09 / 12	- In the morning, a daily sync-up meeting was conducted. - Two new workflows for data extraction for new vendors were developed by me. - Unit testing was performed, and those workflows were committed to Git Lab.
Wednesday	09 / 13	- The daily sync-up meeting took place. - A new extraction workflow for a new vendor was developed. - Today, the UiPath Studio experienced some errors. Attempts were made to fix it. - There was a discussion about fixing the errors.
Thursday	09 / 14	- The daily sync-up meeting was held. - An unclear point from the client side arose regarding the vendor that I started to develop the previous day. Consequently, I suspended development on that vendor and commenced development on a new one. - A bug was raised from the QA side of the workflow that I developed and merged into QA testing last Monday. Attempts were made to fix it, but assistance was required. Consequently, it was put on hold until assistance was received.
Friday	09 / 15	- A daily sync-up meeting was conducted in the morning. - New workflows for two new vendors were developed.
Saturday	09 / 16	Weekend Holiday
Sunday	09 / 17	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

In my tenth week of internship, I engaged in the development of extraction workflows for new vendors within the scope of my ongoing project. This entailed meticulously creating and testing unit tests for each workflow to ensure their functionality and accuracy before merging them into GitLab for collaborative review. However, amidst these tasks, challenges arose as the UiPath Studio encountered errors during workflow development. Despite my efforts to troubleshoot independently, guidance from senior colleagues was sought to effectively resolve the issues.

Moreover, complications emerged when a bug was discovered by the Quality Assurance (QA) team regarding one of the workflows I had developed and merged into QA testing the previous Monday. Despite thorough reanalysis and testing on my end, the workflow performed flawlessly within my environment, perplexing me when confronted with reported problems by QA. This incident marked my initial experience with bug fixing within this project, underscoring the complexity inherent in software development and the importance of accurate problem-solving.

Despite earnest efforts, identifying the root cause of the error proved elusive, prompting me to seek guidance from my supervisor for further insights and resolution. This encounter highlighted the dynamic nature of software development, where challenges and learning opportunities abound, shaping my growth and proficiency in navigating real-world project scenarios.

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WEEK NO : 11

FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 24 / 09 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	09 / 18	- The daily sync-up meeting was attended. - Two new workflows were developed, and unit testing was conducted for them. - Furthermore, they were merged into GitLab.
Tuesday	09 / 19	- In the morning, a daily sync-up meeting was conducted. - A new extraction workflow for a new vendor was developed. Following unit testing, it was merged into GitLab.
Wednesday	09 / 20	- The daily sync-up meeting took place in the morning. - A new data extraction workflow for a new vendor was developed, underwent unit testing, and was merged for QA testing.
Thursday	09 / 21	- A daily sync-up meeting was conducted. - New workflows for two new vendors were developed, tested, and merged. - A bug was raised from the QA side. The workflow was tested again to identify the issue.
Friday	09 / 22	- A daily sync-up meeting was convened in the morning. - New workflows for a vendor were developed. - Another bug was raised by the QA team for the vendor that was developed previously. The workflow was rechecked, the bug was resolved, and it was merged into the QA test.
Saturday	09 / 23	Weekend Holiday
Sunday	09 / 24	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

During my eleventh week of internship, I dedicated my efforts to developing new workflows tailored for various vendor types and optimizing data extraction processes from invoices. This endeavor proved to be a rich learning experience, as each workflow presented unique challenges and opportunities for growth. Witnessing the successful execution of these workflows filled me with a profound sense of accomplishment and pride in my contributions.

While making progress on my tasks, I encountered challenges when the Quality Assurance (QA) team identified two bugs in the workflows I created. I successfully resolved one bug by carefully reviewing and troubleshooting it. However, the solution for the second bug was more difficult to find, so I sought help from senior colleagues. The workflow that was suggested to be added to this place to resolve the second bug. I have attached that workflow below.
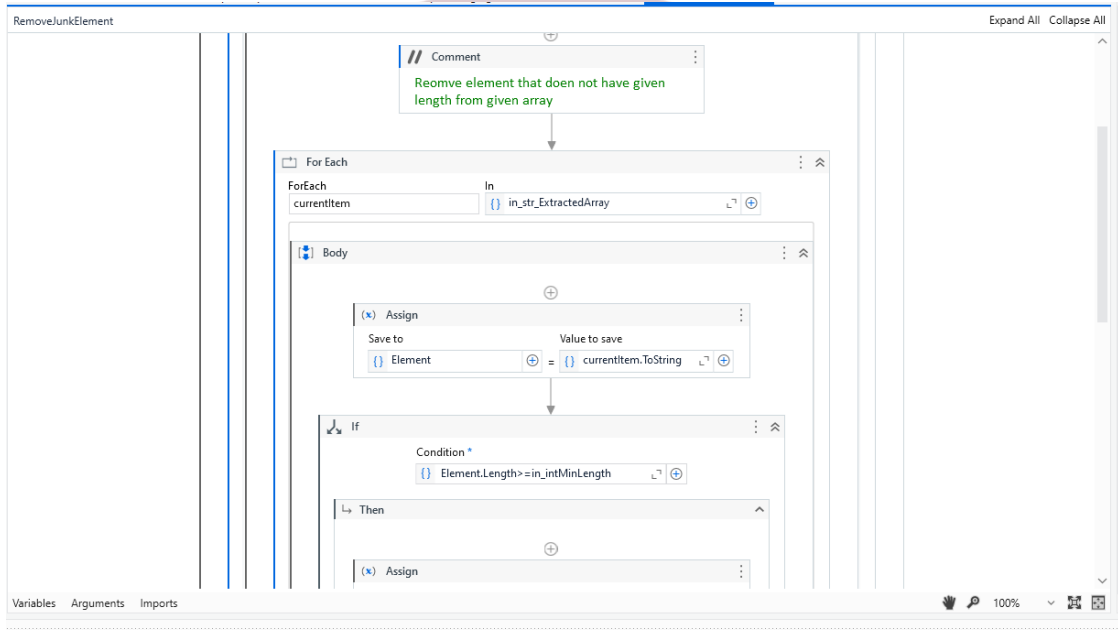
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WEEK NO : 12

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 01 / 10 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	09 / 25	• The daily sync-up meeting was attended. • Three new workflows for three new vendors were developed, and unit testing was conducted for each. They were also merged into Git Lab. • A bug was raised due to an error in the production environment. Discussions were held with a senior software engineer, and attempts were made to fix the bug according to the guidance provided.
Tuesday	09 / 26	• The daily sync-up meeting was conducted in the morning. • The bug that was discussed with a senior software engineer the previous day was resolved. • New extraction workflows for two new vendors were developed, and unit testing was performed.
Wednesday	09 / 27	• There was the daily sync-up meeting in the morning. • I merged those two workflows that I developed last day. • Then we developed a new workflow for a new vendor, unit testing, and merged it with Git Lab.
Thursday	09 / 28	Holiday
Friday	09 / 29	Holiday
Saturday	09 / 30	Weekend Holiday
Sunday	10 / 01	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Twelve weeks had passed since the inception of my internship, and my excitement for learning and gaining practical experience in the field had only intensified. At the day's end, I made an effort to develop more workflows for further vendors. I wanted to ensure that I was making the most of this opportunity and expanding my skill set as much as possible.

This particular week unfolded with new experiences as bugs were raised in the production environment, impacting the workflows I had previously developed. Typically, our workflow creation process involves developing solutions for distinct invoice formats, which undergo thorough testing by QA engineers. Upon achieving a perfect accuracy rate of 100%, these formats are allowed for release into the live environment, ready for client utilization. During the invoice extraction process using the robot we developed, they may encounter extraction issues. Afterward, they report a bug. Subsequently, the developer responsible for the workflow that triggered the bugs is tasked with resolving them. Occasionally, these bugs occur due to changes in the format. We train our robot to extract data points using a fixed format. If alterations are made to the format and the robot cannot locate these points, bugs are raised. As a result, we continuously refine our development process and further train our robots. This constitutes our standard procedure.

At that time, a bug had been raised for my development. It marked the first experience where I had to resolve a bug reported in the live environment. This extraction workflow had successfully passed QA testing with a perfect 100% score. Requesting guidance, I discussed the matter with a senior colleague and attempted to resolve the bug based on the advice provided. Ultimately, I succeeded in resolving the issue. On subsequent days, I focused on developing new workflows to extract data from invoices provided by new vendors. After completing the development, one of the senior colleagues in our team reviewed and approved it. Afterward, I merged them into GitLab.

