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SVKM'S NMIMS
Mukesh Patel School of Technology Management & Engineering
Department of Mechatronics Engineering
RPA Lab
Subject- Robotic Process Automation
EXPERIMENT NO. 5

Objective:
The objective of this experiment is to design and implement an automated bot using Power Automate Desktop for scraping the data from a flight booking website and organizing the information into an Excel sheet. The experiment aims to showcase proficiency in web scraping, data manipulation, and automation through the creation of a streamlined and efficient data extraction and processing workflow.

Prerequisites:
1. Power Automate Desktop installed on your computer.
2. Basic understanding of Power Automate Desktop interface.

Challenge Overview:
The challenge involves designing an automated bot to extract comprehensive data for flight booking from the website e.g, http://makemytrip.com. The bot fills in the information available on the excel sheet and fills it in the respective fields on the website. Further, it extracts the data from the website and the extracted information will be organized into an Excel sheet with dedicated columns for different attributes. The ultimate challenge lies in submitting the details of the highest and lowest price of the flight for the specified data.

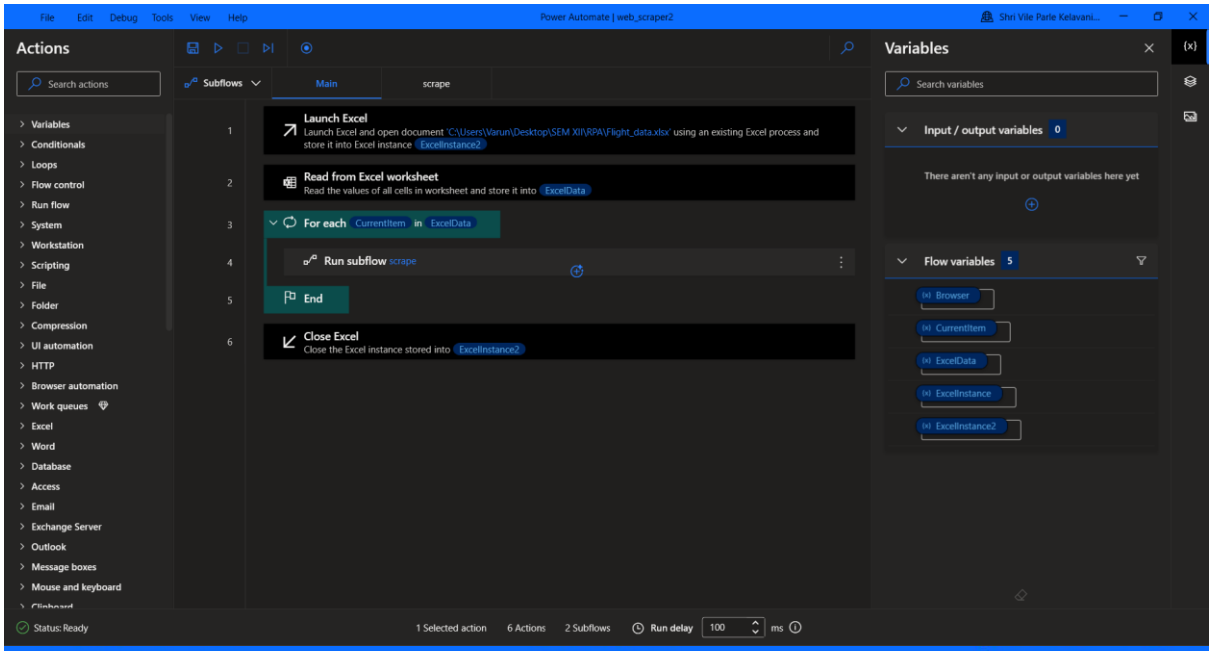
Task List: Flight Fare Scraping Bot Design
1. **Scraping Data:**
   - Develop a web scraping bot to extract data from a flight booking website.
   - Create a structured data collection process for accurate retrieval.
2. **File Creation:**
   - Generate an excel file with a dataset for flight booking.
3. **Excel Data Entry:**
   - The extracted information must be filled in the excel sheet for the respective search happened in the previous step.
4. **Finding the Max/Min Fare:**
   - Calculate the Maximum and Minimum fares and save it in a excel file.

