Annexure-I

Automation Anywhere

A training Report

Submitted in partial fulfillment of the requirements for the award of degree of Bachelor of Technology (Computer Science and Engineering).

Submitted to

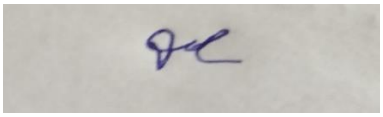
LOVELY PROFESSIONAL UNIVERSITY

PHAGWARA, PUNJAB

Submitted By

Name of student: Keshav Vyas

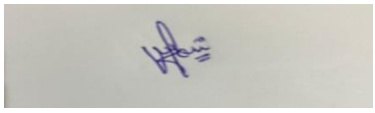
Registration Number: 12013121



Signature of the student:

Name of student: Vishwa Ratan Soni

Registration Number: 12004047



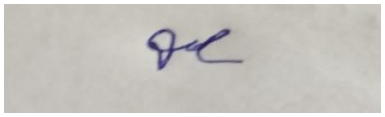
Signature of the student:

Annexure-II: Student Declaration

To whom so ever it may concern

I, **Keshav Vyas, 12013121** and I, **Vishwa Ratan Soni, 12004047** hereby declare that the work done by us on "**Automation Anywhere Project**" i.e., **"Download Reports from NSE"** from **October 2022** to **November 2022**, is a record of original work for the partial fulfillment of the requirements for the award of the degree, **Bachelor of Technology.**

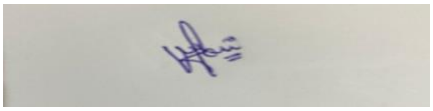
Keshav Vyas (12013121)



Signature of the student

Dated: November 15, 2022.

Vishwa Ratan Soni (12004047)



Signature of the student

Dated: November 15, 2022.

ACKNOWLEDGEMENT

Primarily we would like to thank God for being able to learn a new technology. Then we would like to express my special thanks of gratitude to the teacher and instructor of the course Mr. **Dipen Saini Sir**, who provided us the golden opportunity to learn a new technology from home.

We would like to also thank my own college Lovely Professional University for offering such a course which not only improve my programming skill but also taught me other new technology.

Then we would like to thank my parents and friends who have helped me with their valuable suggestions and guidance for choosing this course.

Last but not least we would like to thank my all classmates who have helped me a lot.

Keshav Vyas
Reg no: 12013121
Date: 15/11/2022

Vishwa Ratan Soni
Reg no: 12004047
Date: 15/11/2022

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Introduction

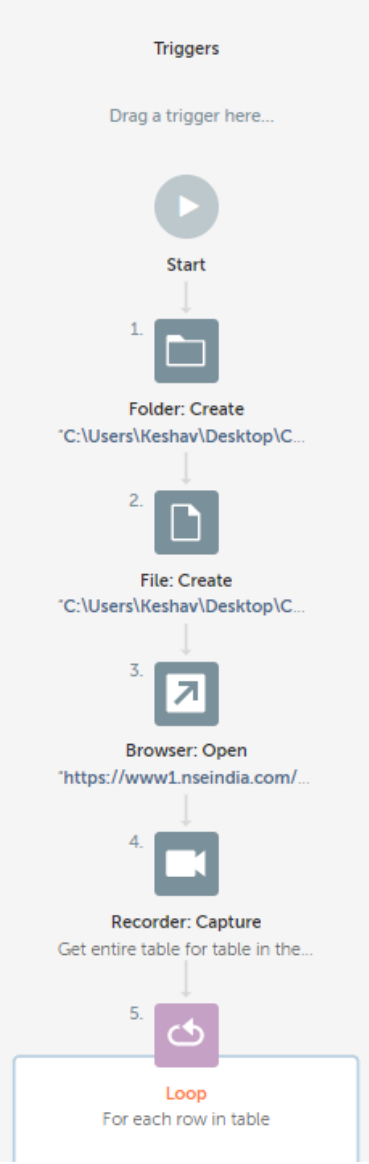
Robotic process automation (RPA) is a software technology that makes it easy to build, deploy, and manage software robots that emulate human's actions interacting with digital systems and software. Just like people, software robots can do things like understand what's on a screen, complete the right keystrokes, navigate systems, identify, and extract data, and perform a wide range of defined actions. But software robots can do it faster and more consistently than people, without the need to get up and stretch or take a coffee break.