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FOR THE WEEK ENDING		**TRAINING LOCATION**
Sunday 08 / 10 / 2023		**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	10 / 02	• The daily sync-up meeting was conducted in the morning. • Data extraction workflows were developed for two new vendors. Subsequently, unit testing was performed for each, and they were merged into GitHub.
Tuesday	10 / 03	• The daily sync-up meeting took place. • A new extraction dataflow was developed for a new vendor. Some clarifications needed to be confirmed and completed from the client side. They were informed, and the dataflows were put on hold until confirmations were received.
Wednesday	10 / 04	• The daily sync-up meeting occurred in the morning. • Subsequently, two new workflows were developed, with one of them being merged into GitHub. The other one still needs to undergo unit testing. • The bug that was held last week until senior support was obtained has been resolved.
Thursday	10 / 05	• The daily sync-up meeting took place. • Unit testing was conducted for the extraction workflow that couldn't be completed the previous day. • A new extraction workflow for a new vendor was developed and merged into GitLab for QA testing.
Friday	10 / 06	• The daily sync-up meeting was conducted. • The client provided confirmation regarding the request made last Tuesday. Consequently, the workflow was completed and merged into GitLab. • A new extraction workflow was developed for a new vendor, involving eight invoices. Additional time was required for unit testing, which was completed before merging it into GitLab.
Saturday	10 / 07	Weekend Holiday
Sunday	10 / 08	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Thirteen weeks had passed since the initiation of my internship, and I eagerly awaited the forthcoming phase of my training. Throughout this week, I explored the development of several new workflows, each with its own unique set of challenges to overcome. One of them posed a particularly complicated challenge. I successfully completed an extraction workflow and started to do unit testing. However, during unit testing, extraction issues arose. The robot couldn't find the invoice date in some invoices because the anchor I used was positioned another place also.
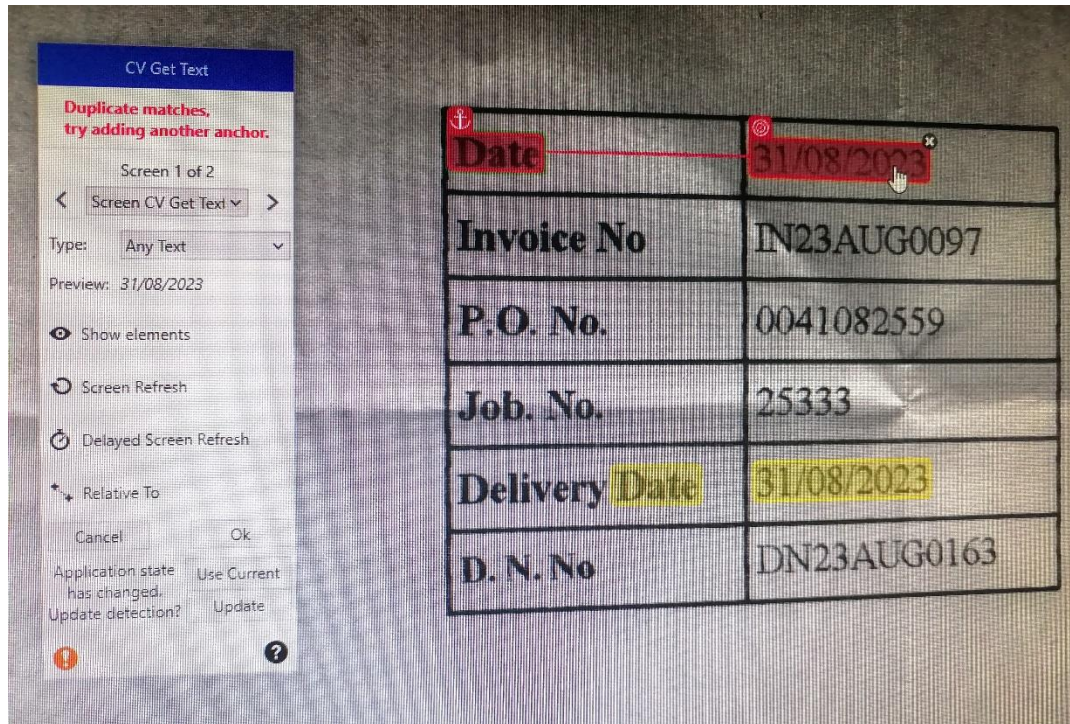
Consequently, I had to explore alternative methods to extract those points. Thus, I attempted the following approach to fix it:.
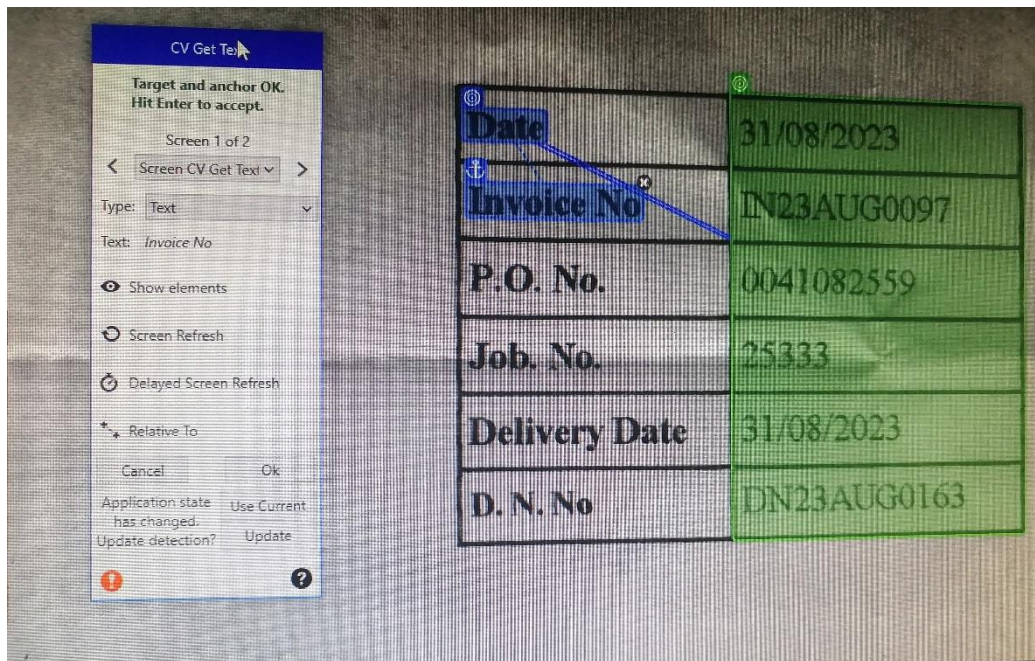
       After applying this method, all invoices were successfully trained by the robot. Subsequently, the workflow was reviewed by the coordinating senior, who praised the solution I had found for the extraction.

       Additionally, the other vendor I attempted to begin development for had two invoices in different formats. As a result, development could not commence until clarification was received from our clients. I informed our project manager, who assured me she would address the issue with the clients. Consequently, I postponed development until confirmation was received.

       Meanwhile, other workflows were easily developed by me using the experience gained in recent days. A bug that I encountered last week, which required senior support, was addressed and resolved. Furthermore, another vendor was held off until confirmation was received from the client, which was subsequently obtained, enabling me to complete the development.

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FOR THE WEEK ENDING		**TRAINING LOCATION**
Sunday 15 / 10 / 2023		**Metatechno Lanka Company**

| Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	10 / 09	• The daily sync-up meeting was conducted in the morning. • A new extraction workflow was developed for a new vendor. • The issue of extraction raised by the QA team was resolved.
Tuesday	10 / 10	• The daily sync-up meeting took place. • Unit testing was conducted for the vendor developed the previous day, involving 10 invoices, which required additional time. • A new extraction workflow was developed for a new vendor, underwent unit testing, and was subsequently merged into GitLab.
Wednesday	10 / 11	• The daily sync-up meeting was conducted in the morning. • A previously resolved QA-verified status was reevaluated by the QA team, who updated the bug status after testing the workflows. • Two new workflows were developed for two new vendors. One of the vendors presented a challenging aspect that had been encountered before. Instructions were received, and efforts were made to address the issue. The development of the other workflow was postponed due to a lack of client confirmation.
Thursday	10 / 12	• The daily sync-up meeting took place. • The vendor development initiated the previous day was completed as per the instructions provided by my supervisor. Upon completion, unit testing revealed some bugs. The workflow was redeveloped to address the bugs, and subsequent unit testing was conducted. After persistent efforts, success was achieved.
Friday	10 / 13	• A daily sync-up meeting was conducted in the morning. • New extraction workflow was developed. Unit testing was performed, and it was merged with GitLab. • A health awareness session was organized by the company.
Saturday	10 / 14	Weekend Holiday
Sunday	10 / 15	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

This marked the fourteenth week of my internship journey, and I eagerly anticipated the experiences that lay ahead in the coming weeks. This week, I undertook the development of new extraction workflows and addressed bugs reported by the QA team and in the production environment. Among the QA bugs, there were cases where the invoice amount could not be extracted for some invoices from one vendor I had developed. An error was encountered during the extraction of the invoice amount.

After studying the issue to identify the error, I finally pinpointed the root cause. The problem stemmed from the robot extracting 'Rs.' as '3s.' along with the amount. Despite having added an activity to remove 'Rs.' during extraction, it failed to do so when '3s.' was extracted instead, resulting in an error as follows.

To resolve the issue, a function designed to remove non-numeric elements from the amount was utilized. The function was invoked as follows.
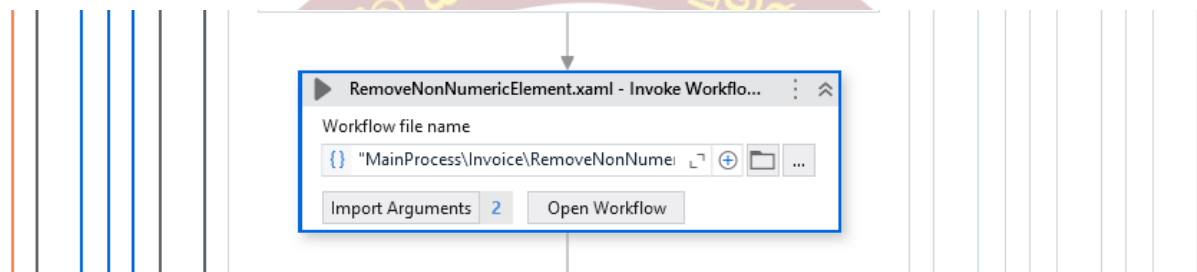
In one vendor, a particularly complex challenge arose, one unlike any I had encountered before. The invoices contained PO Numbers that needed extraction, sometimes located within the file name and other times within the invoice itself. Within this vendor's data, some invoices had PO numbers embedded within the file name, while others contained them within the invoice contents. Upon seeking guidance from my team member, I received instructions to develop a solution capable of extracting PO numbers from both sources. Following these instructions, the solution was developed and subjected to unit testing. Success was achieved in both extraction methods.

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FOR THE WEEK ENDING		**TRAINING LOCATION**
Sunday 15 / 10 / 2023		**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	10 / 16	- The daily sync-up meeting was conducted in the morning. - The workflow, which was put on hold on Wednesday due to pending client details and confirmation, was completed. - A bug was reported by the QA team, and I developed and resolved it promptly. - Assistance was provided to the QA team in entering actual data into invoices.
Tuesday	10 / 17	- There was the daily sync-up meeting. - There was a team to check sample invoices before we developed workflows for them. There were many new invoice samples for checking. So I did the sample-checking part today. - Fixed the extraction data issue raised by the QA team.
Wednesday	10 / 18	- There was the daily sync-up meeting in the morning. - Checked invoices samples.
Thursday	10 / 19	- There was the daily sync-up meeting. - Checked invoices samples and completed it. - Resolved two bugs raised in the production environment.
Friday	10 / 20	- The daily sync-up meeting was conducted in the morning. - A new extraction workflow for a new vendor was developed. - A data extraction bug raised from the production environment was fixed.
Saturday	10 / 21	Weekend Holidays
Sunday	10 / 22	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

In the fifteenth week of my internship, I found myself engaged in a variety of new tasks. Among them, I focused on developing new data extraction workflows and addressing existing bugs within our systems. A special task assigned to me involved entering actual data from invoices, a directive stemming from the QA team's observation of inadequate data entries. These actual data entries served as important criteria for assessing the accuracy of our extraction workflows. Thus, I dedicated an entire day to this endeavor, recognizing its pivotal role in ensuring the accuracy of our testing processes. Moreover, as the QA team evaluated the developed workflows, their primary concern was verifying the accuracy of the data. To facilitate this, manual entry of actual data from invoices was required. This careful process enabled us to confirm the quality of our extraction methodologies, setting a robust foundation for future developments.