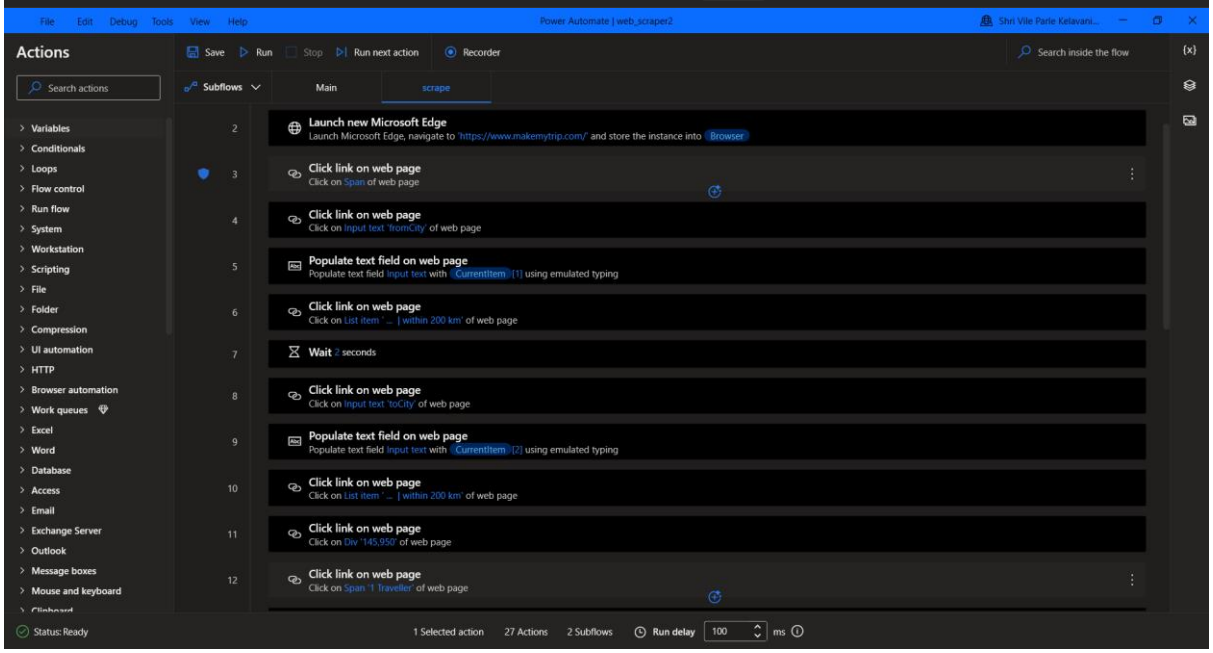
This task list outlines the steps involved in designing a bot for scraping flight details from the information available in the excel file and writes back the scrapped data into it.

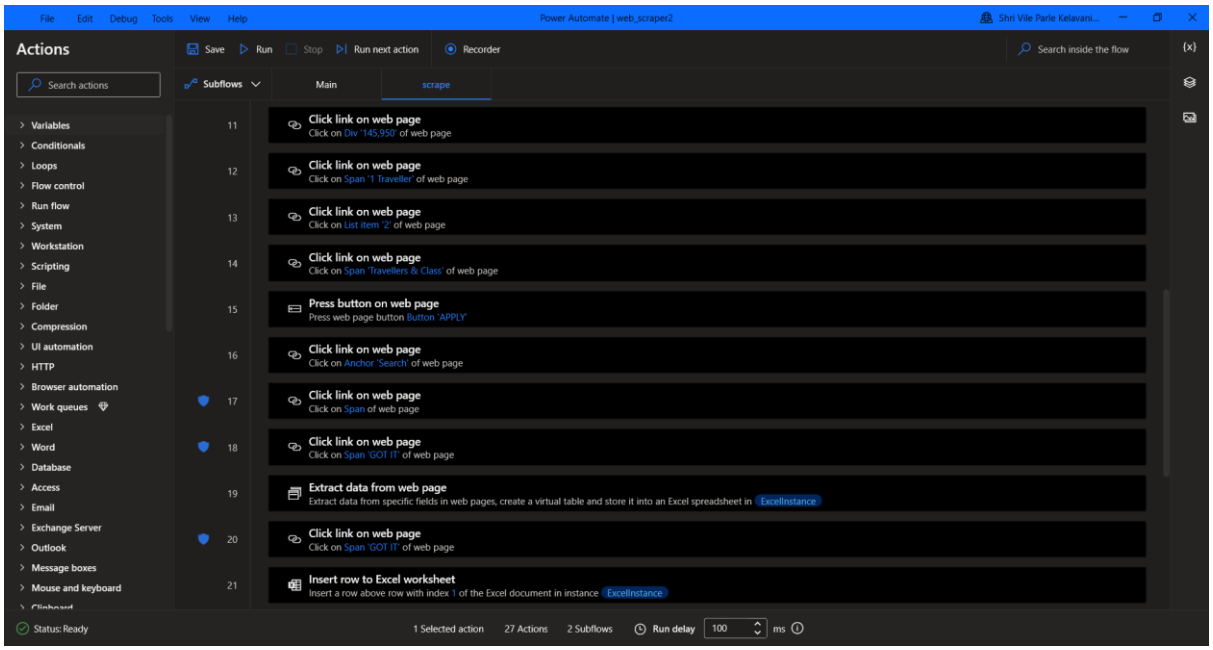
Important Actions:
1. **Web Scraping:**
   - Utilize web scraping actions to extract the flight fare details.
2. **File Creation:**
   - Implement actions to create an excel file the has the data to be used as input and written back after scraping.