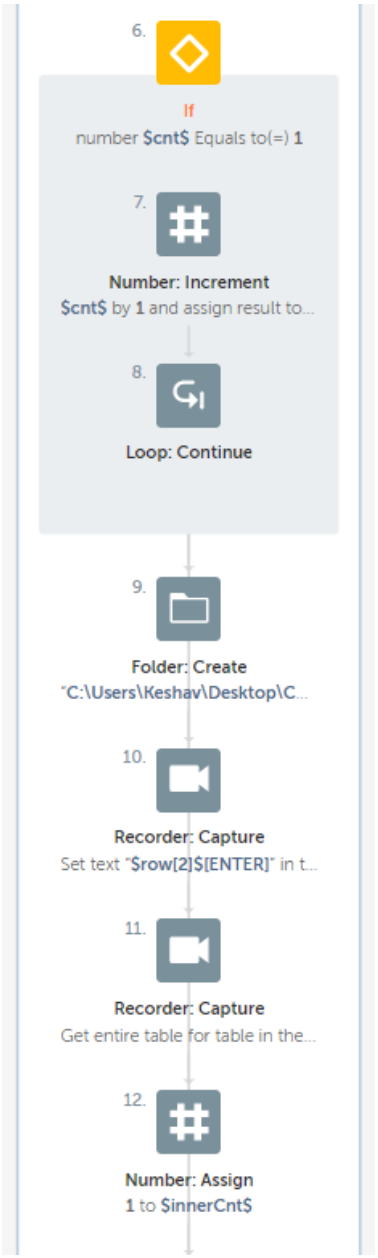
"RPA is a form of business process automation that allows anyone to define a set of instructions for a robot or 'bot' to perform," says Aaron Bultmann, director of product at Nintex. "RPA bots are capable of mimicking most human-computer interactions to carry out a ton of error-free tasks, at high volume and speed."

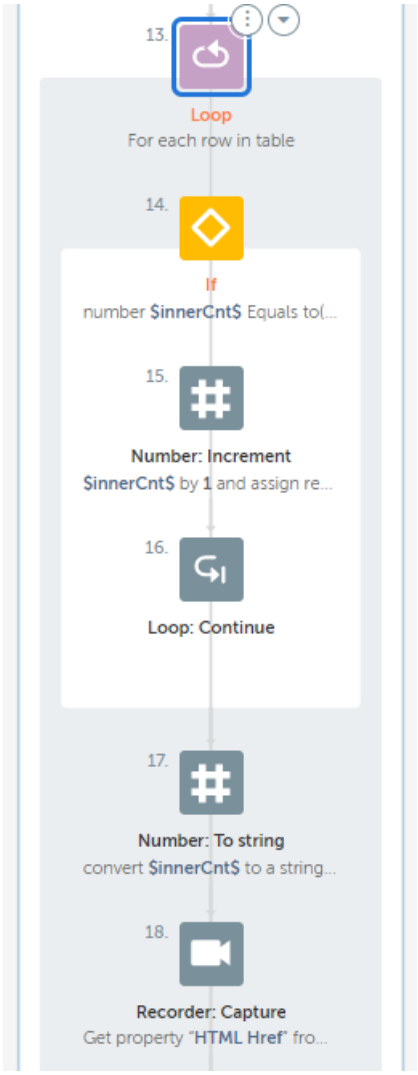
If that kind of automation technology sounds sort of, well, boring – especially compared to the Hollywood robots – that's by design. RPA is ultimately about automating some of the most mundane and repetitive computer-based tasks and processes in the workplace. Think copy-paste tasks and moving files from one location to another, for example.

