Robotic process automation for data scraping

Law Firm

Created an RPA process to automate the data download process of sales reports from two portals for multiple brands and set up data validation checks

Law firm needs to outlaw their data download process

Picture this…

You're looking for automating the data download process of sales reports from two portals for multiple brands and set up data validation checks. However, each brand has reports specific to a region (US, Canada, EU, etc.) which creates over 250 combinations of brands and regions, and the current data download process is manual and requires a lot of time and effort.

You turn to Accordion.

We partner with your team to help automate the data download process in a robust and reliable way utilizing UiPath for the RPA process, including:

1) Implementing scraping of the brand-region combination before the report download process begins, which will enable the system to scale up automatically when new brands are onboarded.
2) Removing the cause of most common errors in manual processes, e.g., mismatching the downloaded report to other brands by programmatically handling the downloaded report naming conventions.
3) Building a robust system to mine the data everyday with the capability to handle common changes in website UI. Automating the system to run behind a locked screen without any necessity of human intervention.

Your value is enhanced.

• You have automated data fetch process using RPA to increase the efficiency by scraping the data every day (smallest time range of data available), reduced errors like data contamination, and increased security by curtailing the number of people with access to the portals.

• You will have increased frequency to download more granular data from the websites by selecting shorter time duration (1 day) for the aggregated report compared to the earlier manual process (1 week).

• The scraping process would have saved over 150 hours of manual effort needed every month. This process could be setup to function over the weekends and other nonworking days as well with an equivalent to 0.9 FTE (effort put in by a full-time employee).

KEY RESULT

• >150 hours of manual effort saved

VALUE LEVERS PULLED

• Robotic Process Automation using UiPath

Robotic Process Automation for a Law Firm

Situation

- Client fetches sales data from two portals for brands with which they collaborate. Each brand has reports specific to a region (US, Canada, EU, etc.) which creates over 250 combinations of brands and regions. This data download process is manual and requires a lot of time and effort.

- Partnered with the client to help automate the data download process in a robust and reliable way utilizing UiPath for the RPA process.

Accordion Value Add

- Implemented scraping of the brand-region combination before the report download process begins, which enables the system to scale up automatically when the client onboards new brands onto their platform.

- Removed the cause of most common errors in manual processes, e.g., mismatching the downloaded report to other brands by programmatically handling the downloaded report naming conventions.

- Built a robust system to mine the data everyday with the capability to handle common changes in website UI. The system is built to run behind a locked screen without any necessity of human intervention.

Impact

- Automated data fetch process using RPA has increased the efficiency by scraping the data every day (smallest time range of data available), reduced errors like data contamination, and increased security by curtailing the number of people with access to the portals.

- Increased frequency helped the client to download more granular data from the websites by selecting shorter time duration (1 day) for the aggregated report compared to the earlier manual process (1 week).

- The scraping process saves over 150 hours of manual effort needed every month. This process is setup to function over the weekends and other nonworking days. This is equivalent to 0.9 FTE (effort put in by a full-time employee).

