

Project #3

Proposal: Global Connectivity Visualisations

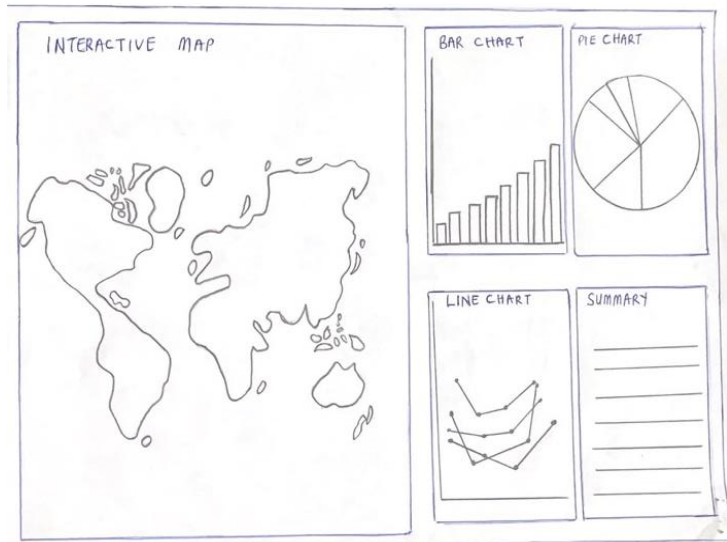


Figure 1 Sketch of our dashboard/landing page

Team Members: Khadra Chisimnulia, Kudzanai and Nathaniel

GitHub Repository Link: <https://github.com/khadra1/Project-3-Connectivity.git>

Tell a Story with Data Visualisations

Description: We will collect data about Global internet usage and connectivity which we will then clean/wrangle, store in a database and visualise in different ways using the below requirements, datasets, visualization inspirations and sketch. Lastly, we'll deploy it to GitHub Pages.

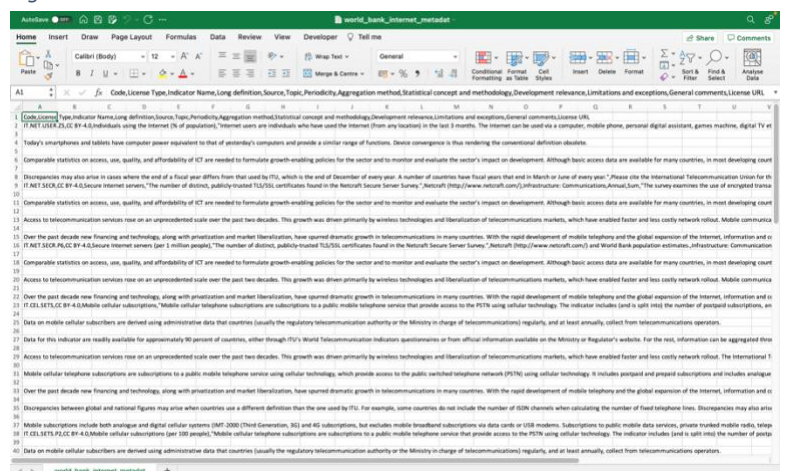
Data sources: Our datasets will cover the following categories: Individuals using the internet, Fixed broadband subscription, Mobile Cellular subscription, Secure Internet Servers, Fixed telephone subscriptions and Internet usage around by age and sex, and by country and continent using these datasets and files:

- **Connectivity Datasets from ITU-D:** <https://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx>
- **World Bank Connectivity Data:** <https://data.worldbank.org/indicator/it.net.user.zs>
- **Countries' Location Data:** https://www.kaggle.com/datasets/parulpandey/world-coordinates?select=world_coordinates.csv

Types of Visualisations:

- Interactive line graph visualising the increase of connectivity (mobile-internet vs home-internet vs landline over the years)
- Interactive Bar charts
- Pie charts (showcasing continents share of world internet usage)
- Interactive Maps

Figure 2 Metadata screenshot



Inspirations for our visualisation ideas:

- <https://ourworldindata.org/internet#mobile-phone-use>
- <https://www.kaggle.com/code/sharmavasundhara/analysing-internet-usage>

Interactive Data Visualization of Geospatial Data using D3.js, DC.js, Leaflet.js and Python:

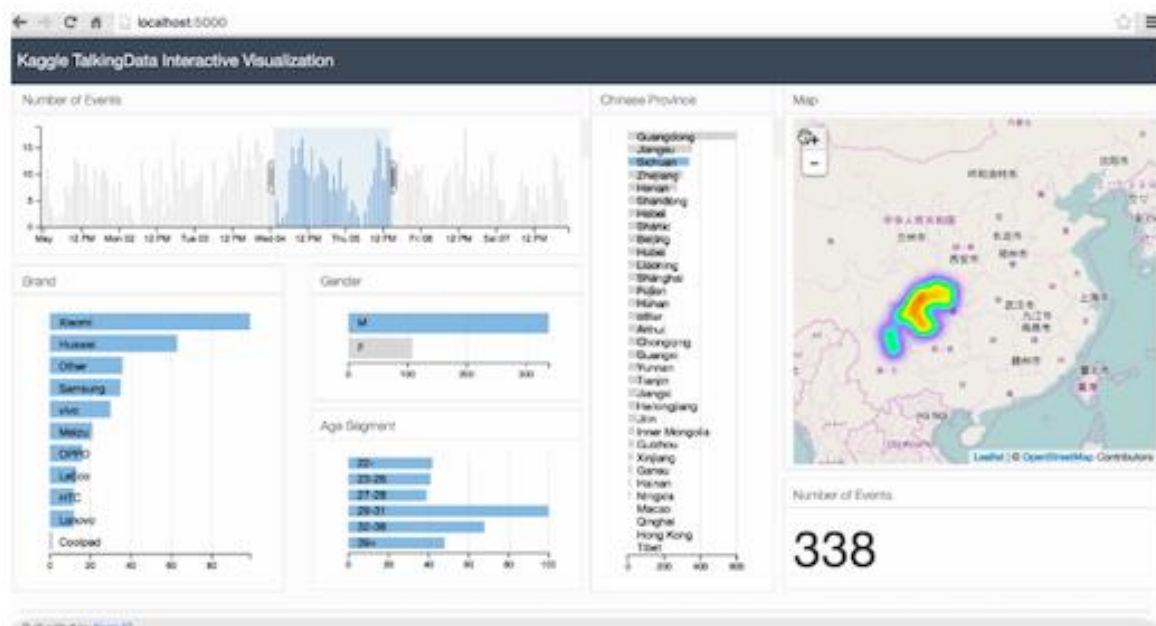


Figure 3 Visualisation inspiration

- <http://adilmoujahid.com/posts/2016/08/interactive-data-visualization-geospatial-d3-dc-leaflet-python/>

Extending visualization skills with geospatial data:



Figure 4 Visualisation Inspiration

- <https://medium.com/datalab-log/how-to-build-a-dashboard-prototype-using-leaflet-d3-js-and-python-1cfda38efbb5>