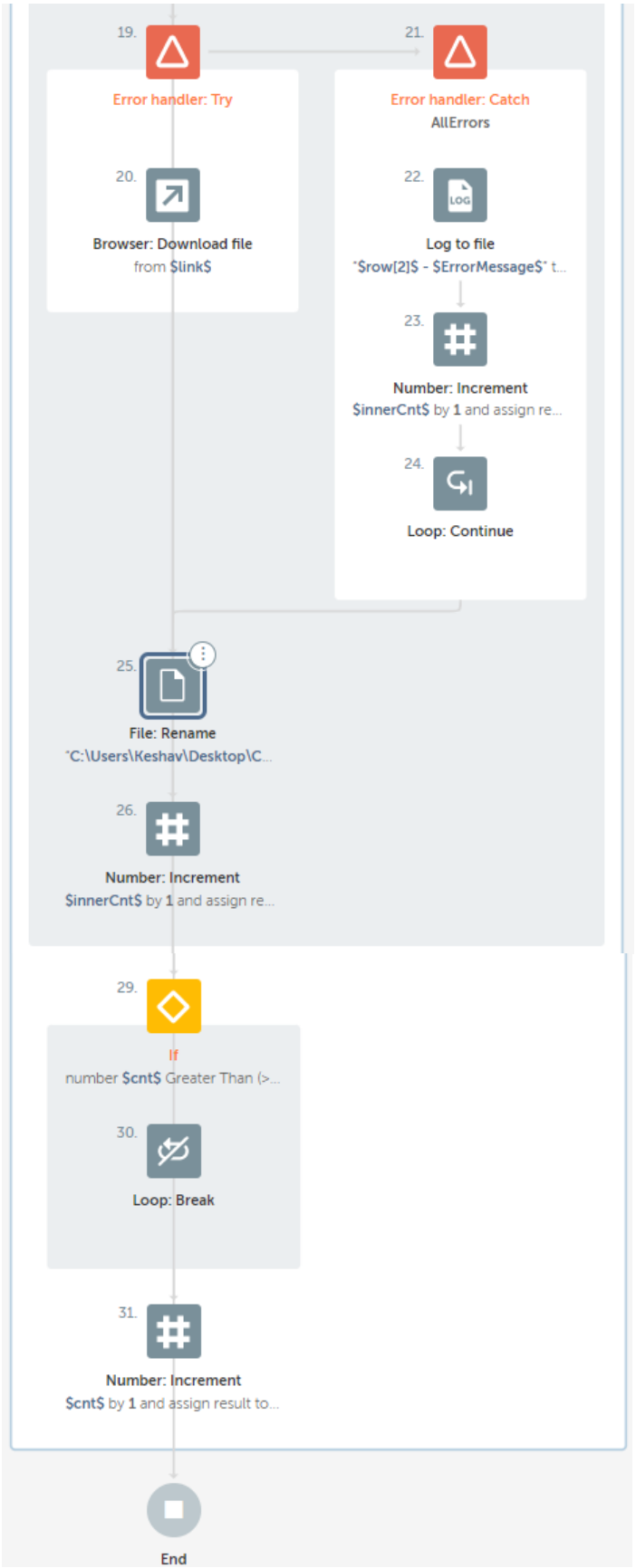
RPA automates everyday processes that once required human action – often a great deal of it performed in rote, time-consuming fashion. That's also how RPA promises to boost efficiency for organizations.

PROCESS DIAGRAM




6.
If
number cnt Equals to(=) 1
7.
Number: Increment
cnt by 1 and assign result to...
8.
Loop: Continue
9.
Folder: Create
"C:\Users\Keshav\Desktop\C...
10.
Recorder: Capture
Set text "$row[2]$[ENTER]" in t...
11.
Recorder: Capture
Get entire table for table in the...
12.
Number: Assign
1 to $innerCnt$


13.
Loop
For each row in table
14.
If
number $innerCnt$ Equals to(...
15.
Number: Increment
$innerCnt$ by 1 and assign re...
16.
Loop: Continue
17.
Number: To string
convert $innerCnt$ to a string...
18.
Recorder: Capture
Get property "HTML Href" fro...


19.
Error handler: Try
20.
Browser: Download file
from $link$
21.
Error handler: Catch
AllErrors
22.
Log to file
"$row[2]$ - $ErrorMessage$" t...
23.
Number: Increment
$innerCnt$ by 1 and assign re...
24.
Loop: Continue
25.
File: Rename
"C:\Users\Keshav\Desktop\C...
26.
Number: Increment
$innerCnt$ by 1 and assign re...
29.
If
number cnt Greater Than (>...
30.
Loop: Break
31.
Number: Increment
cnt by 1 and assign result to...
End

USE CASES

- In order to start the execution, we will first create our main folder, in which all the sub folders and their respective files (for each specific company) will be created.
- We will also create an Error Message Text file to catch errors like due to site/server issue etc.
- Now, we will open “nseindia” website in the browser.
- We will fetch all the company details in a table variable.
- Now, we will iterate for all the rows in table, excluding the first row which contains headers.
- Each row value contains different element, and so row[2] contains the name of the company, therefore going further we will capture the text box and will search the name of the company in it.
- Again, capture the table which shows the update records, lets refer it as inner table and start looping in it, excluding the first row which would be the column headers row.
- Since we need to download the pdf file, we can capture the cell which is in “Download Report” column and fetch it’s href link.
- Now download the file, with the fetched href link. Use Try and catch block to catch errors and log them in error message text file, in case if the download fails due to server error for a specific pdf.
- The downloaded file is a raw file without any format, so rename it and append “.pdf” extension at end.
- Repeat the whole process for all the files in the inner loop.
- Repeat the process for all the companies, in the outer loop. In order to view only top n companies, we can use if else statement to terminate the session, the moment counter exceeds n.