Another new task assigned to me involved checking sample invoices. This task was essential in our endeavor to automate data extraction from invoices, as it provided the foundation for our requirements. Each vendor typically adheres to a specific format, necessitating our robot's training to precisely extract data from predetermined locations within these formats.

Given the inherent limitations of robots lacking logical thinking abilities, meticulous training becomes paramount. Clear extraction points needed to be established to ensure accurate identification and extraction of essential information from the invoices. Although a team was initially tasked with this responsibility, I allocated three days for them to familiarize themselves with the process due to a shortage in sample checking. This investment in time and effort was necessary to uphold the integrity and efficacy of our automation processes.

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FOR THE WEEK ENDING		**TRAINING LOCATION**
Sunday 29 / 10 / 2023		**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	10 / 23	• The daily sync-up meeting was conducted in the morning. • Sample checking was carried out, and workflows were developed based on the checked samples. • Several workflows required completion following client clarifications. Today, they were updated, and the workflows were completed accordingly.
Tuesday	10 / 24	• There was the daily sync-up meeting. • Developed a new workflow for a new vendor, reviewed it with my senior, and merged it into Git Lab.
Wednesday	10 / 25	• The daily sync-up meeting was conducted in the morning. • Two new workflows for new vendors were developed, and they were sent for review. • Two workflows that were held last week due to customer clarifications were completed. • A developer discussion was held regarding the progress of the project.
Thursday	10 / 26	• The daily sync-up meeting was convened. • New extraction workflows for two new vendors were created, reviewed with the senior, and merged into GitLab.
Friday	10 / 27	• The daily sync-up meeting was conducted in the morning. • Two bugs were raised in the live environment. They were retested, and the workflows were redeveloped to address the issues. • Changes needed to be implemented in the workflows sent for review by the senior. After making the necessary adjustments, they were merged into GitLab.
Saturday	10 / 28	Weekend Holidays
Sunday	10 / 29	Weekend Holiday

In the sixteenth week of my internship, I explored developing new workflows for our latest vendors, embracing newfound knowledge along the way. While navigating through the complexities of workflow development, I encountered pivotal moments that challenged me to explore new approaches. Leveraging the resources available in the UiPath forum and community page, I unearthed invaluable knowledge to resolve emerging challenges, ensuring a reliable workflow design.

This week, a discussion among developers was held to evaluate the overall progress of our project. Through collaborative analysis, we tracked our progress, celebrating a commendable 90% success rate in our developed workflows. This reflective session underscored our collective commitment to excellence and continuous improvement. Our team was admired by our general manager because of the success rate achieved.

A new vendor workflow that I developed this week given below.
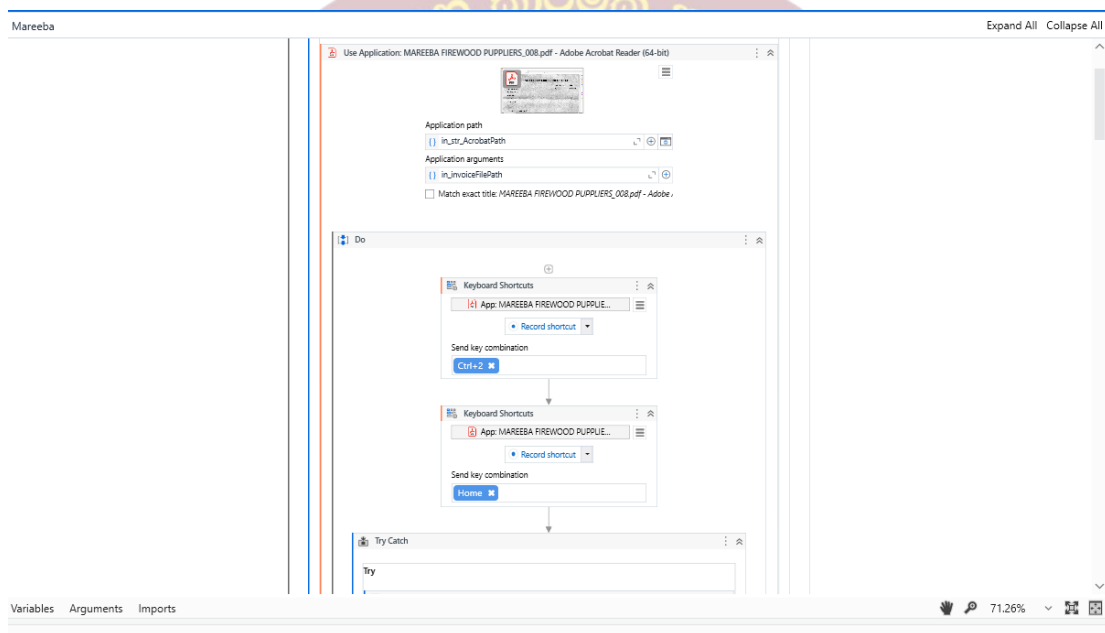
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WEEK NO : 17

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 05 / 11 / 2023	**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	10 / 30	• The daily sync-up meeting was convened in the morning. • Three bugs were identified in the live environment. One bug was rejected due to the invalid renaming method of the invoices. The remaining issues were examined, and appropriate actions were taken, including redevelopment where necessary.
Tuesday	10 / 31	• The daily sync-up meeting was conducted. • Unit testing was performed for the workflow that raised the bug, and it was redeveloped yesterday. • Two new extraction workflows were created, unit tested, and merged after review.
Wednesday	11 / 01	• The daily sync-up meeting was held in the morning. • Three new workflows for three vendors were developed, unit tested, and sent for review.
Thursday	11 / 02	• The daily sync-up meeting was conducted. • Workflows sent for review were reviewed with the senior, and adjustments were made based on his feedback. Some overlooked aspects were addressed as per his explanation. • Two bugs raised in the live environment were fixed.
Friday	11 / 03	• The daily sync-up meeting took place in the morning. • Assistance was provided to the QA engineer for entering actual data. • A new workflow was developed, underwent unit testing, and was subsequently merged into the GitLab repository.
Saturday	11 / 04	Weekend Holidays
Sunday	11 / 05	Weekend Holiday

It had been seventeen weeks since I embarked on my internship journey. This week, a series of bugs surfaced in the live environment, prompting attempts to address them independently. However, some issues had to be discarded due to unforeseen format alterations. Training the bot to adapt to entirely different invoice formats posed a significant challenge.

One particularly stubborn bug involved an extraction error within the invoice amount. Upon inspecting the invoices, it became evident that the bot was inadvertently extracting text from a seal appended to the end of some invoices. As a result, the extracted amount included extraneous characters from the seal. Numerous solutions were explored to rectify this issue. Eventually, a new function was devised to eliminate non-numeric elements from the amount, ensuring that only numerical data was extracted. After integrating this function into the workflow and updating it accordingly, subsequent invoice extractions proceeded without error. That function and the invoked place shown below. Some names and the activities were cropped because of the company privacy policy.
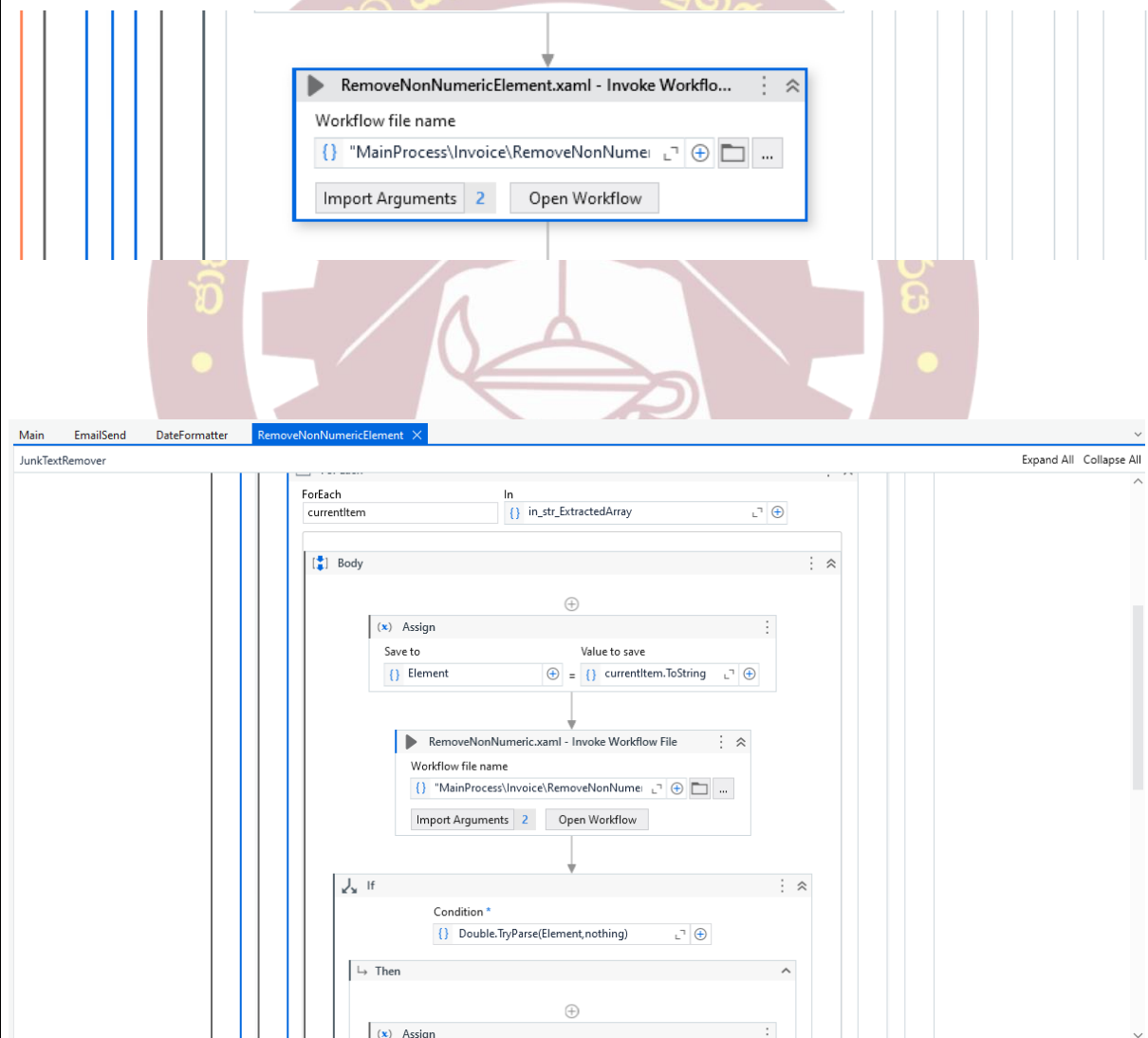
In addition to troubleshooting, this week also involved supporting the QA engineer by entering actual data from invoices for the QA test, enhancing the overall testing process.

