

WEB AUTOMATION IN UIPATH

Web automation refers to the act of allowing software robots to do pre-defined actions, tasks, and processes on a web browser or web application. Web Automation is a process of automating the identification and manipulation of web items based on their properties. This type of automation is compatible with any website and may also be remotely implemented on numerous workstations within the network. UiPath includes a built-in recorder that can read and execute web-based actions using an easy-to-use graphical workflow editor.

What are the applications of web scraping in UiPath?

UiPath extends beyond basic web scraping techniques.

- It can automatically log in to a website,
- pull data from many web pages, filter and alter it,
- and then integrate it into another application or streaming website.

REAL TIME SCENARIO

TASK:

Data should be extracted from Google Contacts and saved in a file.

This is the website link: <https://books.toscrape.com/>, we need to extract the data from this website i.e.,

1. Name
2. Price
3. Stock

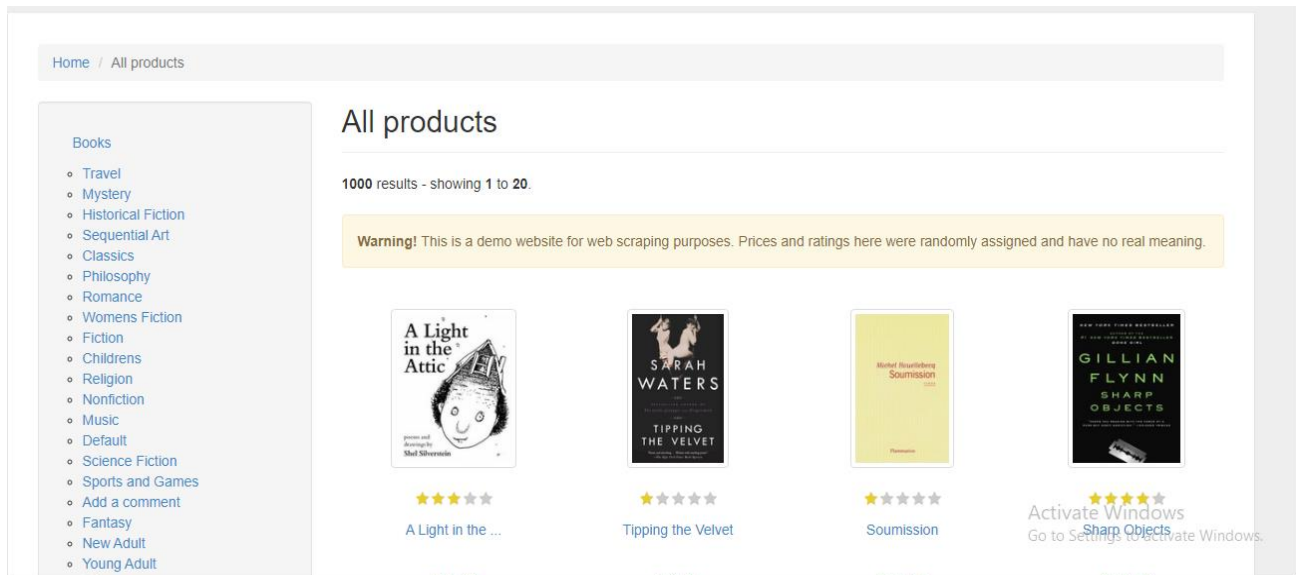
After extracting the data, we must sort the table, replace the special characters, and then write it into Excel.

The activities used are:

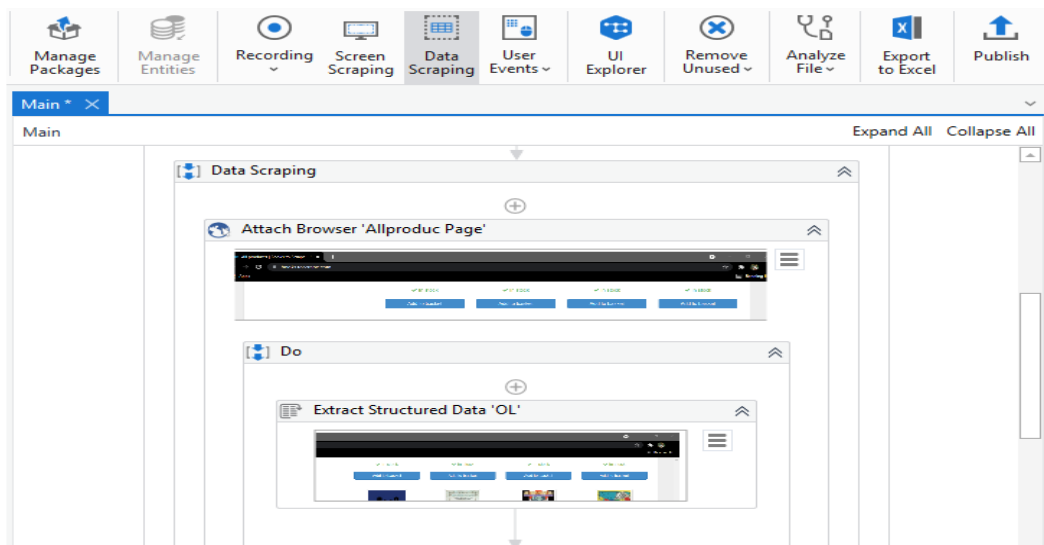
- Open Browser
- Data scraping
- Sort data table
- For each row loop
- Assign activity
- Write range

