

Synopsis
On
Covid-19 Data Management

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Introduction of Project

Covid-19 Data Management is a software system where the management of entire world's Covid-19 data is Computerized. The Covid-19 Data Management is designed using Python.

In this project the details are maintained like Country Code, Country Name, New Deaths, Cumulative Deaths, New Cases, Cumulative Deaths, etc.

The reports can be viewed completely by any user. For General Knowledge it will be more useful. This Proposed System will be interactive, fast and user-friendly for the end users. Using the **Covid-19 Data Management**, following activities can be performed:

- Country Code,
- Country,
- New Cases,
- Cumulative Cases,
- New Deaths, • Cumulative Deaths,
- Date Reported.

Mission of this Project The mission is to facilitate easy management of

Covid-19 with capabilities of New Cases on particular day, New Deaths on the particular day, it refreshes data from World Health Organization's official Covid-19 website. This software lets user knows what the current report of world in response of Covid-19. This software helps enduser in retrieving Covid-19 data in better way with less paperwork and manpower.

Drawbacks of the Existing System

- Data is so big and complicated that it requires core knowledge of this system file in case of any error created accidentally in any file.
- Non-Secure.
- Third-party data.
- No method to trace details.
- Searching is more time consuming.
- Data refreshes when WHO refreshes it.

Advantages of proposed system

- No permissions required.

- Easy way of analysing.
- Save your time.
- Elimination of paperwork.
- Fast and reliable.

Modules

- Date reported,
- Country code,
- Country Name,
- New Deaths,
- Cumulative Deaths,
- New Cases,
- Cumulative Deaths, and
- WHO region.

Module Description

- 1. Date Reported ⑦** This module contains data of date when found any new case of Covid-19. It refreshes and adds new date column when the project file is refreshed. It only stores the data given by a specific country to WHO.

2. **Country Code ⑦** This module contains data of Country in a code like it store India as IN, China as CN, etc. It only stores the data given by a specific country to WHO.
3. **Country Name ⑦** This module contains data of Country name like India, Pakistan, China, etc. It only stores the data given by a specific country to WHO.
4. **New Deaths ⑦** This module contains data of New Deaths happened in a specific country with date reported. It only stores the data given by a specific country to WHO.
5. **Cumulative Deaths ⑦** This module contains data of the proportion of a group that dies over a specified time interval. It is the incidence proportion of deaths. It only stores the data given by a specific country to WHO.
6. **New Cases ⑦** This module contains data of New Cases happened in a

specific country with date reported. It only stores the data given by a specific country to WHO.

7. Cumulative Cases ⑦ This module contains data increasing by successive addition of cases of Covid-19. It only stores the data given by a specific country to WHO.

8. WHO Region ⑦ This module contains the regions of world described by WHO. Example African Region is mentioned as AFR, European Region is mentioned as EUR, etc. Only country listed in WHO will be shown.

Software Requirement Specification

Python*

Hardware Specification:- Processor:

Intel i3 10th Generation

Clock Speed: 1.19 GHz

Ram: 16 GB

Virtual Ram: 32 GB

Solid State Drive Capacity: 256 GB

Hard Disk Capacity: 1TB

Keyboard: 99 Keys

Graphic Card 1: Intel UHD Graphics

Graphic Card 2: NVIDIA GeForce MX130

Mouse: Track Pad

Software Specification:-

Front-end: Python

Back-end: Python

Operating System: Windows 10 Home

Project Structure:-

1. Date Reported:-

```
In [38]: DataF["Date_reported"]

Out[38]: 0      2020-01-03
          1      2020-01-04
          2      2020-01-05
          3      2020-01-06
          4      2020-01-07
          ...
          152149  2021-10-01
          152150  2021-10-02
          152151  2021-10-03
          152152  2021-10-04
          152153  2021-10-05
          Name: Date_reported, Length: 152154, dtype: object
```

