Summer School on Digital Humanities

Web site: https://bit.ly/dt4h-gis

Augusto Ciuffoletti

9 giugno 2025



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Step 1: Lab activity

- Browse the web to find the coordinates of a place at your choice as the center of the raster
- Modify/remove the zoom factor

IMPORTANT:

- you cannot commit your updates on my repo (Error 403)
- you can Connect a repository of your own on GitHub (recommened)
- you can Save your updates,
 - but you will loose your work when you switch branch (Discard Changes)
- you can undo updates with Ctrl-z
- you can Fork a branch
 - this works on a single branch
- you can clone the whole repository (all branches) in your computer and push it on a new repo



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Step 2: Lab activity

- Replace the alert with a popup on the click point
- Instead of the geographical coordinates, print the position of the point in the layer
 - CONSult https://leafletjs.com/reference-1.7.1.html#mouseevent

- Each click on the map adds a marker, and their coordinates are shown on the page
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 - the coordinates are appended to the list in a div element of the DOM

Step 3: Lab activity

- Display the distance of the point from the center instead of its coordinates
 - consult

https://leafletjs.com/reference-1.7.1.html#map-conversion-methods

- An progressive index is assigned to each new point
- The index is shown in the list and added as a title field in the marker definition
 - the title field is automatically displayed when the mouse hovers on the marker
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Step 4: Lab activity

- Configure the marker as draggable (ignore that the displayed coordinates become inconsistent)
 - consult https://leafletjs.com/reference-1.7.1.html#marker
- (advanced) show the coordinates inside the title and update them when the marker is dragged
 - consult the same manual page of the previous lab activity

- Record the markers in an array to have them accessible
 - in the previous steps the marker was a local variable in the callback
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 - no need to increment it

Step 5: Lab activity

- Create a button that hides all the markers
 - Use opacity, same manual page of the previous lab activity

- Having all markers in a layer is more practical than in an array
- Replace the array with a Javer Group object added to the map
- Replace the push operation with an addLayer applied to the layer Group.
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- The solu
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Step 6: Lab activity

- Add a popup to all features in the layer
 - CONSult https://leafletjs.com/reference-1.7.1.html#layergroup

- It is handy to have a standard string representation of a piece of data (serialization)
 - . e.g. to store the data in a file
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Step 7: Lab activity

- Is there any way to record the title field in the JSON string?
- Study the geoJSON format in the console and find a solution
- If needed see :
 - https://geojson.org/ for geojson syntax
 - https://leafletjs.com/reference-1.7.1.html#marker for the toGeoJSON method

- We want to store our markers in the cloud
- The simplest option is to use a Key-Value service
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