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 12 / 11 / 2023	**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	11 / 06	- The daily sync-up meeting was conducted in the morning. - A workflow that had been pending customer verification was successfully completed. - Assistance was provided in entering actual data for the QA Division.
Tuesday	11/07	- There was a daily sync-up meeting held in the morning. - Assistance was provided in entering actual data. - Unit testing was conducted for the vendor that could not be completed last week. - A new workflow was started to be developed.
Wednesday	11 / 08	- The daily sync-up meeting took place. - The workflow held from the previous day was completed. - A bug was reported in the live environment, and it was fixed. - A new task was assigned to automate some manual processes and criteria in this project.
Thursday	11/09	- The daily sync-up meeting was conducted in the morning. - A process map was drawn to gain a good understanding of the sequences that needed to be developed. - The given new task was started to automate.
Friday	11 / 10	- The daily sync-up meeting was conducted. - A part of the given task was developed on Wednesday.
Saturday	11 / 11	Weekend Holiday
Sunday	11 / 12	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE
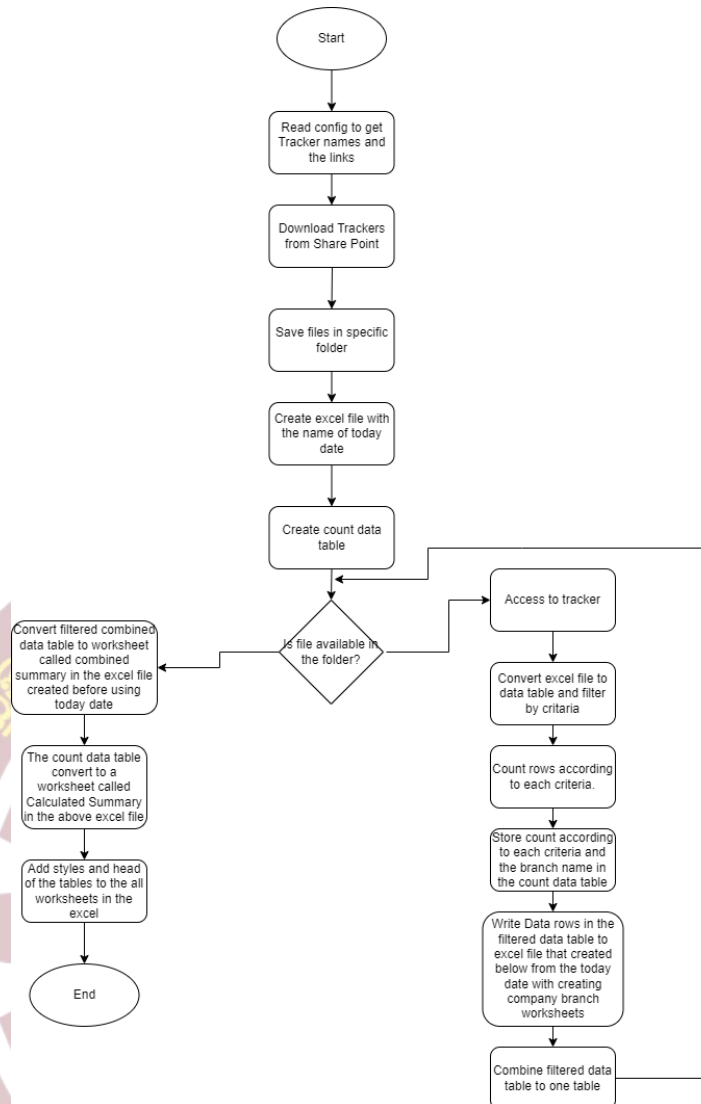
        I have just completed the eighteenth week of my internship journey. During this time, valuable experience has been gained, and a strong understanding of the industry has been developed. Various projects have been worked on, collaborating with professionals in the field and greatly enhancing skills and knowledge. New workflows were developed to automate data extraction from invoices, and bugs raised in the live environment were addressed. In these bugs, the robot had to be trained in multiple ways as it encountered difficulties in extracting certain points. Eventually, these bugs were resolved. Assistance was provided to QA engineers in entering actual data from invoices for QA testing.

        This week, a new task was assigned involving the automation of manual process criteria that were challenging to handle manually. Five development trackers are used to track invoice extraction developments, one by one. Vendors are assigned, and developments commence. Upon completion, trackers are updated with the current status. QA testing is initiated by QA engineers upon completion of developments and unit testing. If the accuracy reaches 100%, vendors are released into the live environment. There are five trackers corresponding to each of our clients' branches. With many vendors listed in these trackers, searching or filtering through them proves to be time-consuming. Therefore, the task assigned was to automate these processes. This involved automatically downloading trackers and filtering them based on user-entered criteria. A process map was drawn to gain a good understanding of the sequences that needed to be developed. The process map was given below. Changes have been made because actual maps cannot be provided due to privacy policy and company rules.

```
                          ┌─────────┐
                          │  Start  │
                          └────┬────┘
                               │
                    ┌──────────────────┐
                    │ Read config to get│
                    │ Tracker names and │
                    │    the links      │
                    └────────┬─────────┘
                             │
                    ┌──────────────────┐
                    │ Download Trackers │
                    │ from Share Point  │
                    └────────┬─────────┘
                             │
                    ┌──────────────────┐
                    │ Save files in specific│
                    │      folder       │
                    └────────┬─────────┘
                             │
                    ┌──────────────────┐
                    │ Create excel file with│
                    │ the name of today │
                    │      date         │
                    └────────┬─────────┘
                             │
                    ┌──────────────────┐          ┌──────────────────┐
                    │ Create count data │          │ Access to tracker │
                    │      table        │          └────────┬─────────┘
                    └────────┬─────────┘                   │
                             │                    ┌──────────────────┐
  ┌────────────────────┐    ◇                    │ Convert excel file to│
  │Convert filtered combined│  Is file available in│ data table and filter│
  │ data table to worksheet│← the folder?          │    by critaria    │
  │ called combined        │    ◇                  └────────┬─────────┘
  │ summary in the excel file│                             │
  │ created before using   │                    ┌──────────────────┐
  │    today date          │                    │ Count rows according│
  └────────┬──────────────┘                    │ to each criteria. │
           │                                    └────────┬─────────┘
  ┌────────────────────┐                                 │
  │ The count data table│                      ┌──────────────────┐
  │   convert to a      │                       │ Store count according│
  │ worksheet called    │                       │ to each criteria and │
  │ Calculated Summary  │                       │ the branch name in   │
  │ in the above excel file│                    │ the count data table │
  └────────┬──────────────┘                    └────────┬─────────┘
           │                                             │
  ┌────────────────────┐                       ┌──────────────────┐
  │ Add styles and head │                       │ Write Data rows in the│
  │ of the tables to the all│                   │ filtered data table to│
  │ worksheets in the   │                       │ excel file that created│
  │      excel          │                       │ below from the today │
  └────────┬──────────────┘                    │ date with creating   │
           │                                    │ company branch       │
      ┌─────────┐                               │ worksheets           │
      │   End   │                               └────────┬─────────┘
      └─────────┘                                         │
                                                ┌──────────────────┐
                                                │ Combine filtered data│
                                                │ table to one table │
                                                └──────────────────┘
```

The processes were studied, and development began. By the week's end, two main parts of the task were completed. First, the process was mapped out, and then automation of the task was initiated.