Methodology/ Approach

Approach

The process to automate the **extraction of sales data for over 250 combinations of brands and regions from 3rd party portals using UiPath** involved the following phases:
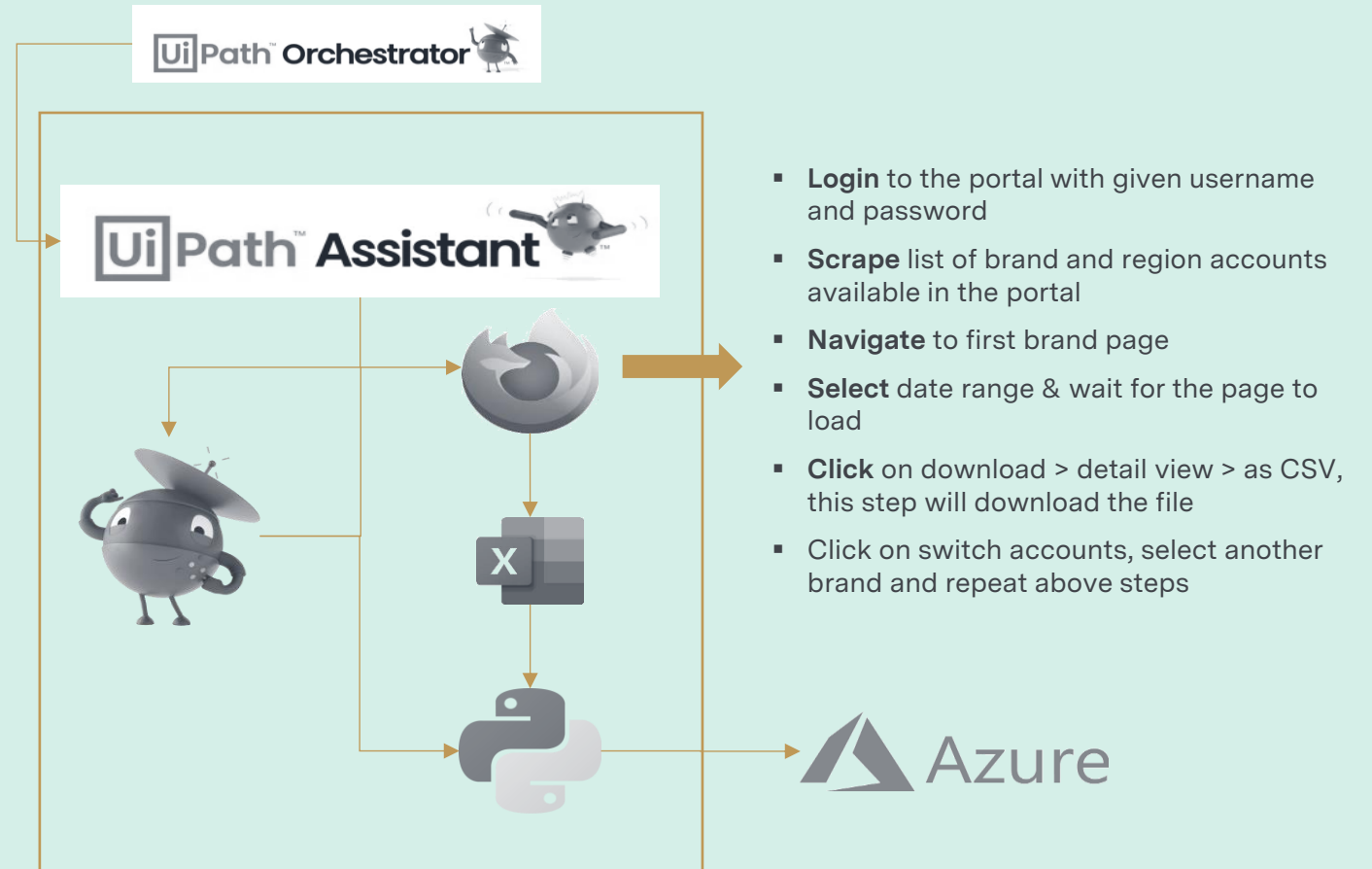
Solution Designing:

First step is to understand all the tools that are required to solve the requirement. This step involved design decisions like browser selection, data storage mechanism, etc.

RPA Implementation:

- All the steps that a user takes in manual approach are listed down
- **UiPath Studio** is used to implement the steps and to build a process
- Robot is created and process to the robot is published using **Orchestrator**
- Process is scheduled with a robot on a system using Orchestrator

System Architecture

- **Login** to the portal with given username and password
- **Scrape** list of brand and region accounts available in the portal
- **Navigate** to first brand page
- **Select** date range & wait for the page to load
- **Click** on download > detail view > as CSV, this step will download the file
- Click on switch accounts, select another brand and repeat above steps

Data scraping

Tables can be scraped from different types of web interfaces using UiPath and saved to excel

Webpage with list of brands

Screenshot of brand & region combination from the website that needs to be scraped

List of names scraped by UiPath to an Excel file from the table above

ACCORDION

UiPath orchestrator (1/2)

