

SafePoint

User Manual for Release V1

Made for SENG202 2021

Team 3

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Section 1: Setting up and running program

SafePoint uses Java along with JavaFX for the main functionality. As such, SafePoint must be run on a machine compatible with at least Java 14. For the best experience, please run SafePoint on Windows or MacOS. The main program is located in SafePoint_<name of OS>.jar. To run this, from the directory of the SafePoint_<name of OS>.jar file, run the command `java -jar safepoint_<name of OS>.jar`. The <name of OS> will be linux, windows, or macos, depending on what OS you are running. E.G, for linux, run:

```
Java -jar safepoint_linux.jar
```

The folder that SafePoint_<name of OS>.jar is contained in must also have a data.csv file. This file should be provided to you along with the jar. Please note that if you want to edit this file or add new records, to follow the style and formatting conventions already in the file.

Please note that a keyboard and mouse will be required for the operation of this program, and an Internet connection will be required for the map view and for comparing and reporting crimes.

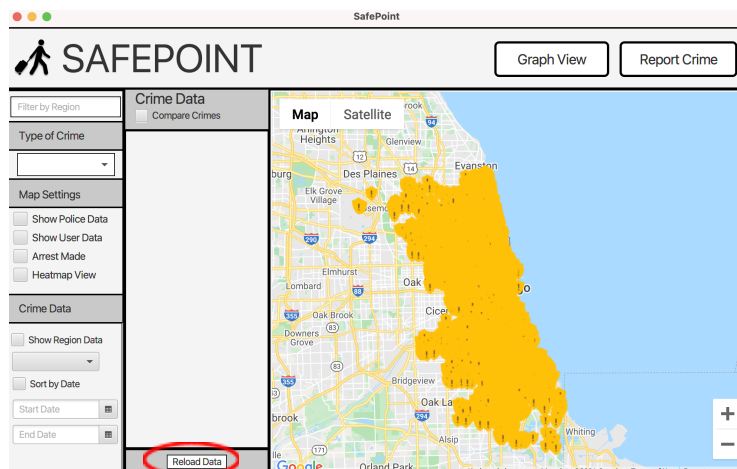
When the program loads up, you will need to reload the data for it to be displayed. Information on how to do that is located below.

Section 2: Operation of program

The main functionality of SafePoint and how to use it is shown below.

Loading and filtering data

To load/reload data based on the active filters, you must click the Reload data button at the bottom of the window. Shown below.



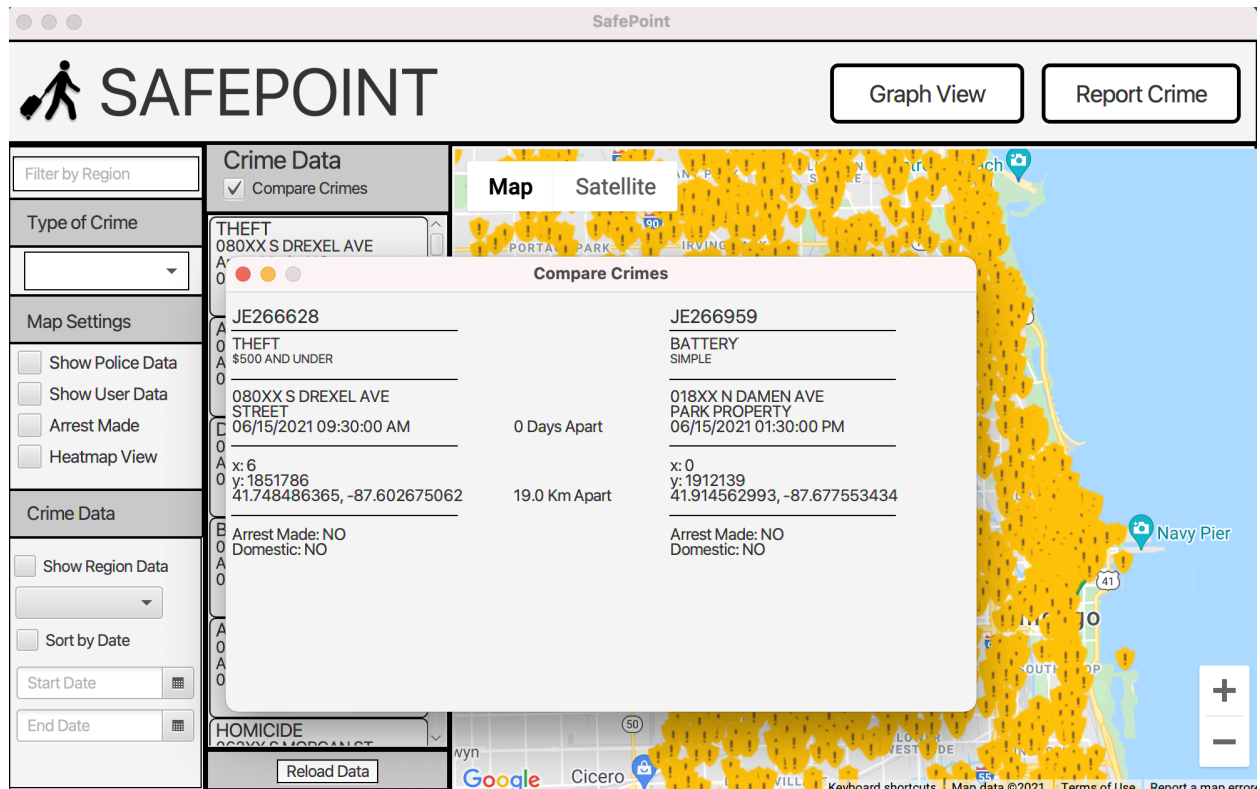
All of the settings for filtering data are located on the left hand side of the window. Modifying these will update the crimes shown in the panel, and on the map.