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	FOR THE WEEK ENDING	TRAINING LOCATION
	Sunday 19 / 11 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	11 / 13	• The daily sync-up meeting was attended in the morning. • Two new formats for two new vendors were developed and completed. • The assigned task from last week was started to develop according to process map.
Tuesday	11 / 14	• The daily sync-up meeting was held in the morning. • A new format for a new vendor was developed. • The workflow that was held last week due to a lack of customer requirements was completed. • I have completed the development of three sequences for the task to be automated.
Wednesday	11 / 15	• The daily sync-up meeting was conducted. • Two developed formats were reviewed, and some points were changed accordingly. • A new workflow was developed for a new vendor. • Assistance was provided in checking invoice samples.
Thursday	11 / 16	• The daily sync-up meeting was held in the morning. • Unit testing was conducted for the developed workflow yesterday. • A new workflow was developed for a new vendor.
Friday	11 / 17	• The daily sync-up meeting was held. • Two new extraction workflows for two new vendors were developed. • Three workflows were reviewed before being committed with the senior software engineer. • I completed task that assigned last week.
Saturday	11 / 18	Weekend Holiday
Sunday	11 / 19	Weekend Holiday

It had been nineteen weeks since the start of my internship, and as I reflected on the journey, I was eager to witness how everything would culminate. This week, my learning curve steepened as I delved into new concepts and tasks. Taking on the assigned task, I referred to the process map that I drew last week, which served as a blueprint for identifying the key sequences essential for task automation. Despite encountering several errors along the way, careful searching on the browser and using community forums enabled me to troubleshoot and overcome these challenges effectively. One notable error encountered is outlined below.
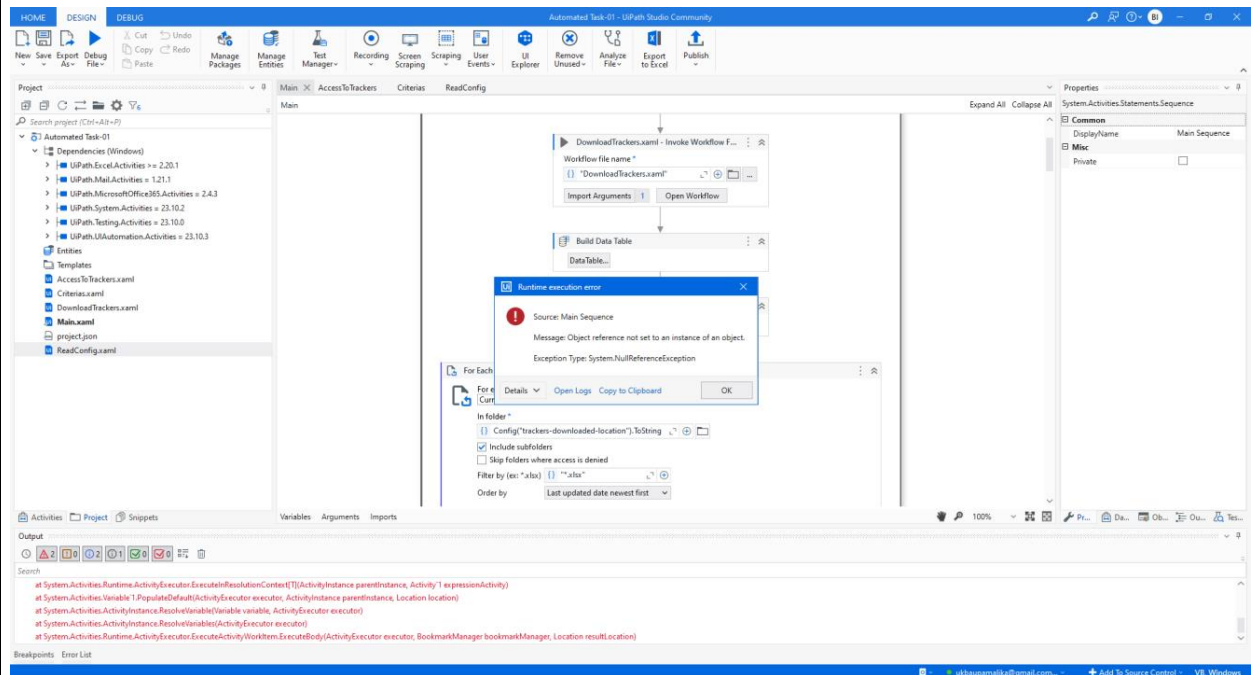
To solve this error, a new sequence called 'ReadConfig' was created, and all activities related to reading the config were added to this sequence. Additionally, before reading the config, a 'Kill Process' activity was added to terminate all Excel processes. The new sequences and the workflow of the task shown below.
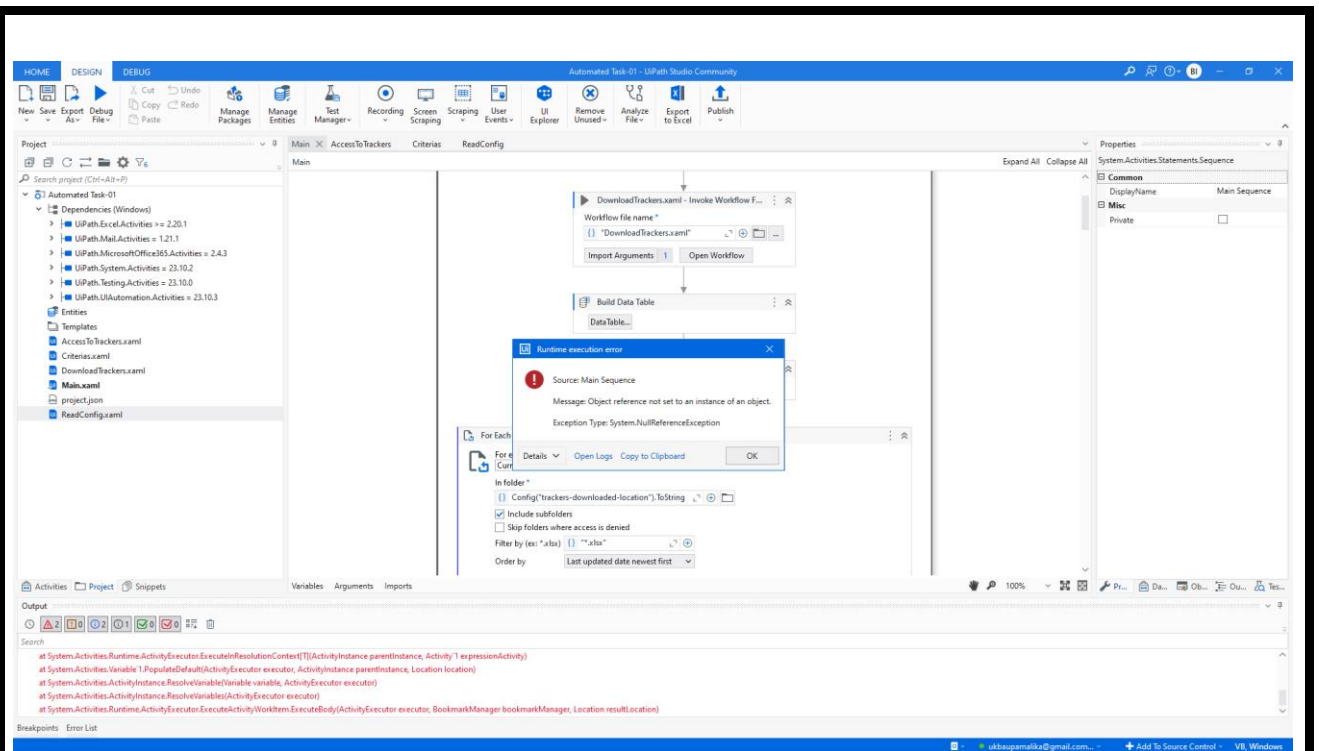
By week's end, significant progress was made, and the task was completed successfully. Alongside task automation, I also allocated time to develop new formats for new vendors. Each workflow underwent careful review by the senior overseeing the project, ensuring alignment with our quality standards before being merged into GitLab. Additionally, I dedicated efforts to expedite the sample checking process, given the sudden number of new invoices requiring exploration.

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 26 / 11 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	11 / 20	• The daily sync-up meeting was conducted in the morning. • New workflows were developed for three new vendors. • A finished task review meeting was held, during which some suggestions were provided to improve certain aspects. These suggestions were noted down to be incorporated into the redevelopment process.
Tuesday	11/ 21	• The daily sync-up meeting was conducted in the morning. • The vendor go-live list in trackers was updated. • Two new workflows were developed. • Three workflows that were developed yesterday were reviewed.
Wednesday	11/ 22	• The daily sync-up meeting was conducted in the morning. • The vendor go-live list in trackers was updated. • Two new workflows were developed. • Three workflows that were developed yesterday were reviewed.
Thursday	11/ 23	• The daily sync-up meeting was conducted in the morning. • New extraction workflows were created for new vendors. • The development that was held last week due to a lack of customer confirmation was completed.
Friday	11 / 24	• The daily sync-up meeting was conducted. • A new workflow for a new vendor was developed. • Workflows developed yesterday were reviewed, modified, and retested. After the modifications and testing, they were merged into GitLab.
Saturday	11 / 25	Weekend Holiday
Sunday	11 / 26	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

        Last week marked the culmination of my new task, followed by a comprehensive review session with our project manager. Her insightful feedback prompted several adjustments and areas of improvement, which I promptly began implementing. To enhance flexibility, a configuration file was integrated into the task structure, facilitating seamless modifications of essential properties. According to her instructions, the decision to develop this task using the RE Framework was made by me. When I inquired about it, she mentioned that it was a good idea and emphasized that better experience could be gained from it. Subsequently, it was started to be developed using the RE Framework.
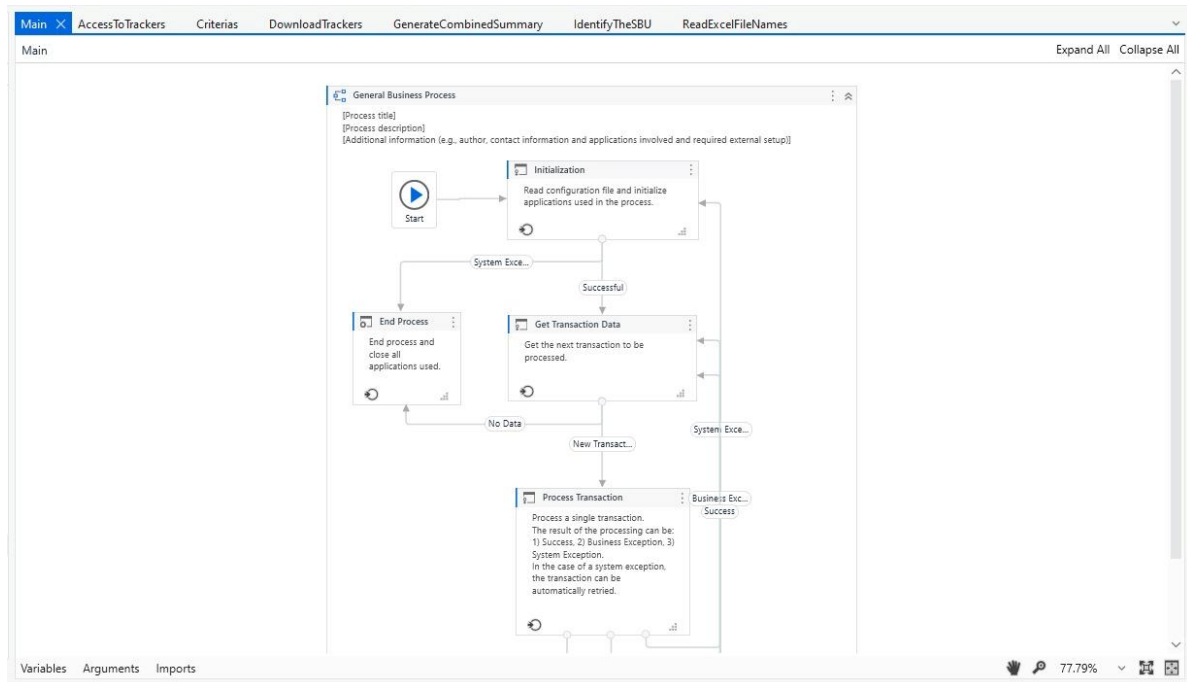
        In addition to these enhancements, I embarked on developing fresh extraction formats tailored for the latest vendors. Concurrently, I wrapped up pending workflows from the preceding week, previously stalled due to insufficient invoice numbers.

