National University Of Computer & Emerging Sciences Karachi Campus

Project Proposal

Data Structures

Section E

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“Covid-19 Travel Guider”

- **INTRODUCTION**

  The system that will be designed will enable the travelers around the globe to be able to take guide from the system and get to know about the countries that are safe to travel with respect to purposes (business, vacations). This system is unique in a sense that it will be the first that will directly help the travelers around the globe.

- **PROBLEM STATEMENT**

  In today’s world when the world is being surrounded by the fear of Covid 19 and there are people who want to go out for their respective purposes wants to know about the countries that are available as per their choice and purpose. Many people are struggling to find the right place according to the trends and statistics available and are unable to interpret and find the required destination.

- **PROPOSED SOLUTION**

  This system will help solve their problem and make their task easy for making their travel hassle free and secure. As this system will make them know about the places that are secure to travel along with their health index.

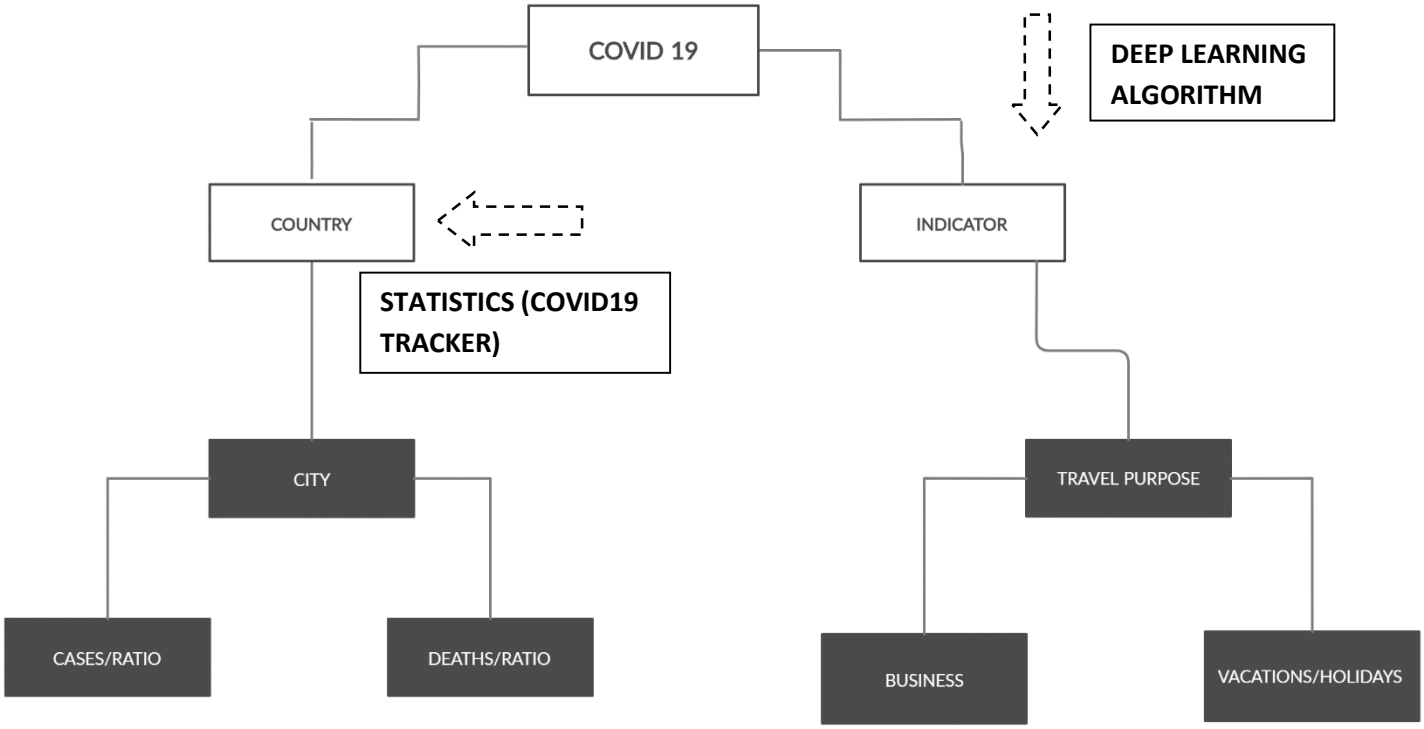
- **SALIENT FEATURES**

  1. Covid 19 Statistics
     - Cases and Deaths (by Country)
     - Testing and Ratio
  2. Travel Guideline Basis of Country
     - Deep Learning algorithms to indicate travel guidelines.
  3. Purpose Based Indicator
     - If travelling necessary, indicator will propose the reasons for travel.

- **TOOLS AND TECHNOLOGIES**

  - Programming Language: C++.
  - IDE: Microsoft Visual Studio Code, Dev C++.
  - Compiler: MinGW for C++.

- **HIERARICHAL STRUCTURE**



This hierarchical structure shows the general purpose of our system

- **SYSTEM DETAILS**

  - Will be able to tell each country's covid stats.
  - Stats can be used through sorting algorithms for research
  - Trends will be fetched and calculated.
  - It will help in indicating each country zones (danger to safe).
  - System will identify safe countries as per trends
  - System will help monitor the trends for research purposes as well
  - System will cater the needs in many of the departments.
  - For instance, medical use, travel agencies, government travel policy.

- **SYSTEM AND DEEP LEARNING**

The system we will be designing is directly linked to a **deep learning process**. System will fetch the **datasets** available for the covid 19 across the globe and upon the basis of the algorithms applied and result is obtained, **deep learning algorithm** will help predict by **analyzing** data and then return the countries that are safe for travel for certain purposes. This way data is deeply analyzed and the whole file is read before drawing a conclusion hence making a **neural network** type structure at the back end of a program making it a **functional deep learning project.**