Installing the Application:
To launch the application from the terminal:

- Make sure the machine the application is being run on has Java 14 installed. If problems exist ensure you are updated to the latest version.

- Next open the terminal and navigate to the .jar file location.

- When at the file locaiton. Run the following code in the terminal:
    java -jar team7_seng202-1.0-SNAPSHOT.jar

Making a New List:
When starting the application to begin a new list must be made to store data in. As many list can be created as is wanted but the data inside each is kept seprate.

To make a list, firstly:
- Enter a name of the list in the text field next to the "Create new list" button.

- Next click "Create new list" this will create a list in the "Available Lists" table.

- To load the list you can either double click the list in the table or select the list and click the "Load list" button.
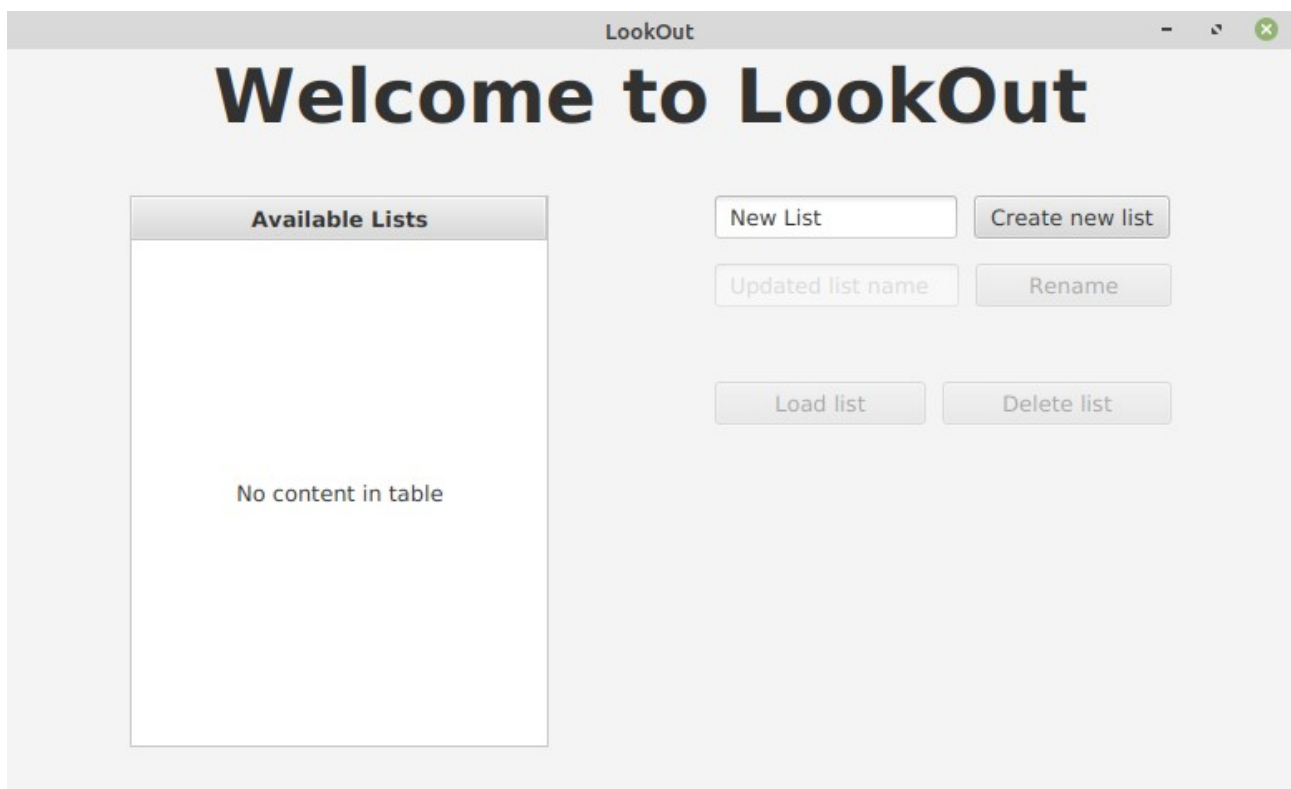

Figure 1: Making a new list.

Importing Data into the Application:

The application can have both ".CSV" and ".DB" files be imported, both of which need to have the correct schemas.

To import a file, firstly:
- Click the "Import" button in the Menu side bar.

