

# CL219 – Database Systems Lab

**Spring 2020, BS (CS-2018)**

Instructor: Ma’am Saba Naseem

Project Proposal

*Focus Logics* COVID-19 Management System

**Group members**

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| --- | --- | --- |
| **Name** | **Roll no.** | **Section** |
| Abdul Wahab | 18F-0121 | C |
| Rizwan Ali | 18F-0106 | C |
| Rameez Ahmed | 18F-0323 | C |

**National University of Computer & Emerging Sciences –FAST (FSD)**

1. **Company name:**

***Focus Logics.***

1. **Company logo:**



1. **Team members:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Roll no.** | **Section** | **Development Role** |
| Abdul Wahab | 18F-0121 | C | Back-End |
| Rizwan Ali | 18F-0106 | C | Front-End |
| Rameez Ahmed | 18F-0323 | C | Middle-Level |

1. **Introduction:**

* The outbreak of Coronavirus has huge implications on the globe. The closure of higher education institutions, as well as the broader measures undertaken in many countries to restrict the mobility of citizens and increase social distancing, hampers the regular implementation of most of the ongoing or planned activities.
* Our foremost concern is the safety and protection of all the participants. This note aims to provide clarifications and general recommendations to support consortia in managing these exceptional circumstances.
* To manage all the relevant areas and features, we are required to design database schema and implement **IMS** (Information Management System) for COVID’19 outbreaks.

1. **Core Features:**
2. **Isolation ward:**

**USING DML:**

* **Search A Ward:**Based on the number of various attributes like no. of Patients, location, no. of beds, or searching wards that are FULL, etc.
* **Insert:** A new ward and its complete details.
* **Update Ward:**All kinds of update queries like updating no. of patients, no. of beds, no. of Paramedic (Doctors and Nurses), etc. will be supported.
* **Delete Ward:**Deleting ward's record based on its attributes.
* **Order by:**We generate a list of wardsin decreasing, increasing order of patients, etc.
* **Group by and having clause:** To generate a list showing no. of wards in particular (asked) region.

1. **Quarantine wards:**

Queries similar to **Isolation** **ward** will be applicable. 

1. **Symptoms, Preventing Measure and Treatment of COVID-19:**

* **System** will provide a list of symptoms and the patient will mark those symptoms accordingly. Based on the number of similar symptoms found, system can recommend that if a patient is in a mild, intermediate or critical stage.
* **Also**, the system can show the user list of popular symptoms and rare symptoms found in the patient.
* **IMS** can print the list of preventing measures given by doctors etc.

1. **Patient Record:**

**USING DML:**

* + **Insert** a new patient record and its complete detail.
  + **Delete** a patient’s record if desired.
  + **Search** a particular Patient Record based upon patient name, ID, status location, etc.
  + **Updating** a patient record i.e. Patient Status etc.
* **By and Having clause:** To further add more types of searches count concerning patient status, and having clause to count particular status patient, etc.

1. **Recommendations of the outbreak in your region(s):**

Preventing measures based on a percentage of the outbreak in the region.

1. **Percentage of COVID outbreak in your region/country:**

Use of **Group by and Having** to count patients in the desired region and showing the calculated percentage of the total number of patients by **sum (no. of Patients).**In this way, the percentage of Outbreak in any region can be found. 

1. **Emergency Call numbers/centers available in your city/region:**

**Using DML:**

* **Search Query:**Searching a center in a particular region is the main concern here so the system will provide search by region, finding contacts of emergency centers in a region using a group by and having clauses. Search a phone number also use of **Like**in case if some characters of a number are known.
* **Add Query:**Inserting a new call center record and its complete detail.
* **Update Query:**Updating the information like the phone number of a call center etc.
* **Delete Query:** Deleting a record based on certain attributes.

1. **Additional Features:**
2. A Click on a specific location at the Map will generate a view using joins to show the patient record for that location.
3. The patient’s location will be added through a pinpointing and fetching location information to the database.
4. A bar chart will be used to display the chances for the patient to be infected with Coronavirus. This will be predicted by comparing symptoms of Coronavirus with the patient’s condition.
5. Statistical reports on a timely basis will be generated through views and joins.
6. There will **FAQs** section where common **FAQs** about **COVID-19** will be answered also it will display common **MYTHS.**
7. A Message box will show No of **total cases** active, recovered, and ended.
8. **Objectives:**

The objectives of ***Focus Logic’s*** COVID-19 Management System are:

1. To provide an optimal Information Management System to help manage the COVID-19 database.
2. To provide Graphical User Interface to input, retrieve, and delete records for patients.
3. To spread awareness about the COVID-19’s symptoms, treatments and adequate preventing measures as described by the WHO and National Government.