        Moreover, I diligently updated the go-live list for all completed vendors, meticulously recording the release version for each vendor's deployment within the production environment.

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 03 / 12 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	11 / 27	• The daily sync-up meeting was conducted in the morning. • New vendor formats for data extraction were developed. • Actual data entry was assisted. • Self learnt about Document Understanding (Machine learning) in UiPath.
Tuesday	11 / 28	• The daily sync-up meeting was conducted in the morning. • The live vendor list in trackers was updated. • Three workflows were reviewed and merged into Git Lab.
Wednesday	11 / 29	• The daily sync-up meeting was conducted. • There were some vendors that were held off due to the low number of invoices. If the number of invoice samples is low, the robot cannot be trained accurately. Today, new samples related to three vendors were received, so those developments were completed.
Thursday	11 / 30	• The daily sync-up meeting was held in the morning. • Some bugs were raised in the live environment. Three bugs were tested, one of which was rejected, while the others were redeveloped, resolved, and merged.
Friday	12 / 01	• The daily sync-up meeting was held. • Redeveloped, retested, resolved, and merged five bugs raised from the live environment. • Document Understanding (Machine Learning) in UiPath was self-learned by me.
Saturday	12 / 02	Weekend Holiday
Sunday	12 / 03	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Twenty-one weeks into my internship journey, I found myself deeply immersed in various tasks aimed at refining our data extraction processes. This week, I dedicated my efforts to developing new formats for data extraction and meticulously updating the go-live vendor list in Trackers. Despite our meticulous efforts, three bugs appeared in the live environment, disrupting our workflow. While one bug was immediately rejected due to quality issues in the invoice, the remaining bugs demanded important attention. We embarked on the challenging process of redeveloping, resolving, and merging them into GitLab.

Currently, our project members are endeavoring to automate this process using machine learning, referred to as Document Understanding in UiPath. In the developed project workflow, all the invoices under one vendor should be the same. If there is a format change, it can lead to a bug, causing trouble for us as we need to enhance development for each bug. Consequently, two of our team members were assigned to work on the machine-learning part. Additionally, I was assigned to learn about document understanding. Information was searched for, and some videos were watched to expand my knowledge. A screenshot of the first watched video and the list of video series was attached by me.
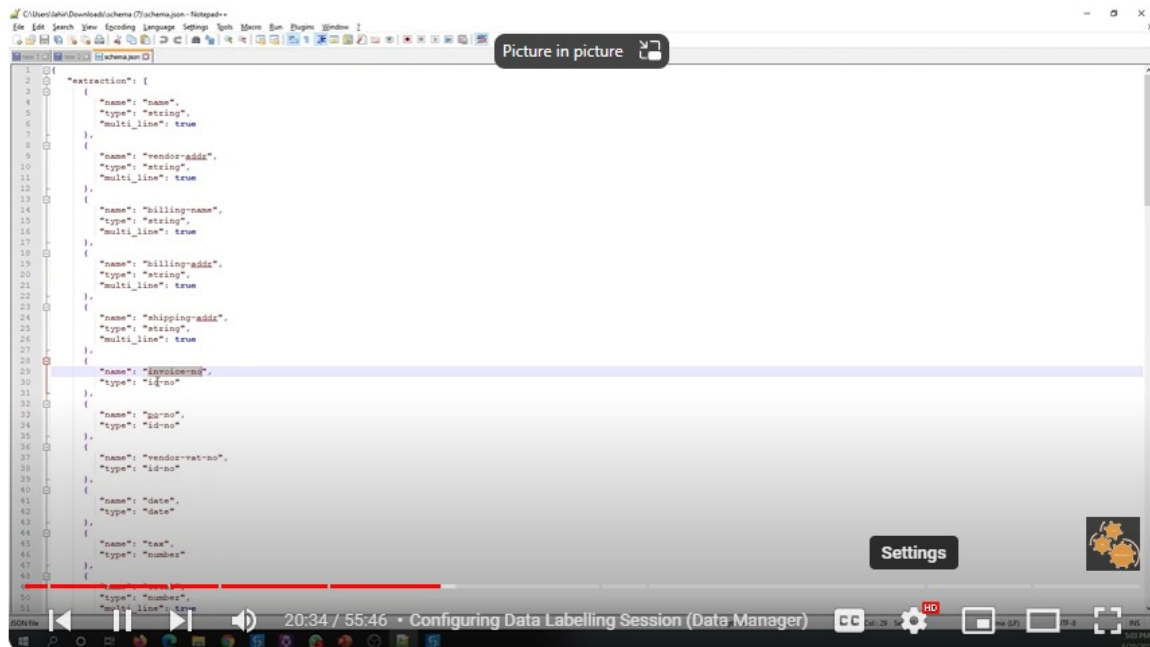
Training UiPath Document Understanding ML Models - Data Manager - Part 1 | RPA
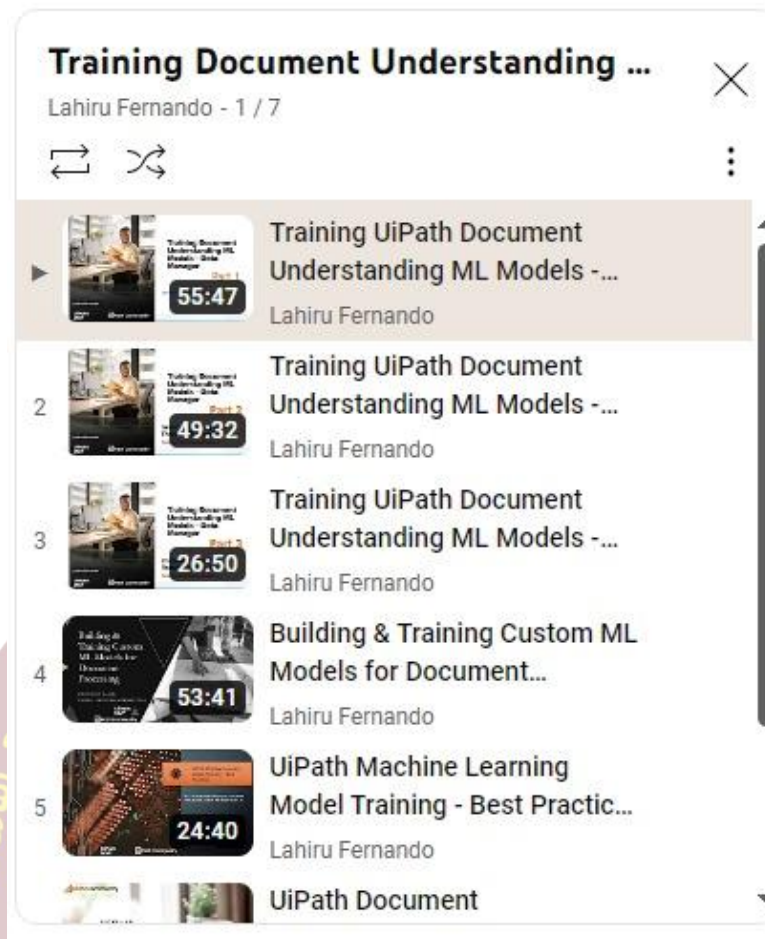
Lahiru Fernando
2.21K subscribers
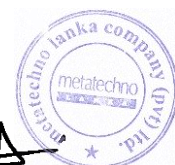
After having watched this video series, a profound understanding of Document Understanding was acquired by me.

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| **FOR THE WEEK ENDING** | **TRAINING LOCATION** |
| Sunday 10 / 12 / 2023 | **Metatechno Lanka Company** |

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	12 / 04	- The daily sync-up meeting was held in the morning. - Two bugs raised in the live environment were resolved. I carefully studied the workflows, identified the issues, rectified them, and conducted thorough retesting before merging the changes. - Actual data and bot-extracted data were checked and compared as part of machine learning-supportive work (document understanding).
Tuesday	12/05	- The daily sync-up meeting was held in the morning. - Three bugs were fixed today. One of them presented a tricky part, which was resolved with the assistance of a senior software engineer.
Wednesday	12 / 06	- The daily sync-up meeting was held. - Six bugs were checked today. Two of them were rejected due to quality issues with the invoices, while the others were fixed and merged for QA.
Thursday	12 / 07	- The daily sync-up meeting was held in the morning. - Today, five bugs were addressed. Four of them were resolved, while the remaining one was held for retesting tomorrow.
Friday	12 / 08	- Two bugs that were held yesterday were resolved. - Four bugs were resolved and merged into GitLab.
Saturday	12 / 09	Weekend Holiday
Sunday	12 / 10	Weekend Holiday

I've just wrapped up my twenty-second week of internship, marked by a series of bug fixes in the live environment. Each fix brought valuable insights and experience. Some bugs couldn't proceed due to quality issues with the invoices, prompting updates in our trackers for client notification. For the rest, I dived into the workflows, pinpointed the root causes, resolved them, and seamlessly integrated the fixes into GitLab for enhanced efficiency.

This week, a new task was assigned to me. Our team decided to try this whole project using Document understanding in UiPath (Machine Learning). In this aspect, the bot is trained to comprehend documents and extract all relevant points using the UiPath Document Understanding framework. The framework enables the processing of incoming files, from digitization to data validation, within an open, extensible, and versatile environment. By integrating robotic process automation (RPA) and artificial intelligence (AI), it facilitates the extraction and interpretation of data from diverse documents, ensuring end-to-end document processing. Below, I've outlined the fundamental process of document understanding according to UiPath.

