**COVID-19 DATABASE\_1599**

**Logo, company name

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**Team Incognito**

**Special Topics: Data and Information**

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**Introduction:**

For the project I have chosen to create a database about COVID-19. This is because it is one of the most important problem around the world right now. Since the disease is so new to everyone, there is so much unknown about it. Therefore, it’s important that the higher officials and the public are informed about what’ s going on around them and how it could affect them in case if someone tests positive. As an individual that has recently tested positive for COVID, I did this project mainly aiming to answer a few questions that I had when I first tested positive.

The target audience for this database are the patients that tested positive and health care officials. I chose this particular group of audience because this database answers a few questions about what to expect when someone tests positive for the disease. It is also a good source for health care officials because they can completely track how the disease is affecting each patient based on their age, and previous health conditions.

**Some of the benefits of this database can include:**

* Lesser anxiety in patients as they have answers to a few questions.
* More knowledge for health care officials about how the disease is affecting individuals.
* Knowledge to the general public about the severity of the disease itself.

**UML-COMPLIANT ER MODEL**

**Timeline

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**Business Rules:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Entity 1** | **Entity 2** | **Cardinality on Entity 1 side** | **Cardinality on Entity 2 side** | **Business Rule(s)** |
| patient | symptom | 1..\* | 1..\* | A patient can have many symptoms. A symptom can be experienced by many people. |
| patient | locationz | 1..\* | 1 | A patient can only be on one location at a time. A location could have many patients at one time. |
| locationz | country | 1..\* | 1 | A specific location can only be in one country. One Country can have many locations. |
| patient | duration | 1..\* | 1 | A patient can only have one duration for recovery. One specific duration can be experienced by many people. |
| patient | month\_affected | 1..\* | 1 | One patient can only be affected once in a month. A month could have many patients that were affected. |
| patient | previous\_health\_issues | 1..\* | 1..\* | A patient could have many health issues. A health issue can be experienced by multiple people. |
| patient | treatments | 1..\* | 1..\* | A patient could use multiple treatments when affected by the disease. A treatment can be used by multiple people while recovering. |
| patient | Masks\_use | 1..\* | 1..\* | A patient can use multiple mask types and one mask type can be used my multiple patients |
| patient | Recent\_travel | 1..\* | 1..\* | A patient could have travelled to multiple locations and one location could have multiple patients visited. |

**Conclusion:**

Overall, this was a very interesting project. It gave me an opportunity to really think about how I can apply what I have learned through the semester in a real-world scenario. I had trouble in the begging as I did not know where to start. But after all lot of thinking and doing a rough sketch about what I wanted my database to look like, I was able to start. Even though this project was very long and time consuming, the outcome of it was really worth is. One thing that I found difficult is to create relationships using SQL. It was an easy task for me to do while doing it through the ER model, but when writing the script, it took me a while to understand what was going on. In the end, I was able to figure out these small details and also strengthen my skills in creating an efficient database.