2. Country Code:-

```
In [39]: DataF["Country_code"]

Out[39]: 0      AF
          1      AF
          2      AF
          3      AF
          4      AF
          ..
          152149  ZW
          152150  ZW
          152151  ZW
          152152  ZW
          152153  ZW
          Name: Country_code, Length: 152154, dtype: object
```

3. Country Name:-

```
In [41]: DataF["Country"]

Out[41]: 0      Afghanistan
          1      Afghanistan
          2      Afghanistan
          3      Afghanistan
          4      Afghanistan
          ...
          152149  Zimbabwe
          152150  Zimbabwe
          152151  Zimbabwe
          152152  Zimbabwe
          152153  Zimbabwe
          Name: Country, Length: 152154, dtype: object
```

4. WHO Region:-

```
In [42]: DataF["WHO_region"]

Out[42]: 0      EMRO
          1      EMRO
          2      EMRO
          3      EMRO
          4      EMRO
          ...
          152149  AFRO
          152150  AFRO
          152151  AFRO
          152152  AFRO
          152153  AFRO
          Name: WHO_region, Length: 152154, dtype: object
```

5. New Cases:-


```
In [43]: DataF["New_cases"]
Out[43]: 0      0
          1      0
          2      0
          3      0
          4      0
          ...
          152149  335
          152150  208
          152151   66
          152152   35
          152153   76
          Name: New_cases, Length: 152154, dtype: int64
```

6. Cumulative Cases:-

```
In [44]: DataF["Cumulative_cases"]
Out[44]: 0      0
          1      0
          2      0
          3      0
          4      0
          ...
          152149  130820
          152150  131028
          152151  131094
          152152  131129
          152153  131205
          Name: Cumulative_cases, Length: 152154, dtype: int64
```

7. New Deaths:-

```
In [45]: DataF["New_deaths"]
Out[45]: 0      0
          1      0
          2      0
          3      0
          4      0
          ..
          152149   7
          152150   1
          152151   1
          152152   2
          152153   0
          Name: New_deaths, Length: 152154, dtype: int64
```

8. Cumulative Deaths:-

```
In [46]: DataF["Cumulative_deaths"]
Out[46]: 0      0
          1      0
          2      0
          3      0
          4      0
          ...
          152149  4623
          152150  4624
          152151  4625
          152152  4627
          152153  4627
          Name: Cumulative_deaths, Length: 152154, dtype: int64
```

Overview of all column entries:-

In [6]: DataF

Out[6]:

| | Date_reported | Country_code | Country | WHO_region | New_cases | Cumulative_cases | New_deaths | Cumulative_deaths |
|--------|---------------|--------------|-------------|------------|-----------|------------------|------------|-------------------|
| 0 | 2020-01-03 | AF | Afghanistan | EMRO | 0 | 0 | 0 | 0 |
| 1 | 2020-01-04 | AF | Afghanistan | EMRO | 0 | 0 | 0 | 0 |
| 2 | 2020-01-05 | AF | Afghanistan | EMRO | 0 | 0 | 0 | 0 |
| 3 | 2020-01-06 | AF | Afghanistan | EMRO | 0 | 0 | 0 | 0 |
| 4 | 2020-01-07 | AF | Afghanistan | EMRO | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 152149 | 2021-10-01 | ZW | Zimbabwe | AFRO | 335 | 130820 | 7 | 4623 |
| 152150 | 2021-10-02 | ZW | Zimbabwe | AFRO | 208 | 131028 | 1 | 4624 |
| 152151 | 2021-10-03 | ZW | Zimbabwe | AFRO | 66 | 131094 | 1 | 4625 |
| 152152 | 2021-10-04 | ZW | Zimbabwe | AFRO | 35 | 131129 | 2 | 4627 |
| 152153 | 2021-10-05 | ZW | Zimbabwe | AFRO | 76 | 131205 | 0 | 4627 |

152154 rows × 8 columns

See that index number 152153 gives date reported of the last date from today i.e. 10/06/2021, when WHO updated data, this project is and can be updated on the daily basis to see new data entries.

Thanks