# **Data Science and Data Visualization**

# **Lab 7 –D3.js –** **GeoMapping**

Reference:

D3: <https://d3js.org/>

D3 tutorials: <https://github.com/d3/d3/wiki/Tutorials>

D3 – Geographic projection: <https://bost.ocks.org/mike/example/>

D3 – Geo map: <https://github.com/d3/d3-geo>

Vietnamese geo-data: <http://opendata.hcmgis.vn/>; <https://portal.hcmgis.vn/>

Instructions

* Use ONLY D3 library
* Read chapter 14 of the Interactive Data Visualization for the Web
* Submit your work (all html, js, css files) to the blackboard assignment for this lab

Details

**Info**

Create an HTML web page with the title “Lab 7”. It contains the following text:

* Your name
* Your student ID
* The course tile “Data science and data visualization”
* The lab title “Lab 7 –D3.js – GeoMapping”
* The text “This is all my own work. I did not copy the code from any other source”

**Map**

Use the following data

* Geo-map of all Vietnamese provinces <https://raw.githubusercontent.com/TungTh/tungth.github.io/master/data/vn-provinces.json>
* Vietnamese data by provinces <https://raw.githubusercontent.com/TungTh/tungth.github.io/master/data/vn-provinces-data.csv>

1. Draw a choropleth of Vietnam (using one of the attributes on the dataset)
2. Follow instruction in <https://stackoverflow.com/questions/14492284/center-a-map-in-d3-given-a-geojson-object> to center the map
3. Draw a choropleth map of Vietnam for COVID confirmed cases by provinces using data from <https://vi.wikipedia.org/wiki/%C4%90%E1%BA%A1i_d%E1%BB%8Bch_COVID-19_t%E1%BA%A1i_Vi%E1%BB%87t_Nam>
4. (Optional) Implement zoom to bounding box of a province on click

<https://observablehq.com/@d3/zoom-to-bounding-box>

**Expected result**

A map of the country

Description automatically generated

A map of the country

Description automatically generated