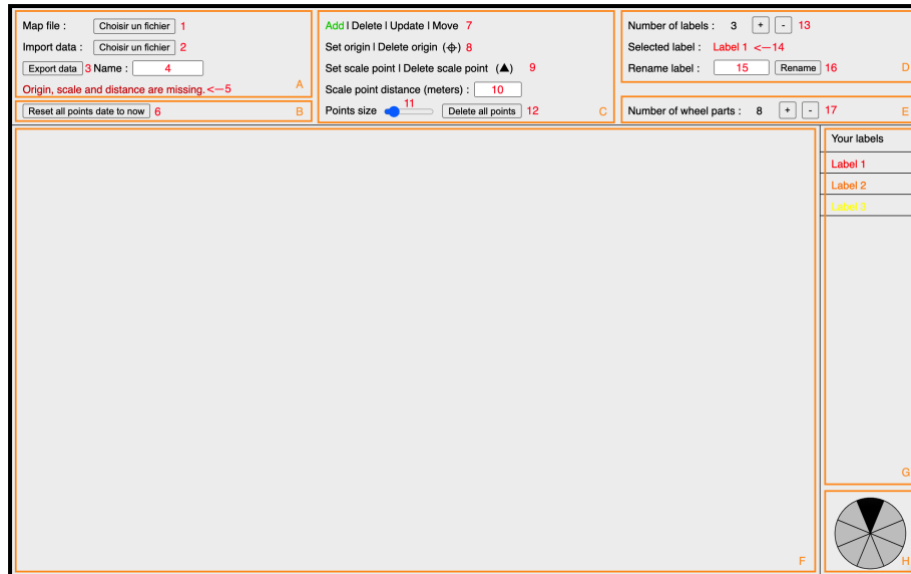


Webapp detailed user guide

Window elements



Areas

- A = Files management
- B = Date and time reset
- C = Points management
- D = Labels management
- E = Wheel management
- F = Drawing area
- G = Label selection
- H = Wheel part selection

Elements

- 1 = Map file selection
- 2 = Data file selection for import
- 3 = Export file
- 4 = Name of exported file
- 5 = Warning before export
- 6 = All points date and time reset
- 7 = Actions options
- 8 = Set/Delete origin
- 9 = Set/Delete scale point
- 10 = Distance between origin and scale point input
- 11 = Points size slider
- 12 = Delete all points
- 13 = Number of labels selection
- 14 = Selected label
- 15 = New name for the selected label
- 16 = Rename label
- 17 = Number of wheel parts

Goal of the webapp

The goal of the webapp is to draw points on a map according to the states/activities/types of people at a precise moment of time. The information of all points will then be exported in a “.json” file to be analyzed by other programs.

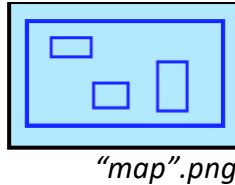
Steps to run the webapp

On the next pages, the following steps will be explained:

- Step 1 - Before the run
- Step 2 - Initialization of the webapp
- Step 3 - Points management
- Step 4 - Data export

Step 1 – Before the run

Start by creating a file / some files with the desired map(s) in the “.png” format or any other image format supported by p5js.



Step 2 - Initialization of the webapp

0. (Not mandatory) Enlarge the window as much as possible.

It is recommended to have the largest window possible for comfort and precision.

1. Left-click on the “Choose a file” button (A,1). Then select the desired map file.
The map will then be displayed, according to the size of the window, on the map area (F).

2. If you want to import a data file, left-click on the “Choose a file” button (A,2). Then, select the desired “.json” save file.

*Tip : don't forget to choose an image file for the map, even if you are using the import button. Points are drawn **only** if a map is loaded.*

3. Prepare your labels. By left-clicking on the “+” and “-” buttons (D,13), you can choose the desired number of labels. Then, rename the labels if you want by left-clicking on a label at the right (G) and writing its new name in the renaming input (D,15). Finally, click on the “Rename” button (D,16) to save the change.

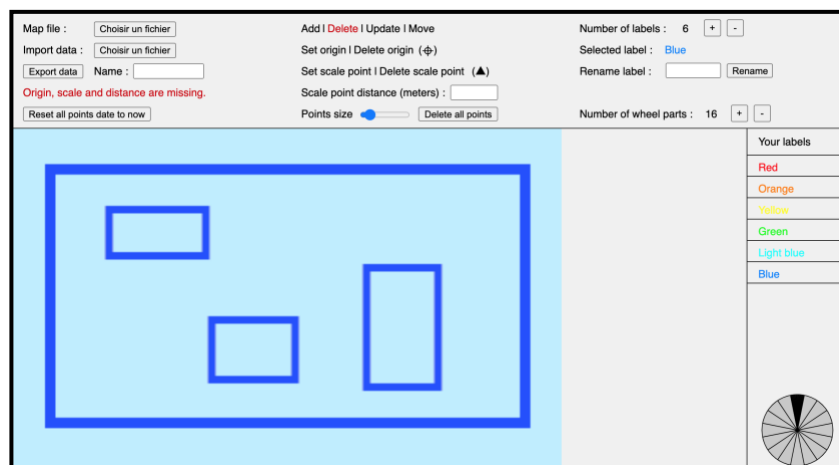
Tip : you can also add/delete/rename labels whenever you want, but choosing them at the beginning is a good practice.

Tip 2 : the number of labels can go from 1 to 20.

Tip 3 : if you decrease the number of labels and the label which will be deleted corresponds to points on the map area (F), you will be alerted before deleting them.