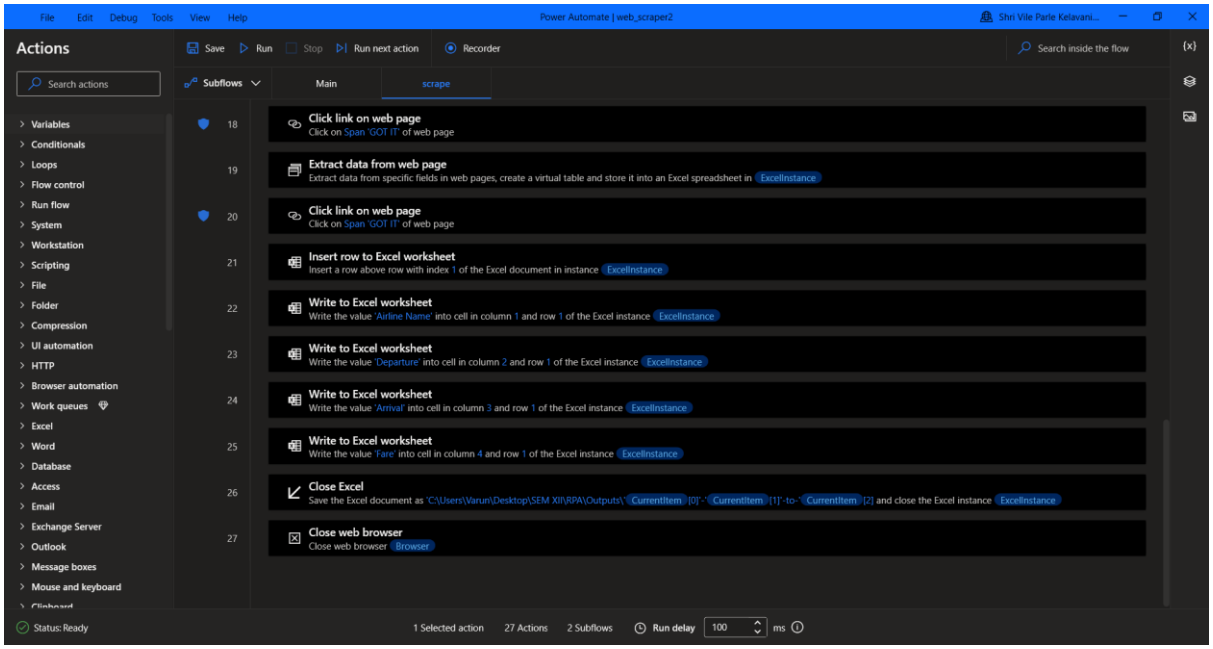
3. **Excel Data Entry:**
    - Utilize Excel actions to populate a spreadsheet with the scraped data.
4. **Finding the Max/Min Fare:**
    - Calculate the Maximum and Minimum fares and save it in a excel file.