The region data filter will sort the data based on a number of factors. If HIGH RISK AREA is

selected, the crimes will be sorted by having the crimes located in the highest risk area at the top of the panel, and the crimes located in the lowest risk areas at the bottom. HIGH FREQUENCY works the same way but with types of crime instead of location.

Comparing and Viewing Crimes

To view a crime in more detail, select the “View” button located on the crime panel. To compare two crimes and view how far apart, and the time apart, first select the “Compare Crimes” toggle at the top of the screen, then press the “View” button on two different crime panes. An example of what that looks like is shown below.

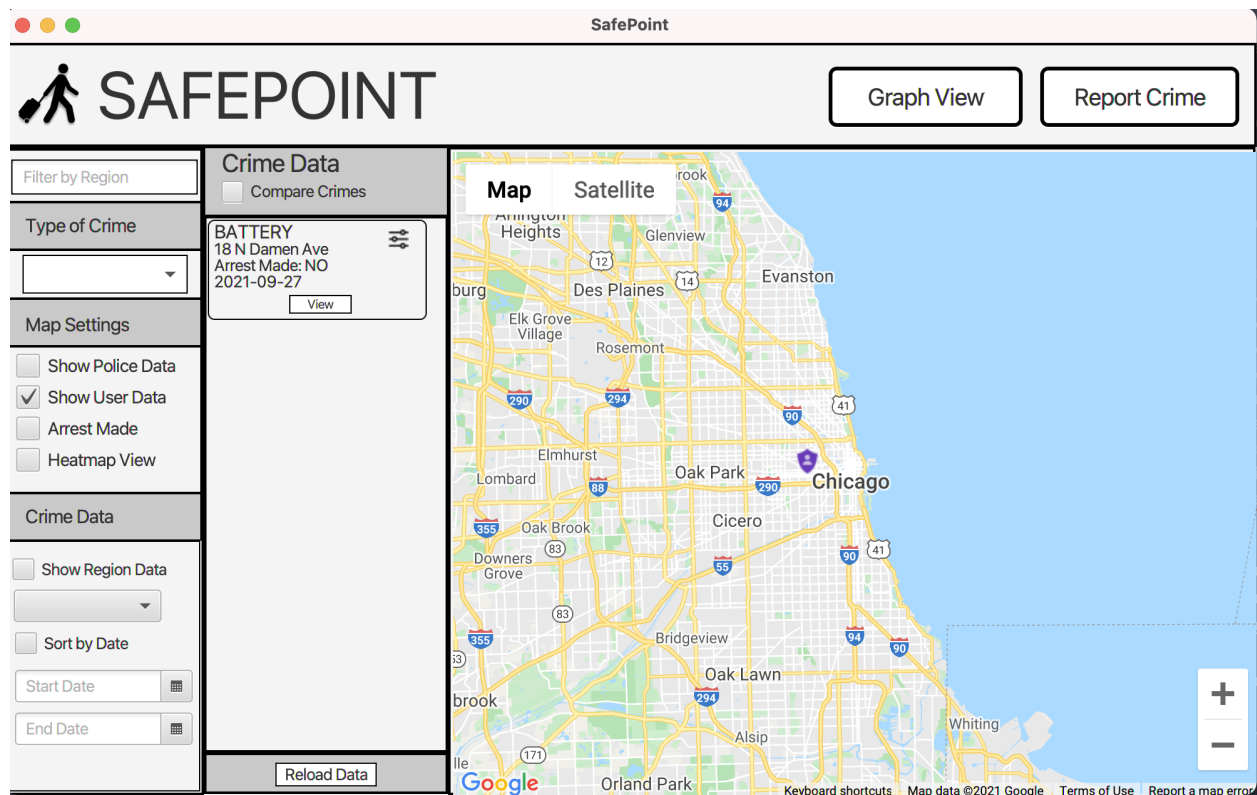


The screenshot displays the SafePoint web application interface. At the top, there is a header with the SafePoint logo and two buttons: "Graph View" and "Report Crime". Below the header, the interface is divided into several sections. On the left, there is a sidebar with a "Filter by Region" dropdown, a "Type of Crime" dropdown, and "Map Settings" including checkboxes for "Show Police Data", "Show User Data", "Arrest Made", and "Heatmap View". The main area is split into a "Crime Data" panel on the left and a map on the right. The "Crime Data" panel shows a list of crimes, with "THEFT" selected. A "Compare Crimes" modal window is open, displaying details for two crimes: JE266628 (Theft) and JE266959 (Battery). The modal shows the crime type, address, date, time, and coordinates for both crimes, along with the distance and time difference between them. The background map shows the city of Chicago with various landmarks and streets labeled.

| Crime ID | Crime Type | Address | Date | Time | Coordinates (x, y) | Arrest Made | Domestic |
|----------|------------|---------------------------------|------------|-------------|---|-------------|----------|
| JE266628 | THEFT | 080XX S DREXEL AVE STREET | 06/15/2021 | 09:30:00 AM | x: 6 y: 1851786 41.748486365, -87.602675062 | NO | NO |
