Madhav Institute of Technology and Science, Gwalior - 474005

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Department of IT

A Minor Project Report On **Linkedin Connection Bot**

Submitted to :
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Submitted by:
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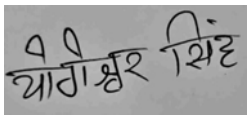
Certificate

Certified that the work contained in the project titled **“Linkedin Connection Bot”**, by Prabal Jain and Chandan Gupta has been carried out under my supervision and that this work has not been submitted elsewhere for a degree.

(Prof.Vikas Sejwar)

Mentor



(Prof. YOGESHWAR SINGH)

Mentor

Undertaking

I declare that the work presented in this project titled **“Linkedin Connection Bot”**, submitted to the *Department of IT*, Faculty of *Madhav Institute of Technology and Science, Gwalior (M.P.)* for the award of the *Bachelor of Technology* degree in *Information Technology*, is our original work. I have not plagiarized or submitted the same work for the award of any other degree. In case this undertaking is found incorrect, I accept that my degree may be unconditionally withdrawn.

July - Dec 2021

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Prabal Jain
Chandan Gupta

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Introduction

The current economic conditions have made sites like LinkedIn premier networking tools, providing job seekers and potential employers with the ability to connect, and help small or early businesses to grow as the economy begins to reopen. One of the most effective ways to help you get through to the final stage of the hiring process is networking. LinkedIn is a great professional platform used by marketers to create a business identity online and try to attain LinkedIn users and convert them into real customers. It is an easy and effective way to build connections.

Problem Identification

There are emerging businesses all over the world who are just starting out and haven't reached the break even point. To increase their profit margins, they need to be able to market their product/service to a wider audience while at the same time keeping their costs low. This isn't possible if they have a significant budget for marketing or hire experienced marketing professionals. This generally leaves the firms with the option to grow their social media networks, done by someone in the team. This includes sending connection requests, a repetitive and cumbersome process which ultimately results in underutilization of the team member's skillset.

Additionally, in the process of job search, an average person submits an appreciable number of applications in many different companies. For seeking referrals from individuals working in that company, an average person would have to search for people working in the company, connect to those people and repeat the process for every company they have applied to. This is an underutilization of time which could be used to prepare for the possible interviews that may come up. Therefore, there is a need for software that saves its users from repetitive work and helps them better use their time and skillset.

Need of Software

This work has a wide range of applications and is the need of the hour in the field of business marketing (for firms and organizations) as well as professional development (for individuals). Functionalities of this bot includes sending connection requests to ‘n’ number of users from varied fields and saving their data to a CSV file. This makes this application beneficial for currently budding and emerging businesses for marketing their product/service through LinkedIn. Additionally, this also helps small firms which couldn’t afford hiring marketing professionals or firms that have a limited budget for marketing to market their product/service efficiently. Small firms or start-ups in early stages could attempt to bring initial traffic to their pages and simply grow their network through this bot. In addition to this, it can also be utilized to reach to people with similar interests or for reaching to people of a certain company for referrals. Rather than reaching out to individuals to broaden the network which is a repetitive and time-consuming process that also underutilized the human skill set, this bot does all of it for its users, saving their time and making sure the human skill set is used to its full potential.

Objective

The Objective of this project is to automate the process of sending connection requests and gathering information of individuals from particular companies/businesses.

Hardware & Software Requirements

Hardware

1. System : Multimedia PC
2. Processor : Pentium 4 or above
3. Memory : 2GB RAM or above
4. Hard Disk : 80GB or above

5. Keyboard : 104 Standards
6. Monitor : SVGA

Software

1. Google Chrome 96.0.4664.45 (!Important)
2. ChromeDriver 96.0.4664.45 (!Important)
3. Python 3.7 or above
4. Selenium 4.1.0
5. Pip 21.3.1 (Optional)

Methodology

The Software Development Life Cycle Model used to develop the tool is Agile. It was specially designed to curate the needs of the rapidly changing environment by embracing the idea of incremental development and developing the actual final product. The first iteration of the Bot involves sending connection requests to ‘n’ number of people belonging to particular organizations. The next iteration will involve sending custom messages to ‘n’ number of people (under development).