Flow Screenshots:

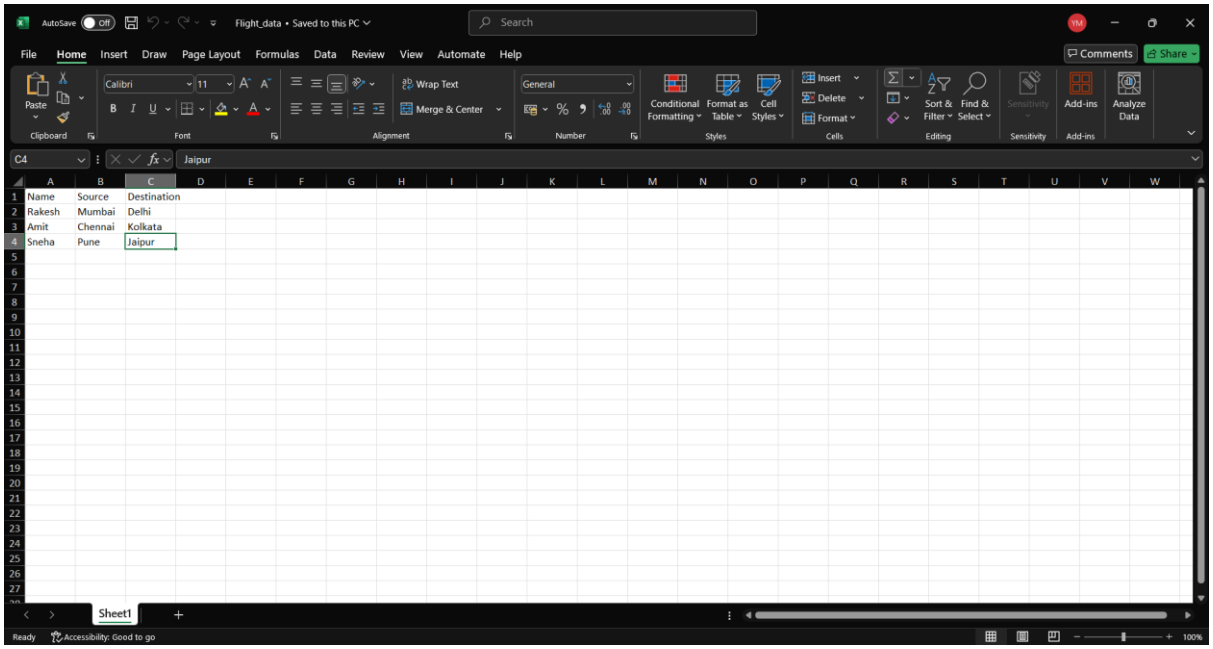




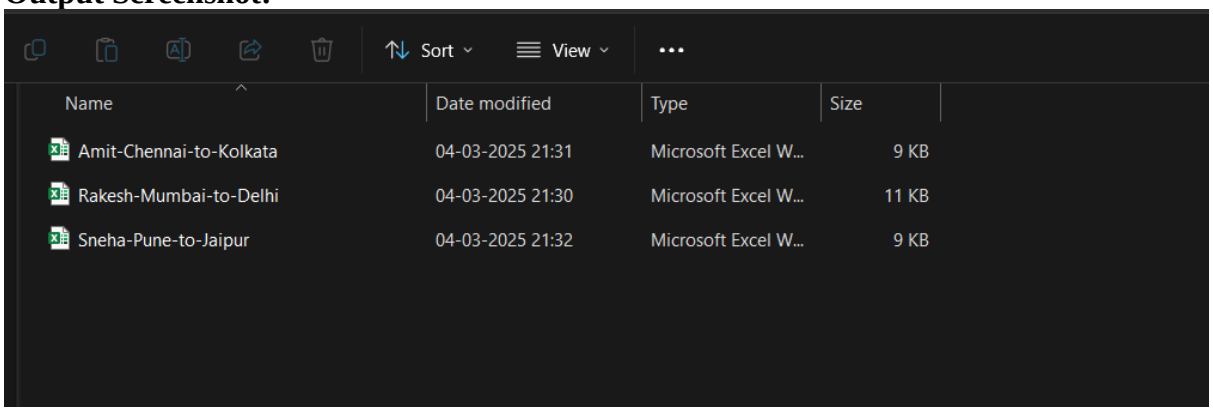


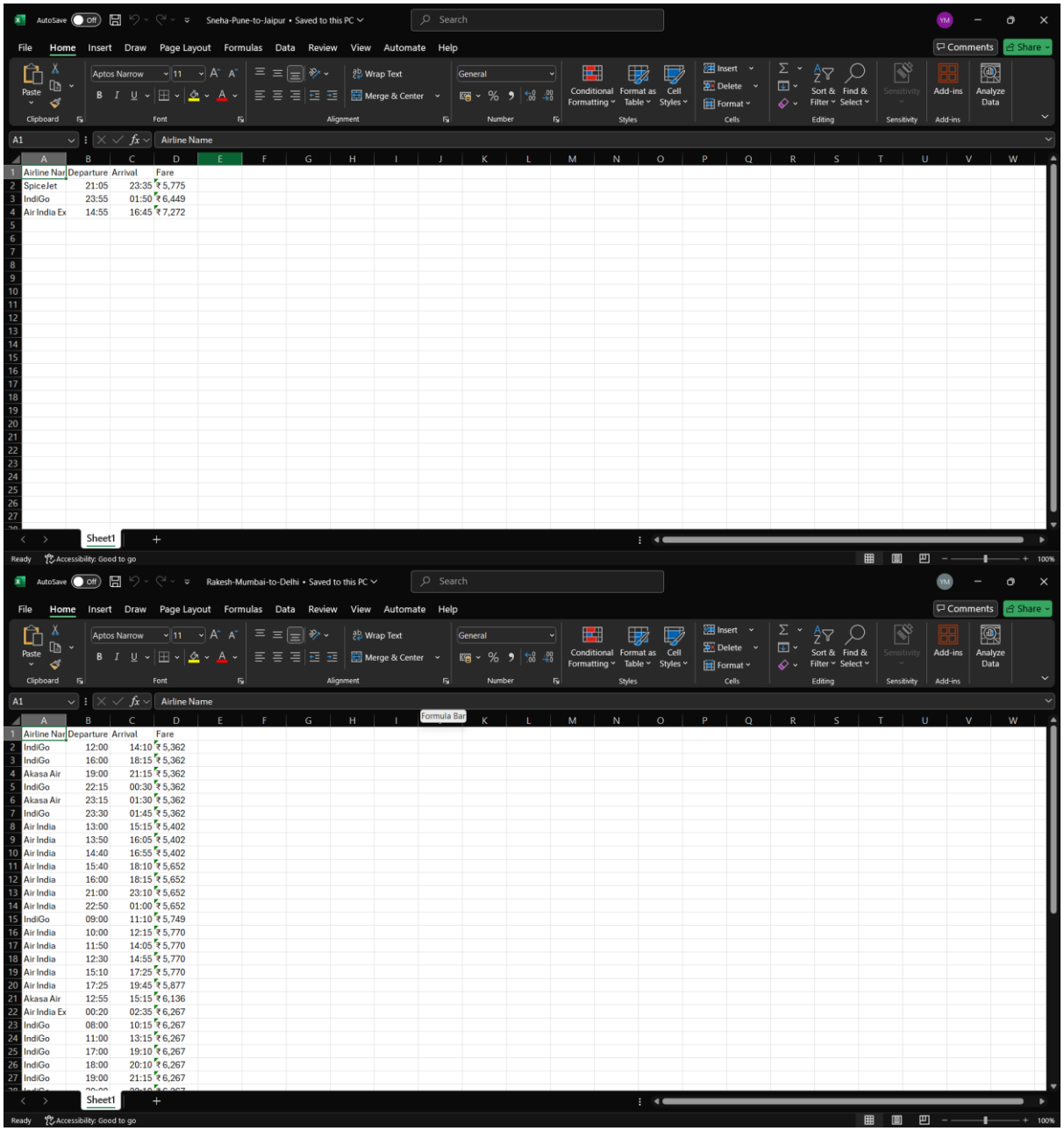


Input Screenshots:



Output Screenshot:





Conclusion:

Learnt how to take data from an excel and how to use the data to perform tasks on a web page and then finally extract data from a web page. This flow was used to get information for flights to and from a destination for multiple users.