

**FAST – NUCES**

COVID 19 PREDICTOR & VACCINATION APPLICATION



***Problem Statement***

In this ongoing pandemic, The citizens are in need of a platform from where they can access all the information regarding the vaccines and this disease.

Also,there is also a n increasing demand by the public, that they are informed of their nearest centers.and that sufficient quantity of vaccines is provided to all centers including hospitals.

Our application is programmed to meet such demands of our people. And we are keen to serve the society.

***Introduction***

Our program is based on a covid vaccination center. The application will provide citizens a platform where they would be able to access information regarding the centers. First, the users will be required to sign up. Then, we will get the basic information.

In addition to this, we will give appointments to the unvaccinated citizens for their convenience, and we will assign them a center near by their residence.

Our program also comprises vaccine inventory management. We aim to supply the centers as well as the hospitals with vaccines.

An additional feature will allow the users to get predictions according to their symptoms using a decision tree algorithm. The program is designed keeping in mind the comfort and feasibility of the people.

***Basic Formalities***

* Basic formalities that our project covers are mentioned below:
* Sign up/Login of user
* Displaying Menu
* Managing and storing inventory of vaccines
* Storing information about the citizens
* Assigning nearby centers
* Covid predictor using decision tree algorithm
* Choice for variety of vaccines
* The locality comprising of a certain number of appointments will be provided with an automobile service
* An overall statistic based on area

**Techniques**

* Abstraction
* Classes and Objects
* Encapsulations
* Inheritances
* Polymorphism (Both overloading and overriding)
* Conditional and looping structures
* Data structure such as arrays, array of objects, etc.
* Constructors and destructors
* Filing and data storage systems
* Exception handling

**Libraries**

* #include <iostream>
* #include <string>
* #include <iomanip>
* #include <stdlib.h>
* #include <fstream>
* #include <exception>
* #include <conio.h>
* #include <windows.h>