Backend : The Project utilizes Python for Backend Programming.

Frontend : The Project utilizes Python Tkinter for Graphical User Interface.

Automation : The Automation is Carried out by Selenium Webdriver.

Other Tools : The Project utilizes Openpyxl to interact with CSV and Excel Files.

IDE : Jetbrains PyCharm IDE

Technologies : Python, Python Selenium, Python Tkinter, Python Openpyxl

Modules :

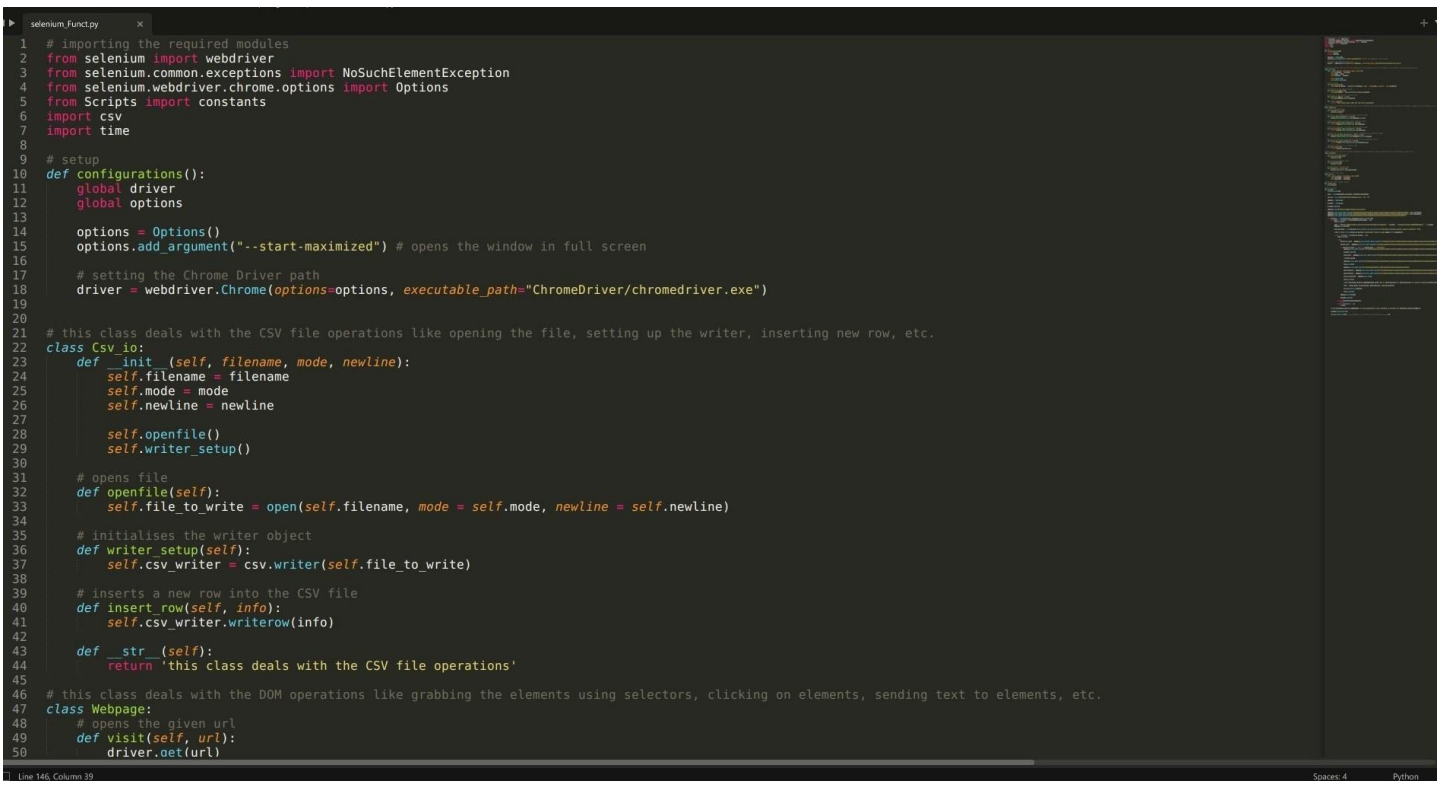
Run_me.py : Triggers the bot.
constants.py : Initializes values of GUI fields.
graphical_script.py : Builds the GUI.
selenium_Funct.py : Runs Automation.