SCREENSHOT 1

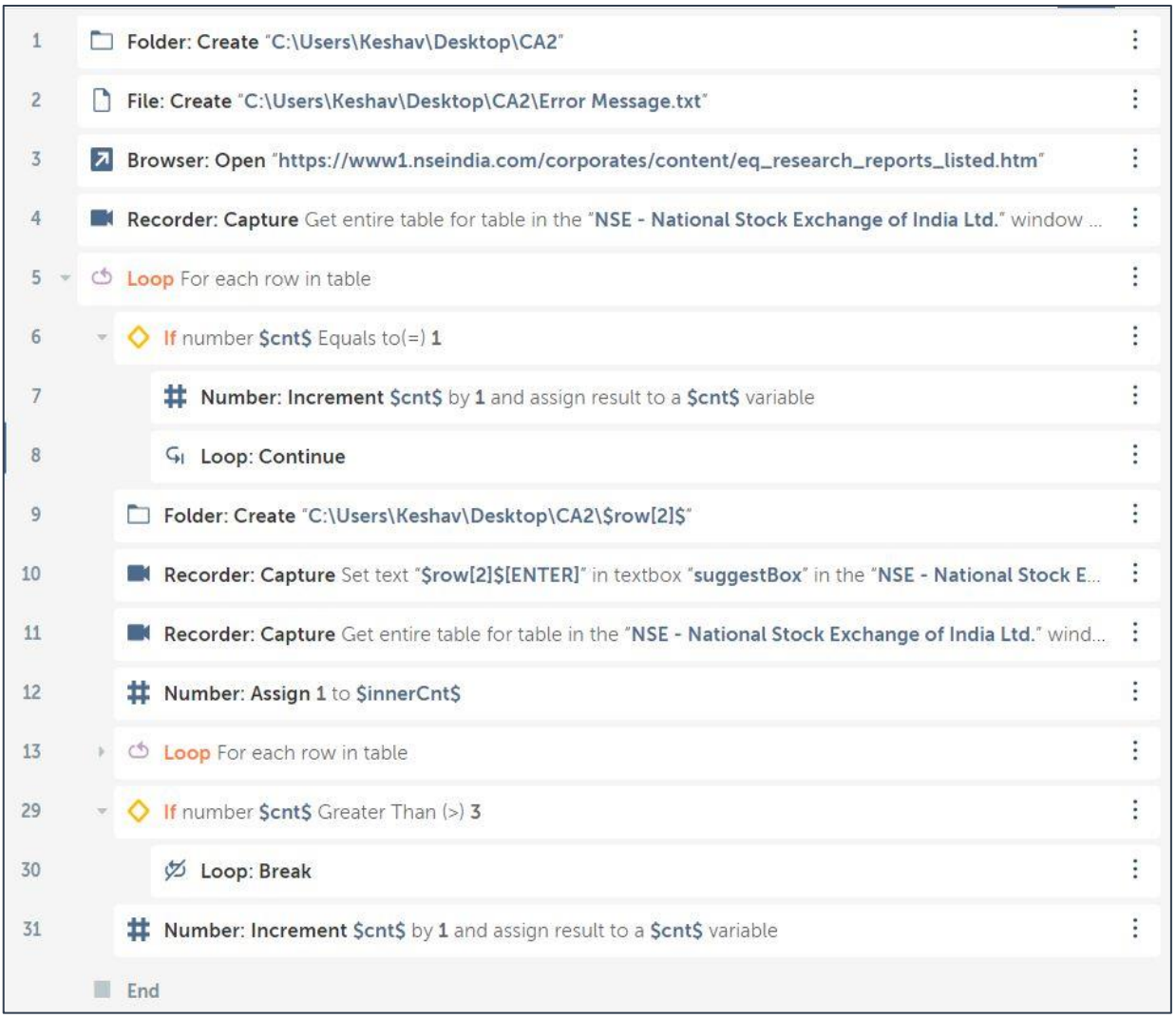


Fig 1.1: Initial Steps to Evaluate the Bot.