- Next a screen will open to select the desired file. Only ".CSV" and ".DB" files be selected. Find the location of the file select it and click "Open".

- Finally the application will ask how to import the data. Complete this and the data will be imported into the list. If there is an issue ensure the schema of the file is correct.
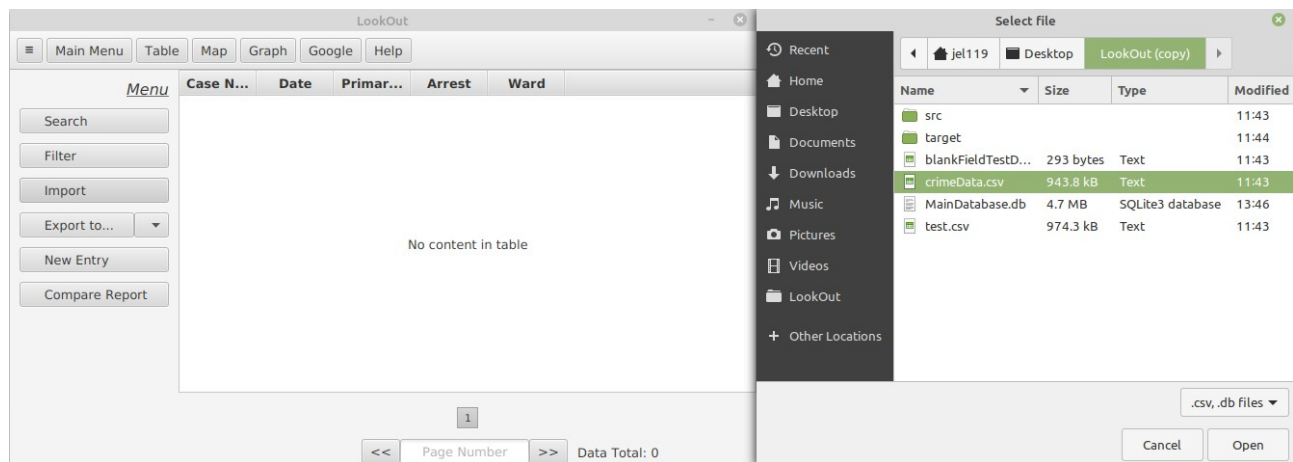

Figure 2: Importing CSV file into the application.

View Data in the Map:

The data can be viewed both as a table of raw data and as a set of pins on a map. To view the map click the "Map" button at the top of the application.
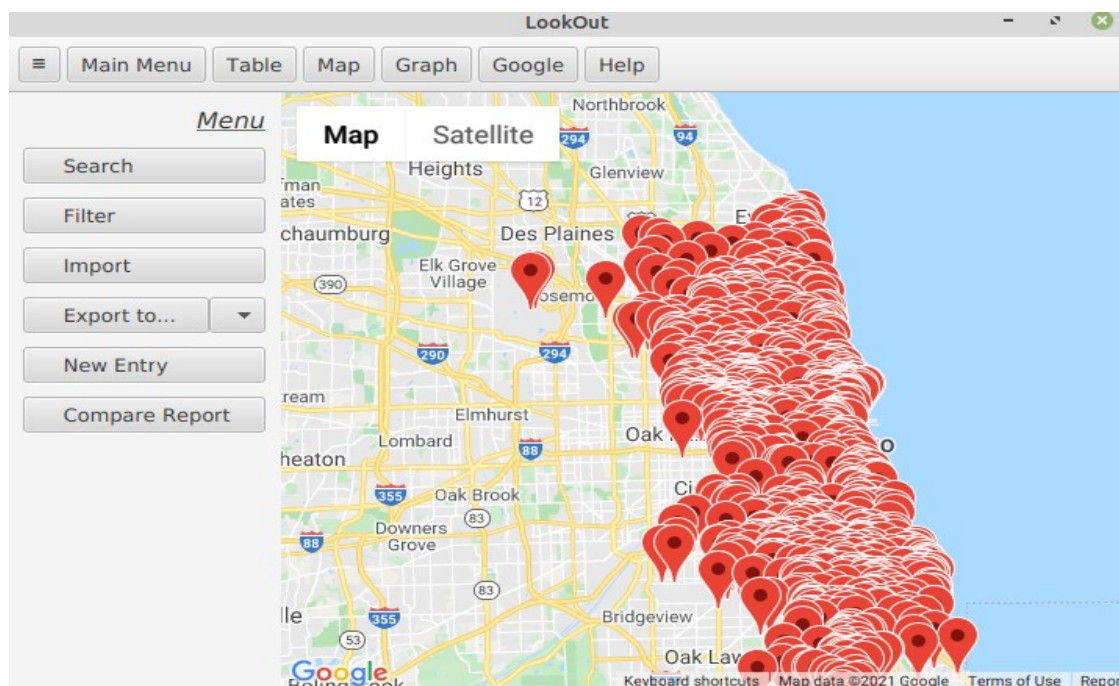

Figure 3: Viewing the data in the map.

