DISEASE

UofT SCS Data Analytics

Project 3 – Group POXY\_SERVER

Submitted 2019 February 24

Updated 2019 March 02

# Project Proposal

## Team POXY\_SERVER

Bobby Bhattacharjee

Laurel Lobo

Gobind Singh

Jose Tomines

Callan Yan

## Project Scope

Analyze the available measle outbreak data in Canada / US / Globally, and if available, corresponding vaccination data. Dataset with at least 100 records. **Note: After analyzing the data, the scope was amended to include different communicable diseases but only within the US.**

Visualization to include a Python Flask powered RESTful API, HTML/CSS, JavaScript, and at least one database (MySQL, MongoDB, PostgreSQL)

Visualization to be interactive, with users clicking/hovering/various events to change the dataset. Your project must include some level of user-driven interaction (e.g. menus, dropdowns, textboxes, etc.)

Final visualization to include at least three views. Possible views will be outbreaks per location, outbreaks over time, vaccination rates per locations. Visualizations will be based on the availability of the data.

## Breakdown of Questions

1. Where in Canada / US / Globally are the measle outbreaks occurring?
2. How does outbreaks change over time?
3. Is there a correlation of vaccination rates with measle outbreak locations?

## Potential Data Sources

Below are the data sources determined by the team:

1. Centre of Disease Control (www.cdc.gov/measles/)
2. Github (github/artiichoke/165\_Final\_Project) – Project about measles and vaccine rates by user artichoke
3. Project Tycho on Kaggle (https://www.kaggle.com/pitt/contagious-diseases)

## Breakdown of Tasks

Updated List:

1. Determine relevant data (Full Team)
2. Determine visualization of data (Full Team)
3. Determine framework of website (Full Team)
4. Build data collection and cleanup code
5. Build HTML – Gobind Singh
6. Incorporate Flask – Laurel Lobo
7. Build a PostgreSQL DB – Laurel Lobo & Callan Yan
8. Build visualization code View 1 – Bobby Bhattacharjee
9. Build visualization code View 2 - Jose Tomines
10. Build visualization code View 3 - Laurel Lobo & Callan Yan

# Approval and Authority to Proceed

We approve the project as described above, and authorize the team to proceed.

|  |  |  |
| --- | --- | --- |
| Name | Title | Date |
|  |  |  |
|  |  |  |
|  |  |  |