What is Selenium ?

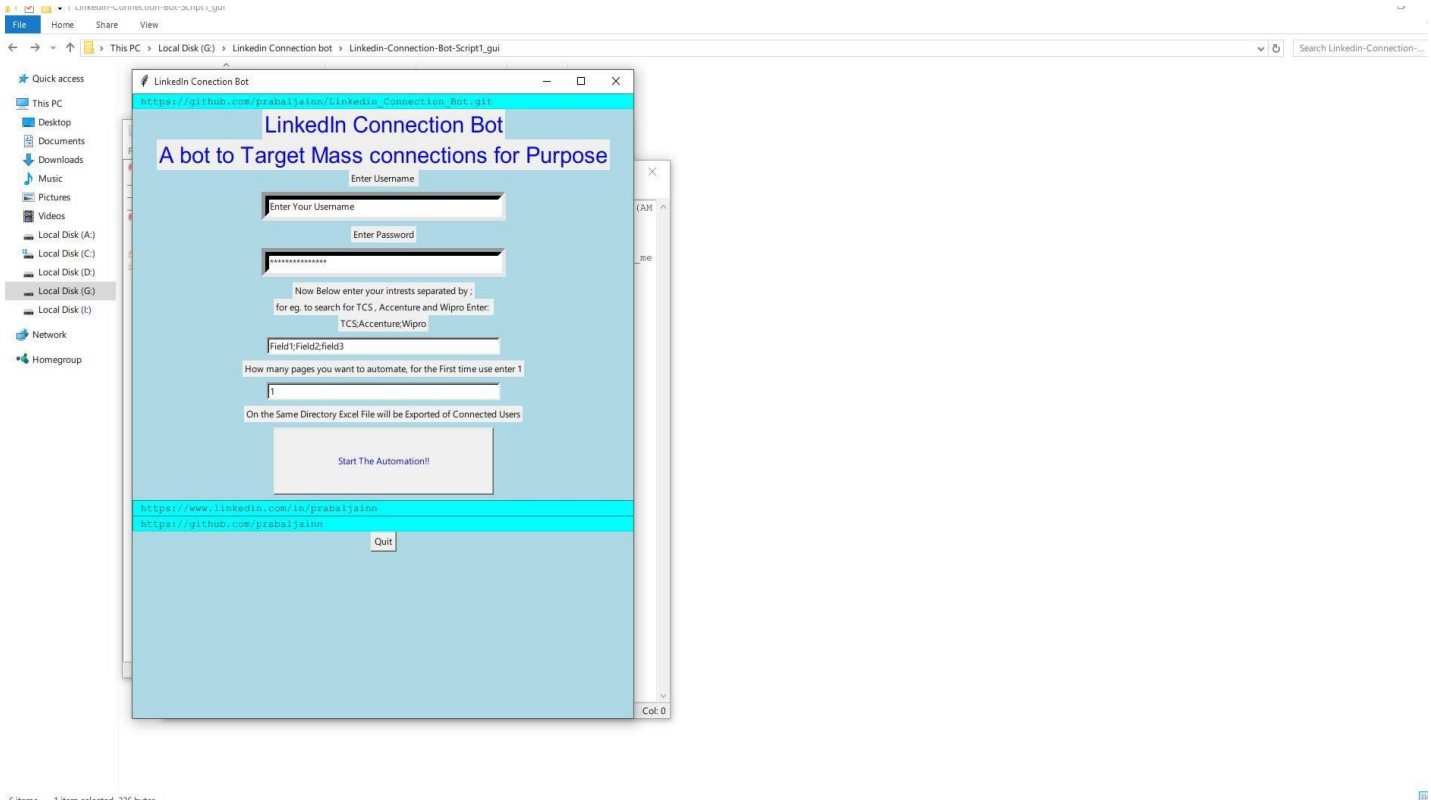
Selenium is a powerful tool for controlling web browsers through programs and performing browser automation. It is functional for all browsers, works on all major OS and its scripts are written in various languages i.e Python, Java, C#, etc. The Project utilizes Python.