How does it work?

1	2	3	4	5	6
Load taxonomy	**Digitize**	**Classify**	**Extract**	**Validate**	**Export**
Define files and data for extraction	Use OCR to detect text and its location	Classify the documents from the specified list	Extract information from the documents	**If needed**, a human can confirm the extracted data	Export the extracted info for further usage
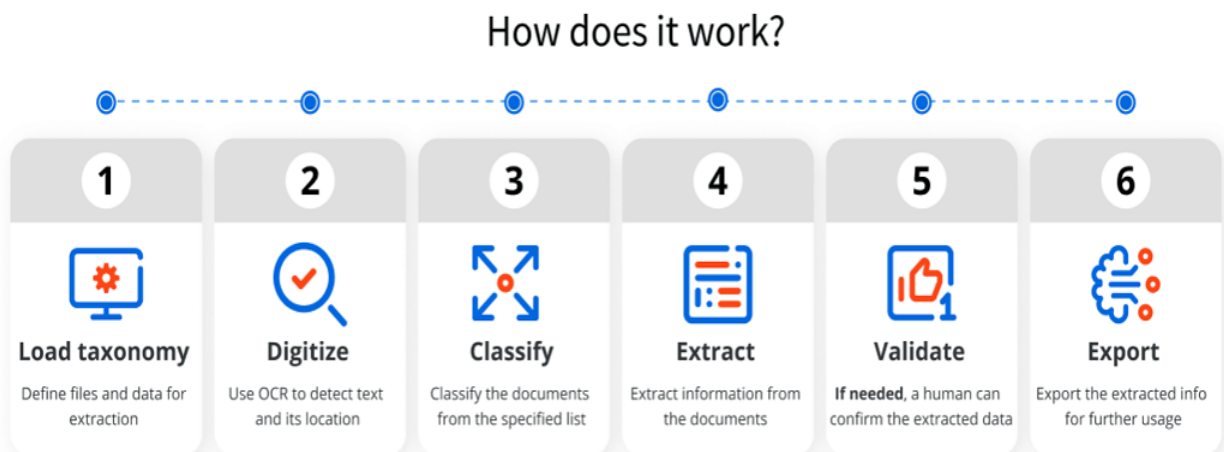
Below are the benefits of document understanding in UiPath.

Fast, accurate, and flexible document processing with AI

- Built to process various document types
- Accuracy improving over time
- Out-of-the-box AI solutions
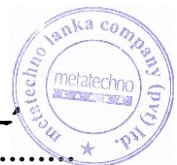- End-to-end automation of complex processes

When our project was developed using document understanding, the entire process was notably simplified. Additionally, there was no need to create distinct formats for each vendor; rather, only the robot required training. With these advantages in mind, our team made the decision to proceed with the project using document understanding. Consequently, senior colleagues embarked on training the robot, completing the initial phase this week. My assignment now entails analyzing and comparing the execution results with the execution summary and the actual data.

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WEEK NO : 23

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 17 / 12 / 2023	Metatechno Lanka Company

| Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	12 / 11	• The daily sync-up meeting was conducted in the morning. • New formats were developed for two new vendors. • Three bugs raised from the live environment were resolved and merged for QA testing.
Tuesday	12 / 12	• The daily sync-up meeting was conducted in the morning. • Invoices were received according to a format that was developed last week due to insufficient invoices for training. Consequently, it was re-developed, re-tested, and merged into GitLab. • Two bugs raised from the live environment were resolved.
Wednesday	12 / 13	• The daily sync-up meeting was attended. • A new format for a new vendor was developed. • Two bugs were resolved and merged for verification by the QA team.
Thursday	12 / 14	• The daily sync-up meeting was conducted in the morning. • Two new formats were completed, which were previously postponed due to a low count of invoice samples for bot training. • Bugs reported by the QA team were addressed by studying the workflow, followed by redevelopment, retesting, and resolution of the bugs.
Friday	12 / 15	• The daily sync-up meeting was held. • Two bugs that were held from yesterday were resolved. • A new workflow for a new vendor was developed, and training for this format was completed and merged. • Three bugs raised from the QA side and from the live environment were resolved.
Saturday	12 / 16	• Four bugs raised from the live environment were checked. Two of them were rejected due to quality issues at the extraction points and the OCR limitation. The other two bugs were resolved.
Sunday	12 / 17	Weekend Holiday

Twenty-three weeks had passed since the start of my internship, and I was astonished by how much I had learned and grown during that time. New invoice extraction workflows for new vendors were developed just last week. Sometimes, formats couldn't be completed due to the low invoice sample count. Some of these formats encountered in the last few days had to be held onto until the client provided new samples. New samples for those vendors were sent by the client this week, and they were completed.

Occasionally, further training of the bot was required. New formats were published to the live environment, and new sample invoices were run by the client based on the completed vendor formats on their side. Bugs could be encountered because invoice formats were changed according to the client's requirements. Bugs raised from live were redeveloped this week.

Also, new experiences were encountered this week. When a new vendor was developed, one number couldn't be detected out of all the numbers in the amount. Many attempts were made to resolve it. The OCR limitation issue was mentioned by a member of our project team. That error is shown below.
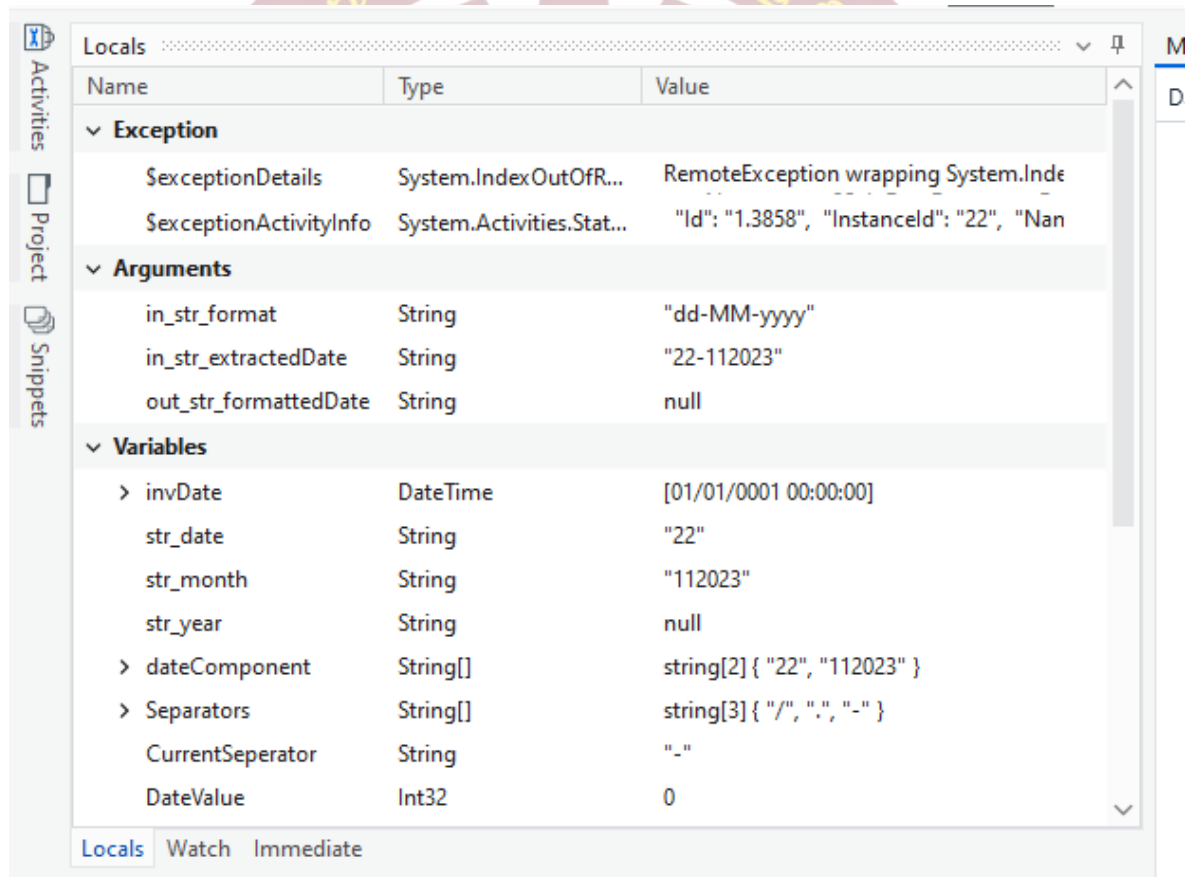
In the above screen capture, "in_str_extractedDate" was extracted as '22-112023'. However, in the invoice, the date is given as '22-11-2023'. The '-' mark could not be extracted by the robot, resulting in an OCR limitation error. Regrettably, no options were available to resolve it.