SCREENSHOT 2

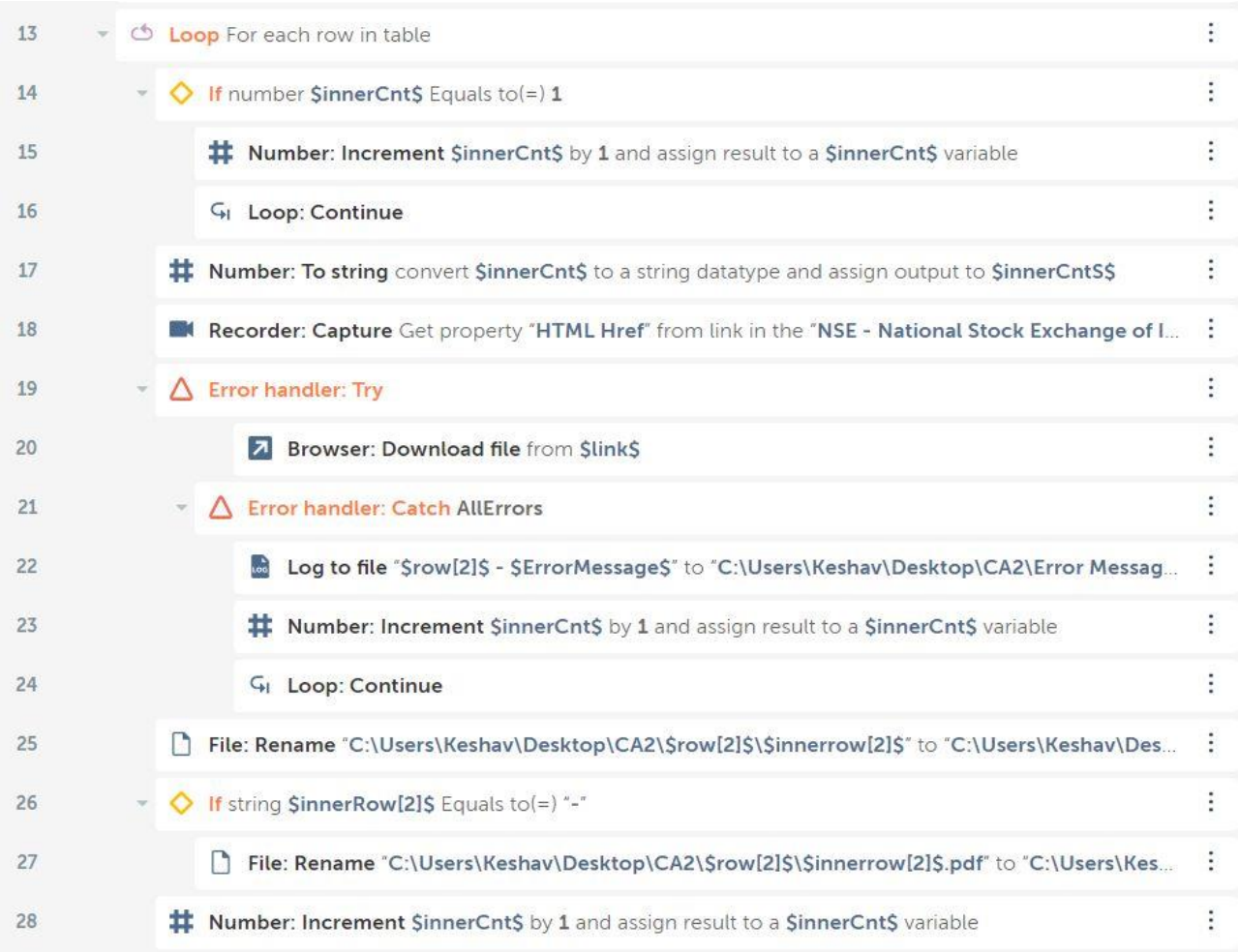


Fig 1.2: The Inner Loop of the Bot From line 14-28.