Screenshots

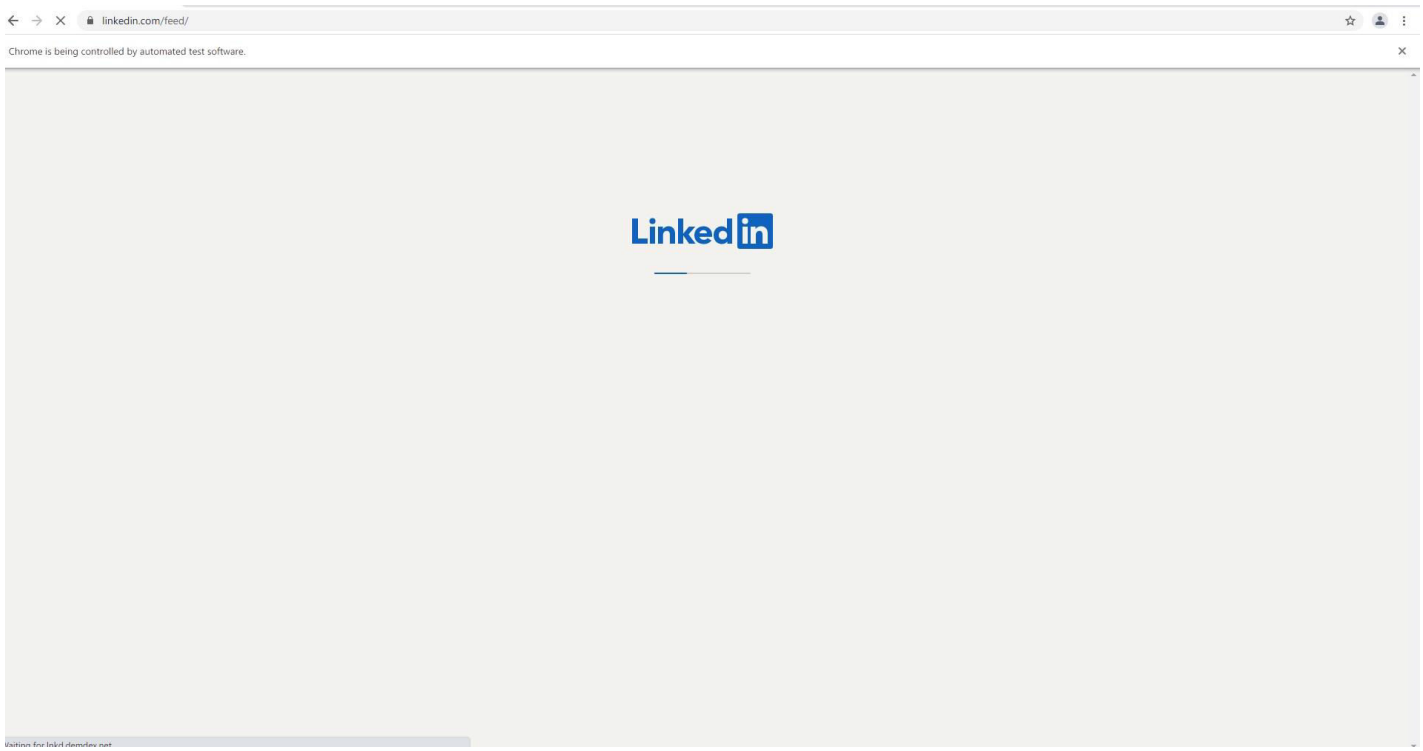
Code



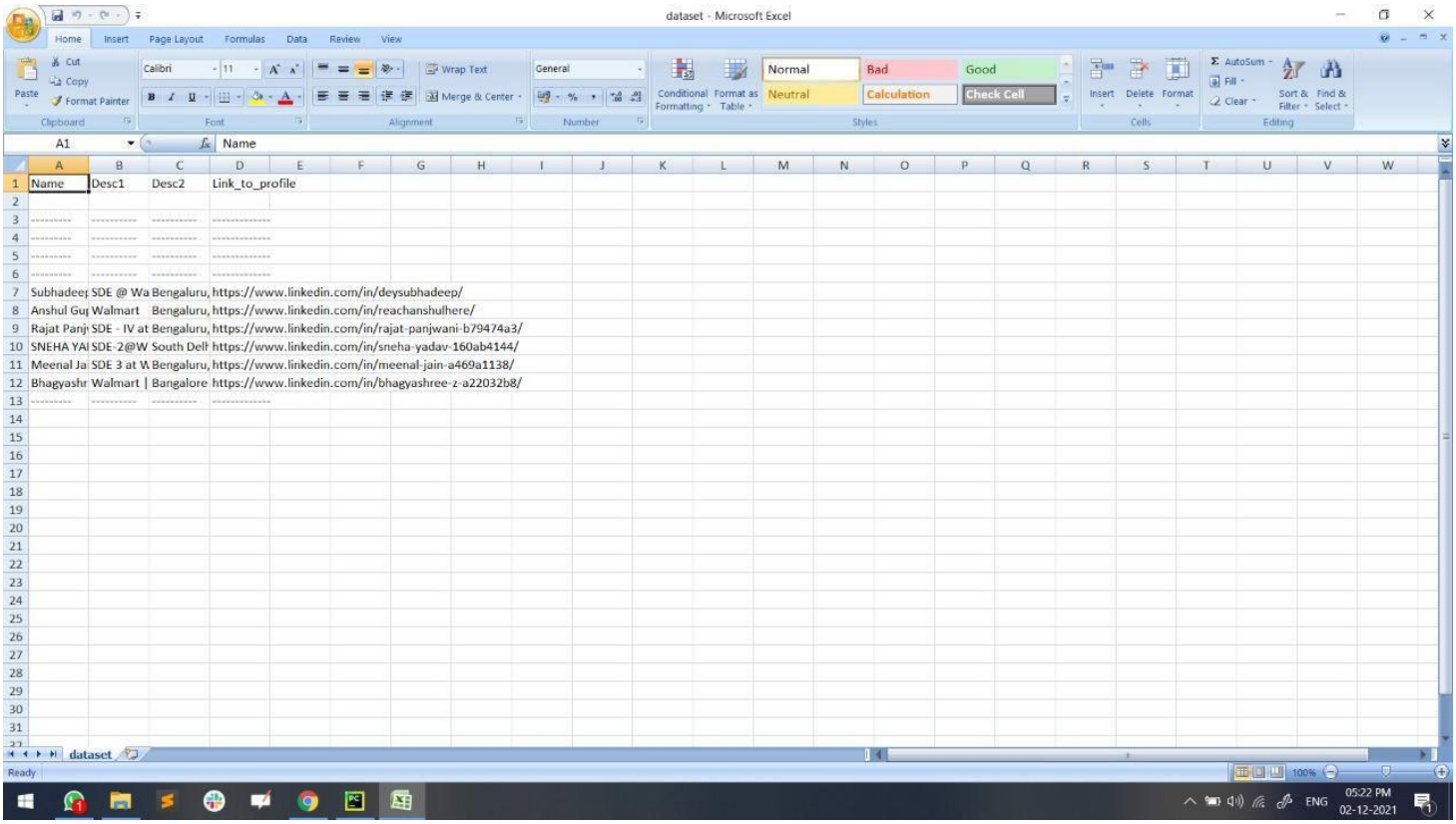
GUI (Graphical User Interface)



Automation in Action



Data in CSV



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