This week, work had to be done on Saturday because it was considered a normal working day.
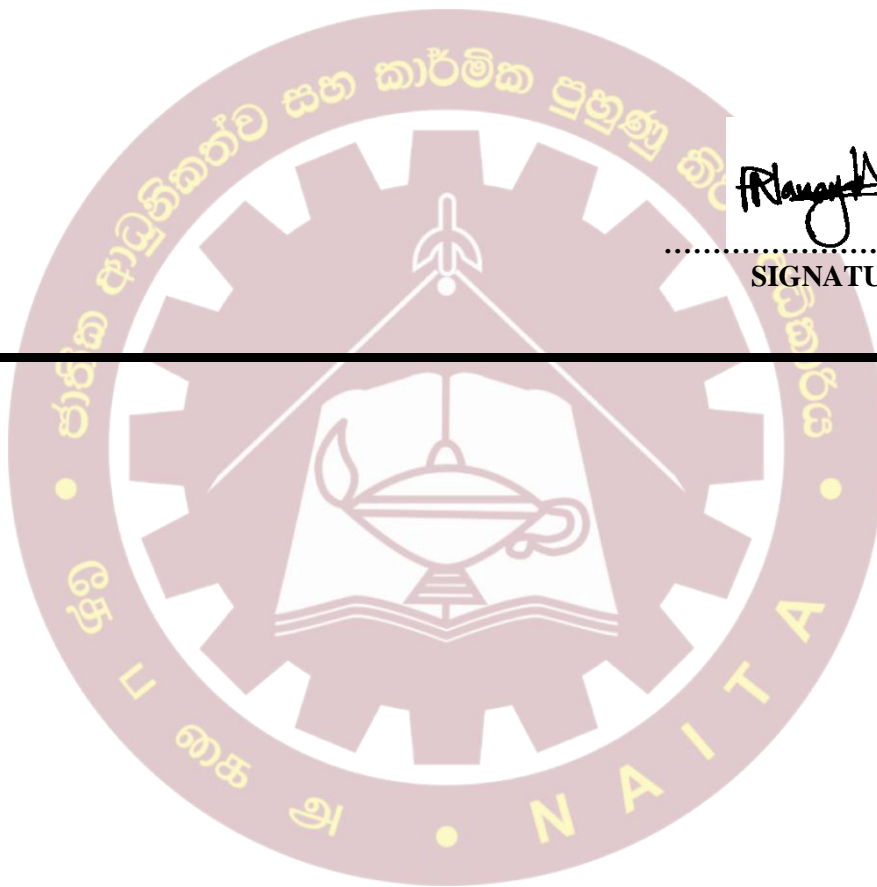
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WEEK NO : 24

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 24 / 12 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	12 / 18	• The morning's daily sync-up meeting was attended. • A new format for a new vendor was developed. • A knowledge transfer session on document understanding was held. • The process of document understanding was attempted. • A bug raised in the live environment was fixed.
Tuesday	12/ 19	• The daily sync-up meeting was held in the morning. • Actual data was entered and compared with extracted data as supportive work for the machine learning part. • New workflows for two new vendors were developed.
Wednesday	12 / 20	• There was the daily sync-up meeting. • Completed and merged some workflows that I held last week due to a lack of invoice sample counts. The client was sent new samples to complete developments.
Thursday	12 / 21	• The daily sync-up meeting was held in the morning. • A new format was developed today. During the development, assistance was required to extract some points, which was provided by our senior. • Two bugs raised in the live environment had to be rejected due to quality issues.
Friday	12 / 22	• The daily sync-up meeting was held. • Four bugs were resolved and merged into Git Lab during the daily sync-up meeting.
Saturday	12 / 23	Weekend Holiday
Sunday	12 / 24	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Also, this week, new formats were developed, and bugs raised from the QA side and in the live environment were fixed. A knowledge transfer session on document understanding was conducted. After the session, I was assigned to try out that process in document understanding. This process is designed to help combine different approaches to extract information from multiple document types.
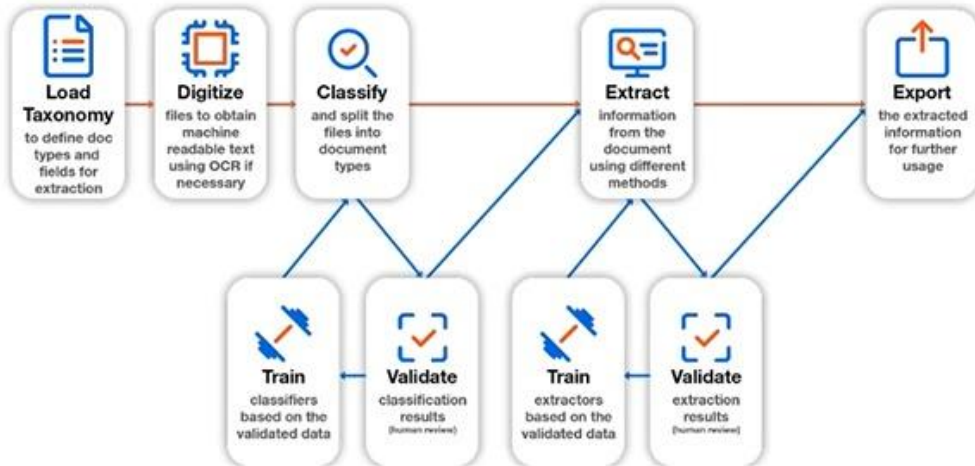
A project was initiated, and an AI Center was established to conduct testing. The AI Center acts as the foundational infrastructure for UiPath Document Understanding machine learning models. Within this environment, elements such as Dataset, Data Labeling, ML Packages, Pipeline, ML Skills, and ML Logs are integrated. ML Packages and a Dataset were generated, and invoices were uploaded for processing. Upon completion of labeling, the data was exported. Following this, pipelines were constructed and integrated into the workflow. In adherence to company policy, sharing any private workflows externally is prohibited. Consequently, actual screenshots cannot be provided. Nevertheless, a sample has been included below to illustrate the data labeling process during robot training.

After the execute that, I check the result. Only one invoice amount was incorrect. Others were correct. I trained the robot using only 12 invoices. When we train the robot more and more to all vendors, we could get high accuracy with low workload.

Binokshi

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SIGNATURE OF TRAINEE

REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

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SIGNATURE

FOR THE WEEK ENDING		**TRAINING LOCATION**
Sunday 31 / 12 / 2023		**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	12 / 25	Holiday
Tuesday	12 / 26	Holiday
Wednesday	12 / 27	Full day Leave
Thursday	12 / 28	• The daily sync-up meeting was conducted in the morning. • The bug raised from the live environment was checked. It was redeveloped, retested, and merged to verify from the QA side. • Actual data was entered and compared to assist with Document Understanding.
Friday	12 / 29	• The daily sync-up meeting took place. • Three bugs raised from the Live environment were resolved and merged into GitLab. • Assistance was provided to the document understanding team.
Saturday	12 / 30	Weekend Holiday
Sunday	12 / 31	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Throughout the week, efforts were focused on addressing newly identified bugs within the live environment. Adjustments to invoices were required by our clients to better align with evolving business requirements. However, upon attempting to execute these modified invoices, format discrepancies emerged, resulting in the manifestation of bugs within the live environment. Consequently, a redevelopment effort was undertaken to ensure alignment with the new format.

Additionally, support was provided to the machine learning (document understanding) team within our project. This involved active participation in data input and verification processes to ensure the accuracy and reliability of the extracted information.

Binokshi

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SIGNATURE OF TRAINEE

REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 07 / 01 / 2023	Metatechno Lanka Company

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	01 / 01	- The daily sync-up meeting was held in the morning. - Assistance was provided in checking and comparing actual data with bot-extracted data as part of machine learning support work (document understanding). - A new extraction workflow was developed for a new vendor.
Tuesday	01 / 02	- The daily sync-up meeting took place in the morning. - Another workflow, which had been held last month and was owned by another team member, was assigned by the PM. New samples were provided by the client today, so the workflow was completed and merged into GitLab. - Two bugs were resolved and merged into GitLab.
Wednesday	01 / 03	- The daily sync-up meeting took place. - Today, I was assigned to self-learn about document understanding in the UiPath (machine learning) part. All the resources that were used to learn about it were shared.
Thursday	01 / 04	- The daily sync-up meeting was held in the morning. - A new task to automate using Re-Framework without utilizing orchestrator queues was assigned to me. I commenced that task.
Friday	01 / 05	- The daily sync-up meeting was conducted. - A new extraction workflow for a new vendor was developed. - The given task was automated using Re-Framework.
Saturday	01 / 06	Weekend Holiday
Sunday	01 / 07	Weekend Holiday

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

        This week, I continued my responsibilities of resolving bugs and developing new formats, consistent with previous weeks. Our Project Manager assigned me a new format, previously developed and managed by another team member, which I successfully completed. Additionally, I embarked on a new automated task to be implemented using ReFramework, initiating its development process.

        Moreover, I dedicated time to studying the Document Understanding course in UiPath (Machine Learning). Valuable resources utilized by our team members in learning Document Understanding were shared, facilitating our collective understanding of the subject. Presently, there is an ongoing endeavor within our team to automate our project using document understanding techniques.

Binokshi

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SIGNATURE OF TRAINEE

REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

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FOR THE WEEK ENDING	TRAINING LOCATION
Sunday 14 / 01 / 2023	**Metatechno Lanka Company**

Day	Date	BRIEF DESCRIPTION OF THE WORK CARRIED OUT
Monday	01 / 08	• The daily sync-up meeting was held in the morning. • A knowledge transfer onboarding session was conducted in the Software Development division. • The task assigned last week was automated by me.
Tuesday	01 / 09	• The daily sync-up meeting took place in the morning. • Three new bugs raised from live, which were owned by another software engineer, were assigned to me by our PM. I studied those bugs to identify the errors and resolved one of them. • Efforts were made to complete the given task for automation.
Wednesday	01 / 10	
Thursday	01 / 11	
Friday	01 / 12	
Saturday	01 / 13	
Sunday	01 / 14	

DETAILS AND NOTES OF WORK CARRIED OUT, PROBLEMS ENCOUNTERD AND HOW SOLVED ETC., DIMENSIONS AND SKETCHES TO BE GIVEN WHEREVER POSSIBLE

Last week, I successfully completed the automated task assigned to me the previous week and also addressed several bugs. A comprehensive onboarding knowledge transfer session was conducted, aimed at familiarizing us with company processes and procedures. This session was instrumental in providing clarity on various aspects, such as writing clean code, best practices in coding, and project folder structures. It also offered an open forum for us to ask questions and clarify any doubts we had. Overall, the session was remarkably informative and beneficial.

As the last week of my internship period, it marked the culmination of a valuable learning experience. Throughout this time, I had the privilege to engage in ongoing real-world projects and collaborate with seasoned professionals in my field. The skills and knowledge I acquired during my internship journey will undoubtedly serve as a solid foundation for my future career endeavors.

Binokshi

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SIGNATURE OF TRAINEE

REMARKS AND CERTIFICATION BY THE ENGINEER / T.O

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SIGNATURE

INSPECTION REPORT

Inspection 01

NAME AND DESIGNATION OF OFFICER: DATE

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REMARKS:

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SIGNATURE

Inspection 02

NAME AND DESIGNATION OF OFFICER: DATE

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REMARKS:

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SIGNATURE

Signature of the officer in-charge of training.
(With rubber stamp)