Inserting New Data:

To insert a ne crime entry into the data base firstly;
- Click the "New Entry" button this will load of page of empty feilds.

- Add all data needed to create a vaild crime entry. (Note: Time of Occurrence must be in the form, "Hour:Mintues".)

- Next click save. When going to save if any nessary feilds are missing they will be show as red, these must be added to save the data.

Also, to edit existing crime data you can double click the data row in the "Table" section. This will bring up a similar screen with data already eixsiting and works the same way.

Figure 4: Inserting data into the list.

Filter Data:

Filtering can be done by selecting the "Filter" button. This will load a set of fields that can be filled to add resitictions to the tables data. Also filters can be saved and loaded using the "Save" and "Load" buttons for persitant filters.

Figure 5: Filtering data in the list.

Graphing:

Graphing has two types of graphs it generates. Either a bar graph created when selecting "Crime Statistics" or a line graph when clicking "Display Graph" the line graph can have restictions put on the data by selecting fields such as type of crime, ward or beat.
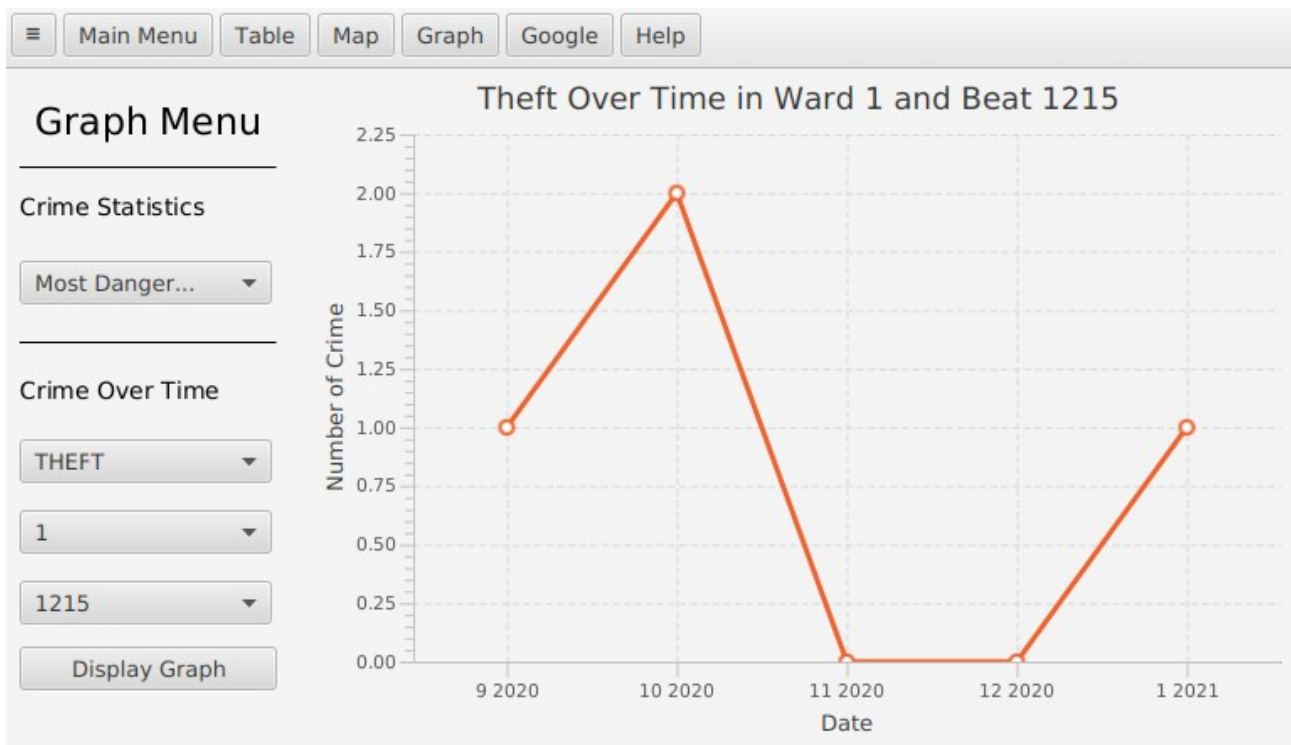

Figure 6: Graphing data in the applicaiton.