4. Prepare the direction wheel. By left-clicking on the “+” and “-” buttons (E,17), you can choose the desired number of wheel parts. Wheel parts will be used to inform the user and the computer about the direction of the people represented by points on the map area (F).

Tip : the number of wheel parts can go from 2 to 90.



Webapp Initialized

Step 3 - Points management

This is the most important part of the webapp.

Principally, you will be able to add points (1), delete points (2 + 3), update points information (4), move points (5), set/delete the origin point (6), set/delete the scale point (7), indicate the distance between origin and scale points (8), change the size of the points (9) and reset the date and time of all points (10).

1. How to add points?

To add a point, left-click on the “Add” option (C,7). Choose the label of the point by left-clicking on the desired label (G). It will be display as selected (D,14). Finally, choose the direction of the point with the wheel by left-clicking on the wheel part you want (H). You can then left-click on the map area where you want to add a point.

Tip : if the map is too small to add points with precision, you can always zoom on it (with keyboard or fingers).

Tip 2 : if points are too small or too big, you can resize them with the “Points size” slider (C,11).

Tip 3 : obviously, you don’t need to repeat all steps for all points. You can draw many points with the same settings.

2. How to delete points ?

Left-click on the “Delete” option (C,7). You can then click on the map area (F) where you want to delete a point.

Tip 1 : it is not mandatory to left-click directly on the desired point to delete it. When the mouse is left-clicked, the nearest point of the mouse pointer will be deleted.

Tip 2 : if you want to delete all points at once, see point 3 below.

Tip 3 : if the map is too small to delete points precisely, you can always zoom on it (with keyboard or fingers).

3. How to delete all points at once ?

Simply left-click on the “Delete all points” button (C,12).

4. How to update points information ?

Left-click on the “Update” option (C,7). You can then left-click on the map area (F) where you want to select a point.

Then, you can change the position of this point with the arrows of the keyboard, its label by left-clicking on the desired label (G) or change its direction by clicking on the wheel (H).

Tip 1 : it is not mandatory to left-click directly on the desired point to select it. When the mouse is left-clicked, the nearest point of the mouse pointer will be selected.

Tip 2 : when a point is selected, its size is bigger.

Tip 3 : if the map is too small to select points precisely, you can always zoom on it (with keyboard or fingers).

5. How to move points ?

Left-click on the “Update” option (C,7), then use the arrows of the keyboard. This method is recommended for precision moves.

You can also drag and drop points after left-clicking on the “Move” option (C,7). This method is recommended for long distance moves.

Tip : be careful, due to p5js implementation, if the dragged point collides with another one, you will lose the dragged point at this position and begin to drag the collided point instead.

6. How to manage origin point ?

The origin point goal is to give information to the computer to understand the position of the origin of the exported points coordinates.

You can add the origin point by left-clicking on the “Set origin” option (C,8) and left-clicking on the map area (F) where you want to set up the origin point.

To move the origin point, see point 5 above.

To delete the origin point, left-click on the “Delete origin” option (C,8) and left-click on the map area (F).

Tip : the origin point has no label and no direction.

Tip 2 : if the origin point is missing, a warning will be displayed (A,5) and you will not be able to export data (A,3) until you set it up.

7. How to manage scale point ?

The scale point goal is to give information to the computer to understand the ratio meters/pixels of the map and understand points coordinates in real life.

You can add the scale point by left-clicking on the “Set scale point” option (C,9) and left-clicking on the map area (F) where you want to set up the scale point.

To move the scale point, see point 5 above.

To delete the scale point, left-click on the “Delete scale point” option (C,9) and left-click on the map area (F).

Tip : the scale point has no label and no direction.

Tip 2 : if the scale point is missing, a warning will be displayed (A,5) and you will not be able to export data (A,3) until you set it up.

8. How to manage scale point distance ?

The scale point distance goal is to give information to the computer to understand the ratio meters/pixels of the map and understand points coordinates in real life. It will correspond to the real distance in meters between the origin and the scale point.

You can write this distance in the “Scale point distance” input (C,10).

Tip : if the distance is missing, a warning will be displayed (A,5) and you will not be able to export data (A,3) until you enter a value.

Tip : the format to write float numbers is “0.507...”. If you try to use “,” instead of “.” or write text or other symbols in the input, a warning will be displayed (A,5) and you will not be able to export data (A,3) until you enter a value in the correct format.

9. How to change the size of the points ?

You can change it by using the slider (C,11).

10. How to reset the date and time value of points ?

Points store the information of the date and time of when they were drawn. If you want to reset the date and time of all points to the actual date and time, left-click on the “Reset all points date to now” button (B,6). A warning message will be displayed and you have to accept it to reset all points date to “now”.

Step 4 – Data export

When you are done adding the points on the map area (F), you can save your work by left-clicking on the “Export data” button (A,3). You can also add a name for the file in the “Name” input (A,4). Otherwise, the app will take the date and time value of the actual date and time as a default name.

To be able to export data, you must not have warning (A,5), meaning you have set up the origin (step 3.6), the scale point (step 3.7) and inserted a valid distance (step 3.8).

If you have no warning, a “.json” file will be downloaded with important information for the analysis program and to restore values for later use with the webapp.

Tip : the exported file contains data for all points, including the origin point, the scale point and even deleted points.

Tip 2 : the exported file contains a final element with all variables needed to restore the actual working state if it is imported in a reset app.

Tip 3 : keep in mind that the more dates and times there are for taking data, the more data the analysis program will have. Therefore, with more dates and times, the analysis program could make more links with the sensors and might be better.