SCREENSHOT 3

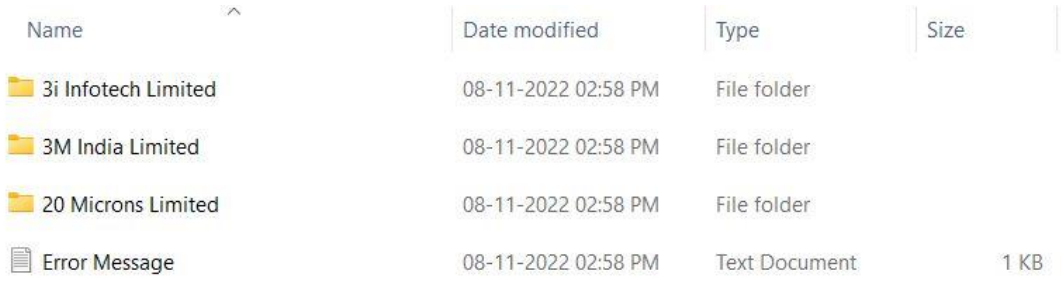


Fig 1.3: The Folders created by Bot.

SCREENSHOT 4

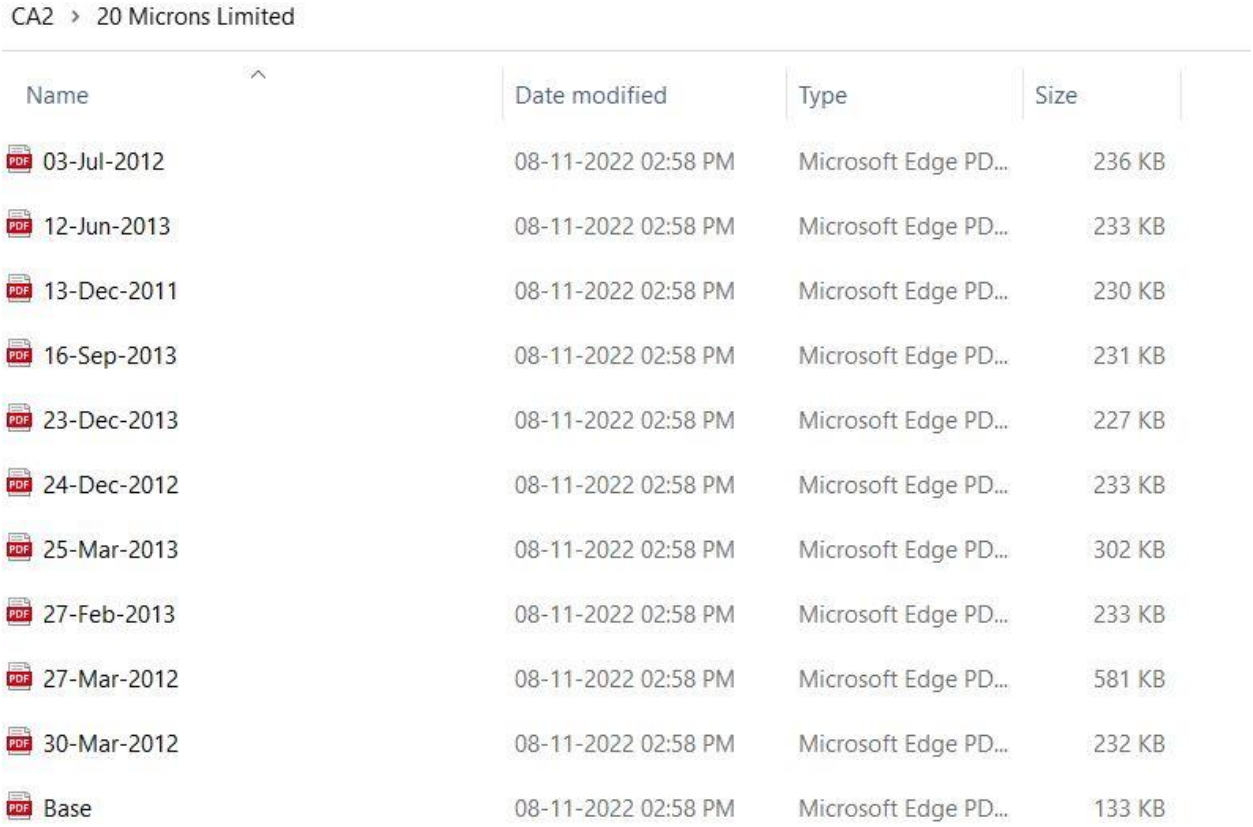


Fig 1.4: PDFs downloaded by Bot.

SCREENSHOT 5

Fig 1.5: Error catching File.

