**User Manual for Recon Scraper**

**Step 1**: Open the command prompt, go to the main directory of the repository, type

python main.py

Text

Description automatically generated

OR using Python IDE: Run main.py

**Step 2**: Input a company in the program, using ‘*Singtel’* as an example.

**Step 3**: Start by extracting the data using option 1.

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*If the user tries options 2-7 before extracting data, there will be an error and the main menu will be reprinted.*

**Step 4**: Choose a database to extract the data from. Using option 1: Indeed for this example.

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If the extraction is successful, the following message will appear with the other functions for the program.

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*However, if the search query is unable to find the company, there will be an error message. The user can then try to use other data sources or exit the program and re-enter another company.*

**Step 5**: Choose option 2 to open as CSV format then it shows the list of available files to open.

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Text

Description automatically generated

Choose option 2 to open the results as we have chosen to use Indeed database.

Graphical user interface

Description automatically generated with medium confidence

Text

Description automatically generated with medium confidence

**Step 6**: Choose option 3 to open the data in HTML format

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Description automatically generated

Choosing option 1: All-in-One displays all extracted data into one HTML file and outputs it on the user’s web browser.

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Description automatically generated

Text

Description automatically generated

Choosing option 2: Separated by database displays the output as individual databases in the HTML file.

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Description automatically generated

Text

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Graphical user interface, application

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**Step 7**: Choose option 4 to display the top 10 technologies found during data extraction.

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**Step 8**: Choose option 5 to display technologies that can be found for the company in the technologies.txt file. The frequency of the technologies is counted and arranged in descending order.

Text

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**Step 9**: Choose option 6 to generate the graph of technologies for the visualization of data. The graph can be zoomed in and out and can be saved on the desktop.

Chart, bar chart, histogram

Description automatically generated

**Step 10**: Choose option 7 to generate a word cloud of technologies as a visual representation of text data. The word cloud can be saved on the desktop as well.

Graphical user interface, text, application

Description automatically generated

**Step 11**: Choose option 8 to exit the program gracefully.