The steps are as follows: -

1. To extract data, go to the Google Contacts page (<https://books.toscrape.com/>).



2. Open the UiPath Studio Create a blank project and rename it.
3. Drag and drop Open Browser: “Pass the website link”
 - Use the Maximize windows
4. Hit the Data Scraping Option, Extract the data From the Webpage.



5. For sorting the data (price list) use sort data table

- In properties panel, pass the Variable in Input data table i.e., **Extract Data table** (The Extract Data Table variable is the output variable that is automatically generated from the Data Scraping Wizard. You can find this variable in the Extract Structured Data activity.)
- Create a Variable in Output debatable section: Dt1 for mine.
- Index value is 1
- Order: Descending (you can change ascending /descending)

6. Using for Each loop.

- Use the Assign activity to assign a value for replacing the Character.

The screenshot shows the 'Sort Data Table' activity in the workflow designer. The activity is configured with 'CurrentRow' as the 'For Each' variable and 'Dt1' as the 'In' variable. The 'Body' section contains an 'Assign' activity with the expression 'CurrentRow(1) = CurrentRow(1) + CurrentRow(1).ToString.Replace("£", "₹")'. The properties panel on the right shows the following settings:

Common	
DisplayName	Sort Data Table
Input	
DataTable	ExtractDataTabl ...
Misc	
Private	<input type="checkbox"/>
Output	
DataTable	Dt1 ...
Sorting Column	
Column	The DataColumn ...
Index	1 ...
Name	The name of th ...
Order	Descending

7. Drag and drop the write range activity, for write the output data into excel sheet.

The screenshot shows the 'Write Range' activity in the workflow designer. The activity is configured with 'Result1.xlsx' as the file path, 'Sheet1' as the sheet name, and 'Dt1' as the data source. The 'A1' cell range is specified. The activity is ready to be added to the workflow.

Output:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Name	Price	Stock												
2	The Perfect Play (Play ...	₹59.99	In stock												
3	Last One Home (New ...	₹59.98	In stock												
4	Civilization and Its Discontents	₹59.95	In stock												
5	The Barefoot Contessa Cookbook	₹59.92	In stock												
6	The Diary of a ...	₹59.90	In stock												
7	The Bone Hunters (Lexy ...	₹59.71	In stock												
8	Thomas Jefferson and the ...	₹59.64	In stock												
9	Boar Island (Anna Pigeon ...	₹59.48	In stock												
10	The Improbability of Love	₹59.45	In stock												
11	The Man Who Mistook ...	₹59.45	In stock												
12	The Gray Rhino: How ...	₹59.15	In stock												
13	Life Without a Recipe	₹59.04	In stock												
14	Listen to Me (Fusion ...	₹58.99	In stock												
15	Unlimited Intuition Now	₹58.87	In stock												
16	Approval Junkie: Adventures in ...	₹58.81	In stock												
17	Hamilton: The Revolution	₹58.79	In stock												
18	Myriad (Prentor #1)	₹58.75	In stock												
19	The Rose & the ...	₹58.64	In stock												
20	Candide	₹58.63	In stock												
21	Alight (The Generations Trilogy ...	₹58.59	In stock												
22	Catherine the Great: Portrait ...	₹58.55	In stock												
23	Miller's Valley	₹58.54	In stock												
24	Shameless	₹58.35	In stock												
25	Silence in the Dark ...	₹58.33	In stock												
26	How to Speak Golf: ...	₹58.32	In stock												
27	Aristotle and Dante Discover ...	₹58.14	In stock												
28	The Death of Humanity: ...	₹58.11	In stock												

Sheet1

Count: 1001

THANK YOU