Proposal BKMG

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February 2020

1 Introduction

In this project undertaken for the class Building and Mining Knowledge Graphs, the idea that will be addressed is as follows. "Is there a correlation between global warming, country GDP and the over all health of people in their countries?". The idea was come up with because I was interested in pursuing something to do with health, and started searching for datasets in relation to it that would provide a decent amount of data. After searching datasets on global warming and country GDP seem to be the easier ones to find, and contain a significant amount of data.

2 Problem

For this research project i would be looking to answer the following questions;

- Is there a correlation between global warming rates and country GDP?

- Is there a correlation between global warming rates and health rates of countries?

- Is there a correlation between health rates of countries and country GDP?

- Is the a correlation between global warming rates and country GDP relevant to health rates of countries?

- Are countries that are effected by global warming the most experiencing a decline of health? Is the country GDP relevant to the status of health?

these are the questions that I would like to be answered, depending on the findings there may be additions or subtractions to these questions.

3 Significance

Because of the significant changes our planet is under going due to global warming the effect it has on people cannot be minimized. These effects for the reach

of this project is to try and see how these effects will pertain to us humans. To get more accurate insights on this correlation the relationship between the countries GDP and health information will also be looked at. Country GDP is relevant knowledge as it will give us an idea about how much effort and monetary investment is but into health in the countries that we will observe.

4   Related work

Since the threat of global warming has been upon us for years there are several papers on the subject. Some examples that I've read as part of researching for this proposal are; Potential effects on health of global warming[1], Global environmental change and health: impacts, inequalities, and the health sector[2], Climate Change Is The Greatest Threat To Human Health In History[3], Climate change and health[4] and Climate Effects on Health[5].

5   Methodology

The direction of this project is intended is to take multiple publicly available and open datasets and convert them to RDF, and then link them to achieve a knowledge graph. Then use SPARQL to find answers to the research questions that have been determined.

6   Innovation

The novelty of this project lies within the making of a knowledge graph to be able to work towards finding the answers to the research questions set.

7   Milestones and deliverables

The checkpoints to reach in this project are to determine all of the datasets to be used(the ones that have been so far will be included in the references), to convert them to rdf, to link them, and to make SPARQL queries to find answers to the questions we are asking. The deliverables will be in the form of a knowledge graph and the answers to the questions asked.

8   Anticipated results

The anticipated results for this research project are a knowledge graph showing thee connection between the databases, the answers to the research questions proposed here, and any other outcome that may be found interesting. The problems that may occur are due to the data, and creating suitable relations between them.

References

Cited References

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[2] A J McMichael et al. "Global environmental change and health: impacts, inequalities, and the health sector". In: *BMJ* 336.7637 (2008), pp. 191–194. ISSN: 0959-8138. DOI: 10.1136/bmj.39392.473727.AD. eprint: https://www.bmj.com/content/336/7637/191.full.pdf. URL: https://www.bmj.com/content/336/7637/191.

[3] David Introcaso. *Climate Change Is The Greatest Threat To Human Health In History.* https://www.healthaffairs.org/do/10.1377/hblog20181218.278288/full/. 2018.

[4] WHO. *Climate change and health.* https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health. 2018.

[5] CDC. *Climate Effects on Health.* https://www.cdc.gov/climateandhealth/effects/default.htm. 2019.

Datasets For the Project

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[7] *Health emergencies.* https://www.who.int/data/gho/data/major-themes/health-emergencies/GHO/health-emergencies.

[8] *Health and well-being.* https://www.who.int/data/gho/data/major-themes/health-and-well-being/GHO/health-and-well-being.

[9] *Health systems.* https://www.who.int/data/gho/data/themes/theme-details/GHO/health-systems.

[10] *Malaria.* https://www.who.int/data/gho/data/themes/malaria/GHO/malaria.

[11] *Noncommunicable diseases.* https://www.who.int/data/gho/data/themes/noncommunicable-diseases/GHO/noncommunicable-diseases.

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[18] *Child health.* `https://www.who.int/data/gho/data/themes/child-health/GHO/child-health`.

[19] *Public health and environment.* `https://www.who.int/data/gho/data/themes/public-health-and-environment/GHO/public-health-and-environment`.

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[24] *GDP.* `https://datahub.io/core/gdp#readme`.

[25] *Gdp by country years 1-2008.* `https://data.world/adamhelsinger/gdp-by-country-years-1-2008`.

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[27] *World religion peace gdp.* `https://data.world/kevinnayar/world-religion-peace-gdp`.

[28] *GDP.* `https://github.com/datasets/gdp`.

[29] *GDP Archieve.* `https://stats.oecd.org/Index.aspx?DataSetCode=SNA_TABLE1_ARCHIVE`.