UiPath Orchestrator is a tool used to manage the robots. Here we can see a list of different automation processes created
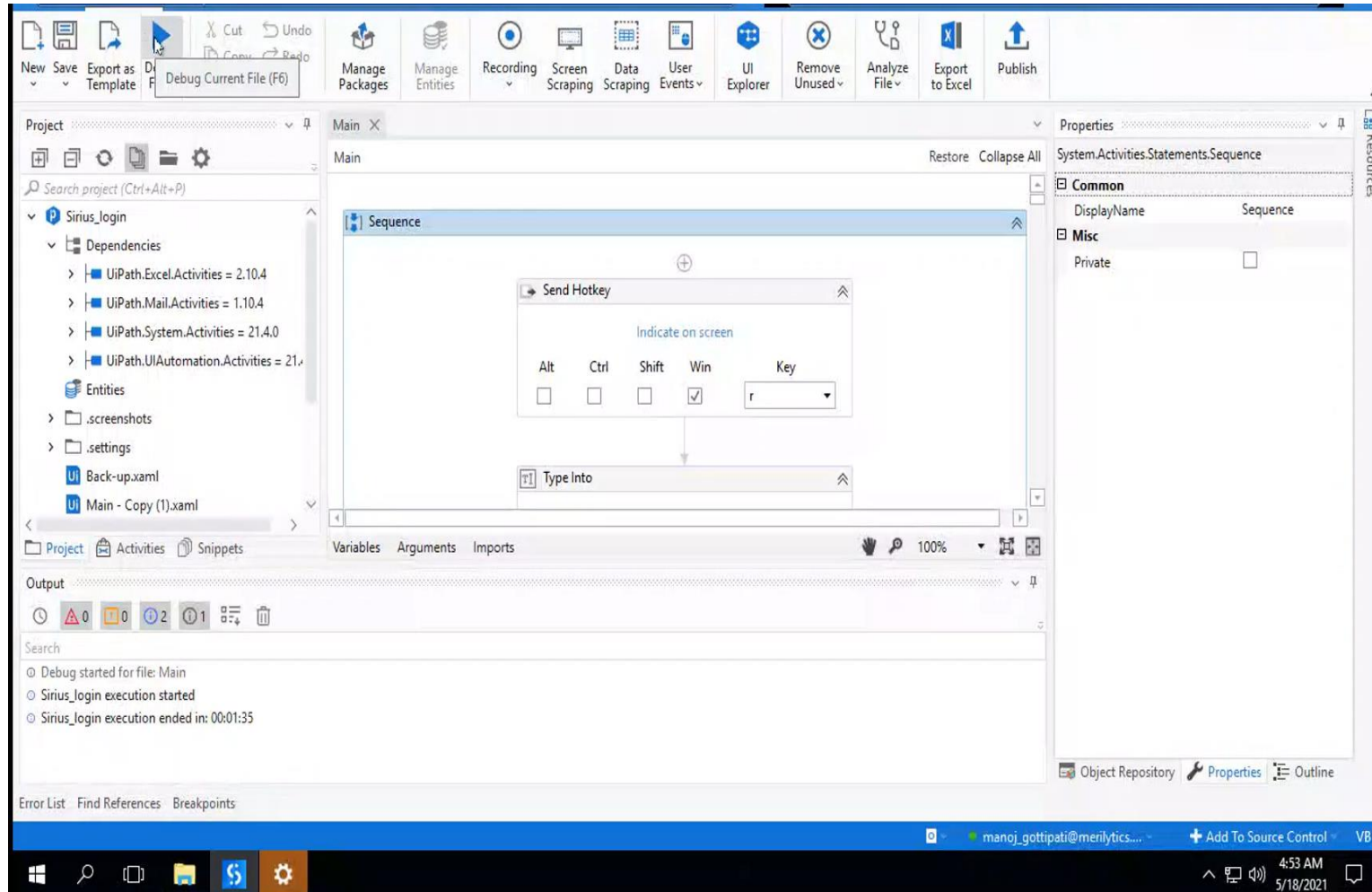
UiPath Orchestrator Process List

Created processes can be scheduled to be triggered at any interval using the orchestrator

UiPath Orchestrator (2/2)

UiPath RPA Process

Use Case:

The need is to place order of SKUs on a software called Siriusware which is a native windows application. This is a **manual intensive process** where an individual needs to input data of multiple SKUs from excel.

The process involves the following steps:

- Launch the application using windows run command.

- Wait for application launch and login using the credentials.

- **Select the required functionality** from activities drop down and select purchase order.

- **Fill the purchase order details** in the subsequent data entry fields. This is complex data entry step which loops through the data available in an input excel sheet and fills the parameters.

The video demonstrates a **UiPath RPA process** which performs the above steps in a windows machine.