SCREENSHOT 6

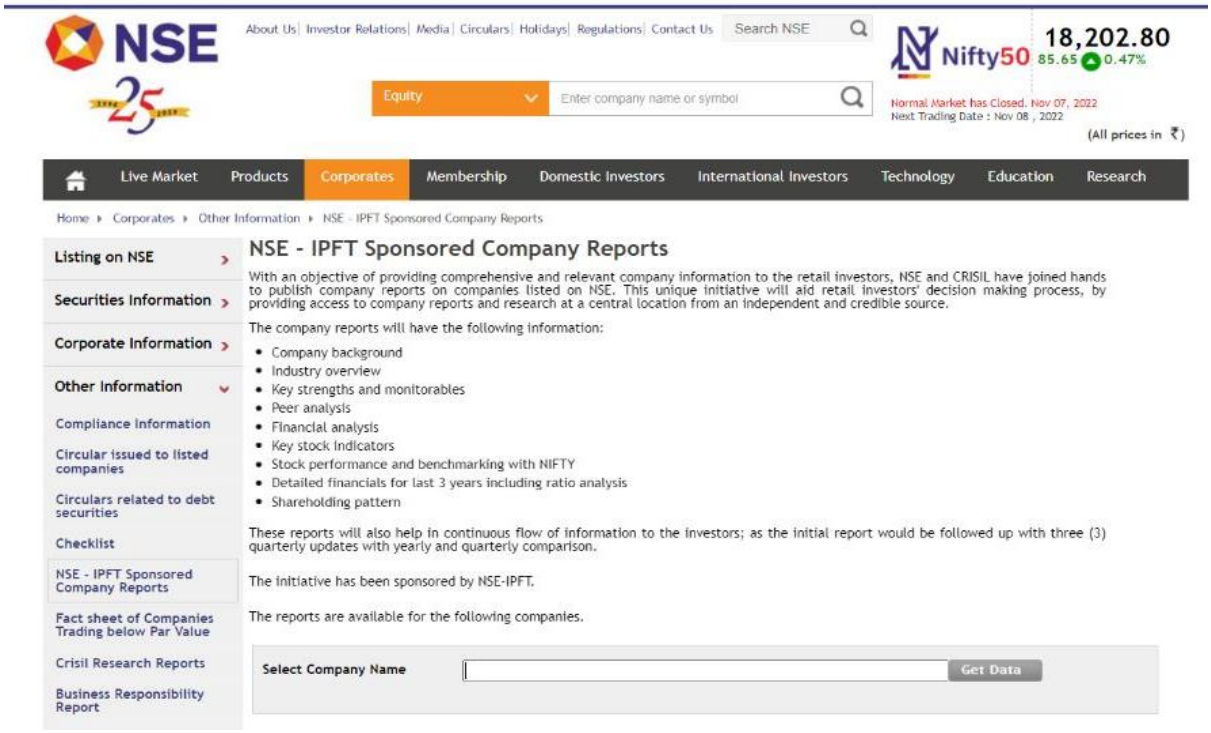


Fig 1.6: NSE site being opened by Bot.

SCREENSHOT 7

Select Company Name | Get Data

Sr No.	Symbol	Company Name	Report
1	20MICRONS	20 Microns Limited	
2	3IINFOTECH	3I Infotech Limited	
3	3MINDIA	3M India Limited	
4	A2ZMES	A2Z Maintenance & Engineering Services Limited	
5	AANJANEYA	Aanjaneya Lifecare Limited	
6	AARTIDRUGS	Aarti Drugs Limited	
7	AARTIIND	Aarti Industries Limited	
8	AARVEEDEN	Aarvee Denims & Exports Limited	
9	ABAN	Aban Offshore Limited	
10	ABB	ABB Limited	
11	ABCIL	Aditya Birla Chemicals (India) Limited	
12	ABGSHIP	ABG Shipyard Limited	
13	ABHISHEK	Abhishek Corporation Limited	
14	ABIRLANUVO	Aditya Birla Nuvo Limited	
15	ACC	ACC Limited	
16	ACCELYA	Accelya Kale Solutions Limited	
17	ACE	Action Construction Equipment Limited	
18	ACROPETAL	Acropetal Technologies Limited	
19	ADANIENT	Adani Enterprises Limited	
20	ADANIPORTS	Adani Ports and Special Economic Zone Limited	
21	ADANIPOWER	Adani Power Limited	
22	ADFFOODS	ADF Foods Limited	

Fig 1.7: Bot Capturing object.