Export File:

To export a file, fristly;
- Open the Menu so that you can select "Export to…"

- Next either click the button to export the current data within the table (which is equivlent to exporting with filter) or click the down arrow button to have the option export without the filter.

- This will open a menu similar to importing expect now it is exporting the data as either a ".CSV" or ".DB". Goto the location you wish to save the file.

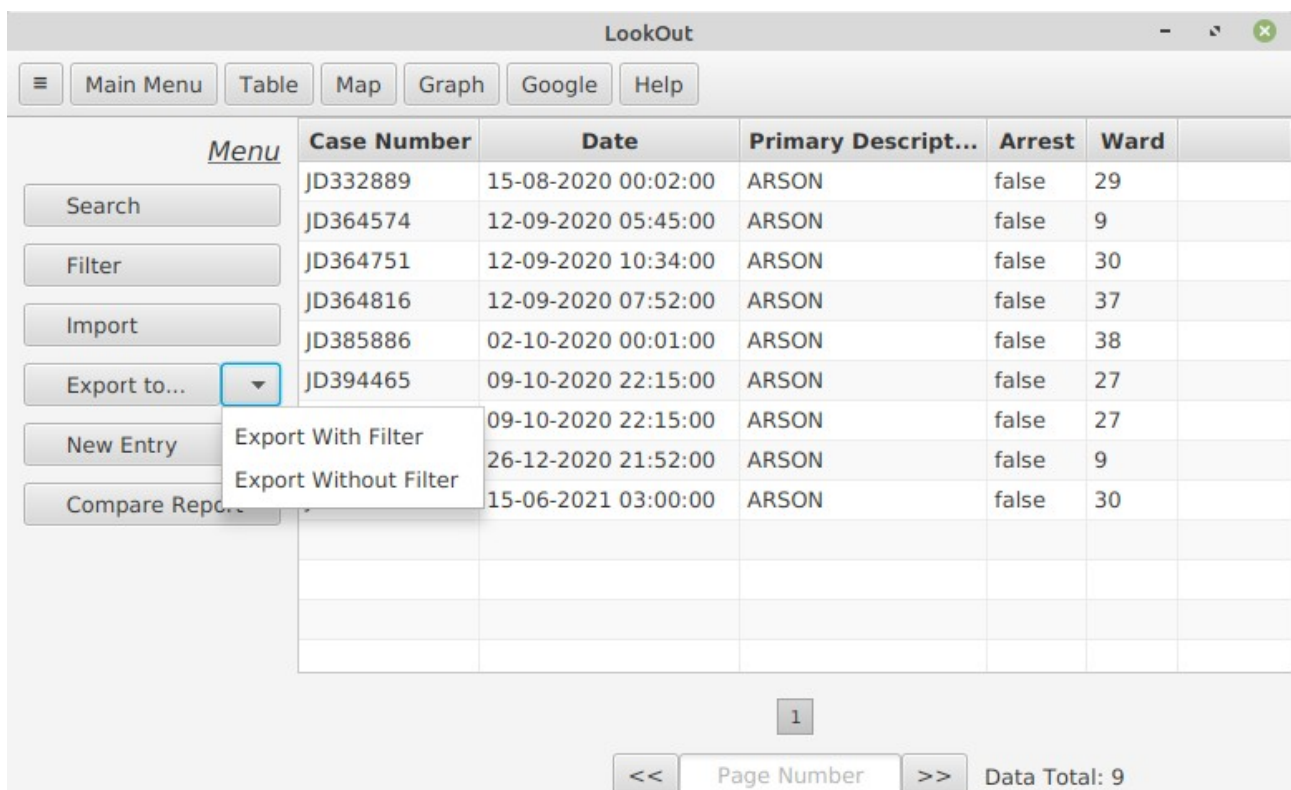- Give the file a name and select from the file expore to either save it as a ".CSV" or ".DB" and click "Save"

Figure 7: Exporting data out of the application.