| JE266959 | BATTERY | 018XX N DAMEN AVE PARK PROPERTY | 06/15/2021 | 01:30:00 PM | x: 0 y: 1912139 41.914562993, -87.677553434 | NO | NO |

Reporting a Crime

To report a crime, press the report crime button at the top right of the screen. A window will open for you to select the crime type, address, and date. The latitude and longitude fields are optional, and will be generated from the address field. If you know the latitude and longitude fields then you can also enter them here. Once you have entered the information, press the report crime button. A new window will open up with a confirmation ID that will be used if you want to remove or edit this crime. Please keep this number. To view this crime in the list or map you will need to reload the data. The image below shows a new user reported crime that has been reported. Note the unique config button that is on the top right of the panel that is used to edit/remove this crime.



Editing/Removing a Crime

You can only edit or remove crimes that you reported. To do this, press the config button on the top right of your crime panel. It will ask for your unique ID given when you reported this crime. It will then open up the same panel as you used for reporting the crime, but with the data already filled in. Here you can make changes to your crime, then press report crime down the bottom, and when you reload the data your crime will be updated. Your unique ID will remain the same.

To remove your crime, delete the address section from the report crime window, and when you report the crime it will remove it from the database. You will have to reload the data for this to take effect.

Graph View

To access the graph view, press the graph view button on the top right of the main window. This will open a new window where you can view any time of crime over a selected year. The numbers at the bottom of the graph represent the week number, and along the side represents how many crimes happened this week. You can also change the year to view for a different year. Note that user reported crimes won't show up on this graph.