SCREENSHOT 8

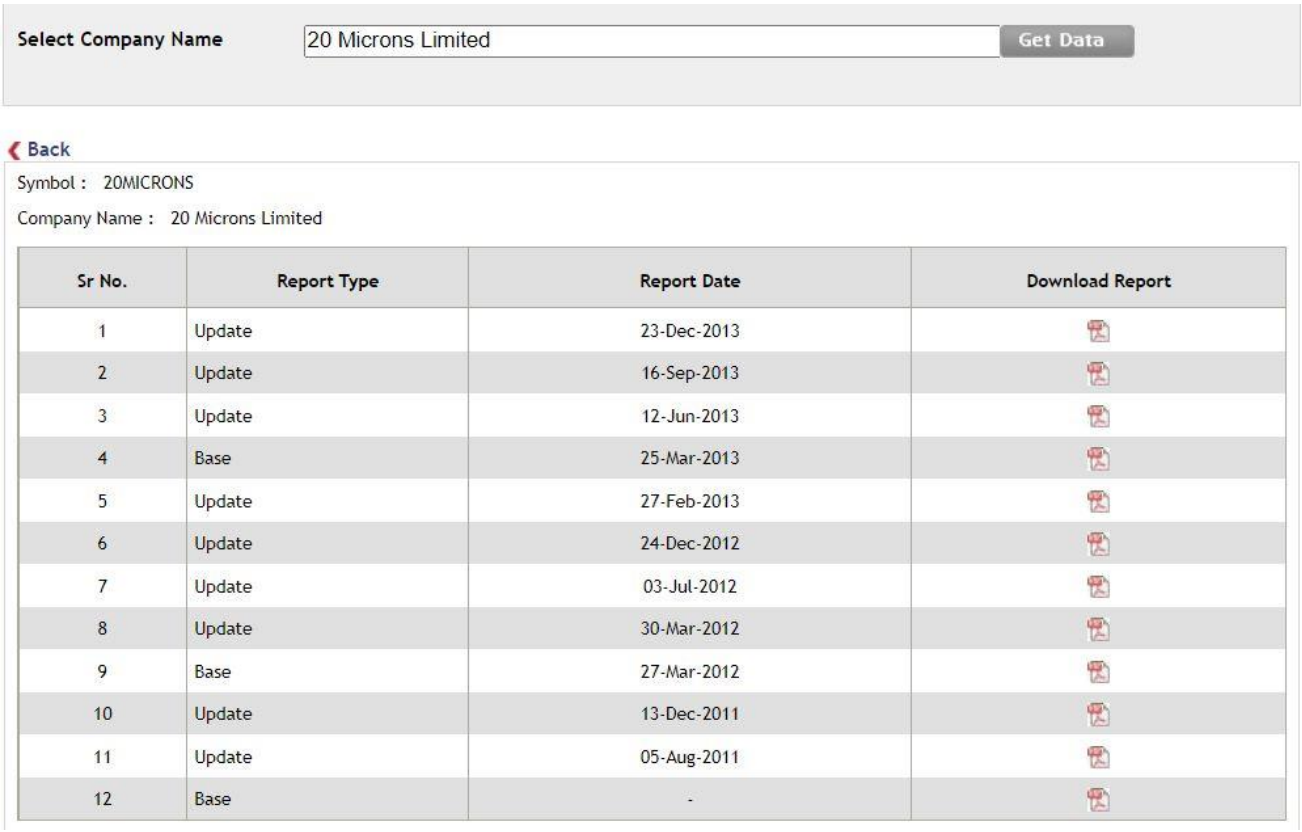


Fig 1.8: Bot writing Company Name.

BIBLIOGRAPHY

1) **ROBOTIC PROCESS AUTOMATION:** (Book) GUIDE TO BUILDING SOFTWARE ROBOTS, AUTOMATE REPETITIVE TASKS & BECOME AN RPA CONSULTANT by RICHARD MURDOCH, PEARSON.

2) **Automation Anywhere Website:**
https://university.automationanywhere.com/training/rpa-learning-trails/

3) **Stack Overflow:**
https://stackoverflow.com/search?q=automation+anywhere&s=95592b93-1bc3-4cb4-bbe4-67d6c94efa78

4) **Automation Anywhere (YouTube):**

https://www.youtube.com/playlist?list=PLsqtNsp8iHKVUia-YI-uvy4xChSL2L3m2

5) **Edureka (YouTube):**

https://www.youtube.com/playlist?list=PL9ooVrP1hQOGv9kDX4q76sKGkxqy2TX33