Facebook in Time and Space

About Ethi Facebook in Time and Space

Goal

Ethi educates people about how their data can be used, and provides them with useful and interesting insights about themselves and their lives from this data.

The goal of the project is to use location and time series data to create an immersive and interactive visualisation of people's activity since they first signed-up on Facebook.

Deliverables

- A presentation about our strategy detailing approach to the problem, our solution, and key findings.
- Code files that include all our steps from cleaning the data to producing insights and creating the visualizations.
- A readme file that will help to understand the process and methods used.

Our Team

Project Manager: Adwoa Nyame

Data Engineer: Abhinandan Aggarwal

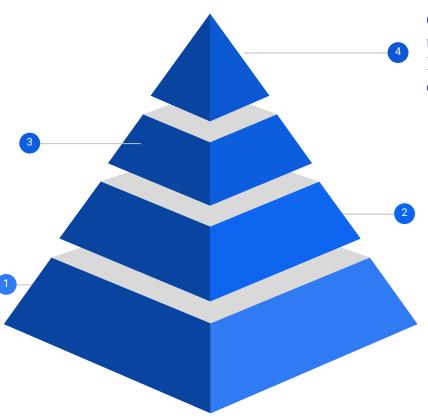
Data Engineer: Atin Singhal

Frontend Developer and Data Visualization: Alexander Armero

4 Step Pyramid Model to Solve the Problem

Eliminated data which can't be visualized and visualizations that Ethi already has from our list of project ideas through discussion. Followed by brainstorming more unique visualizations.

Made a google sheet of all our various Facebook data to assigned each person to research a specific group of data.



Created a final list of three unique ways to visualize Facebook data & aimed to complete 2 of our ideas.

Compiled our research on Facebook data visualization in a document and each team member presented their findings. Brainstormed a list of project ideas from our discussion on our research.

Our Solution - Map of Location Data

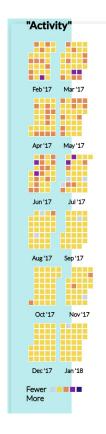
Created an interactive world map based of Facebook user's login and logout location data.

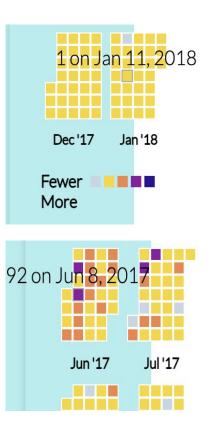
Spatial tracking of the user around the globe helps businesses to recommend customized advertisements for users.

Shows how user's IP addresses are collected to determine their location during their duration on Facebook.



Our Solution - Calender of Activity

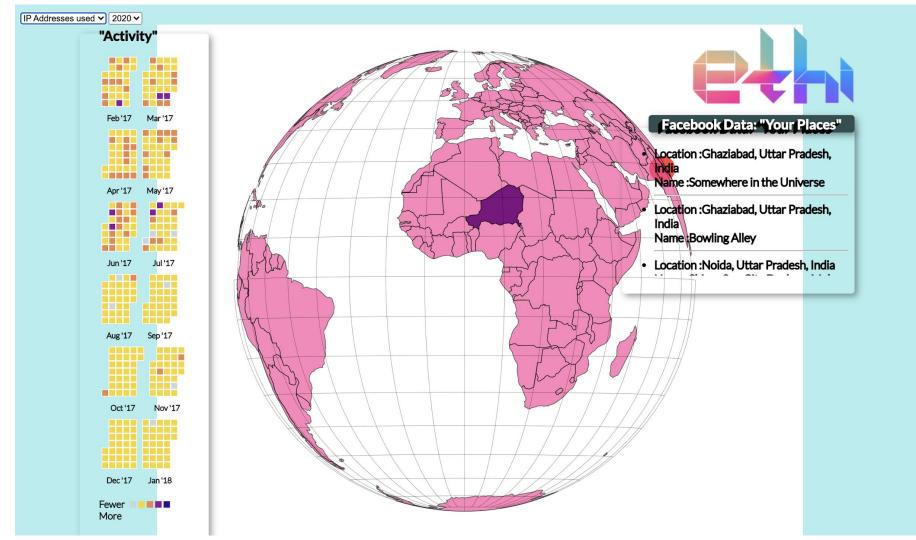




Activity data from the likes and reactions folder from the Facebook sample dataset was used to create an interactive calendar. This data also includes when the pages were liked and when any posts & comments were made.

More darker regions of the calendar show the how many times the user interacted with Facebook. Users can hover to get the exact count for each date.

Temporal tracking of the user since account creation allows users to understand their Facebook usage. Their likes and dislikes give an insight into the user behaviour, and their dependence on social media can be tracked.



References

- https://medium.com/swlh/what-does-facebook-know-about-my-likes-and-dislikes-eb88abeba265
- https://medium.com/@bansalsamarth/seven-charts-that-show-how-i-used-facebook-over-the-year s-bc7e8b3b5170
- https://arxiv.org/ftp/arxiv/papers/1805/1805.11300.pdf
- https://vis.stanford.edu/papers/
- https://research.tableau.com/papers
- https://www.mdpi.com/2078-2489/9/11/285/htm
- https://towardsdatascience.com/download-and-analyse-your-facebook-messenger-data-6d1b4940
 4e09
- https://www.vox.com/2018/4/11/17177842/facebook-advertising-ads-explained-mark-zuckerberg
- https://meet.google.com/linkredirect?authuser=0&dest=https%3A%2F%2Fobservablehq.com%2F %40d3%2Fgallery