

FAST NUCES

(OOP Project)

~~Covid-19 Resource Center~~

Covid-19 Prediction & Vaccination
Center

Instructor: Sir Shoaib Rauf

Batch: 21K- BSCS

Sec: 2E

GROUP MEMBERS:

Sabeeka Shameel 21K-4606 (Leader)

Insha Javed 21K-3279

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Approved
[Signature]
01/March/2022

This project will be submitted as a partial requirement for the course CS-217 in spring 2022.

Introduction

System User(s):

1. Paramedical staff / Hospitals / Vaccination Centers.
2. Citizens

For Hospitals / Centers / Mobile Units:

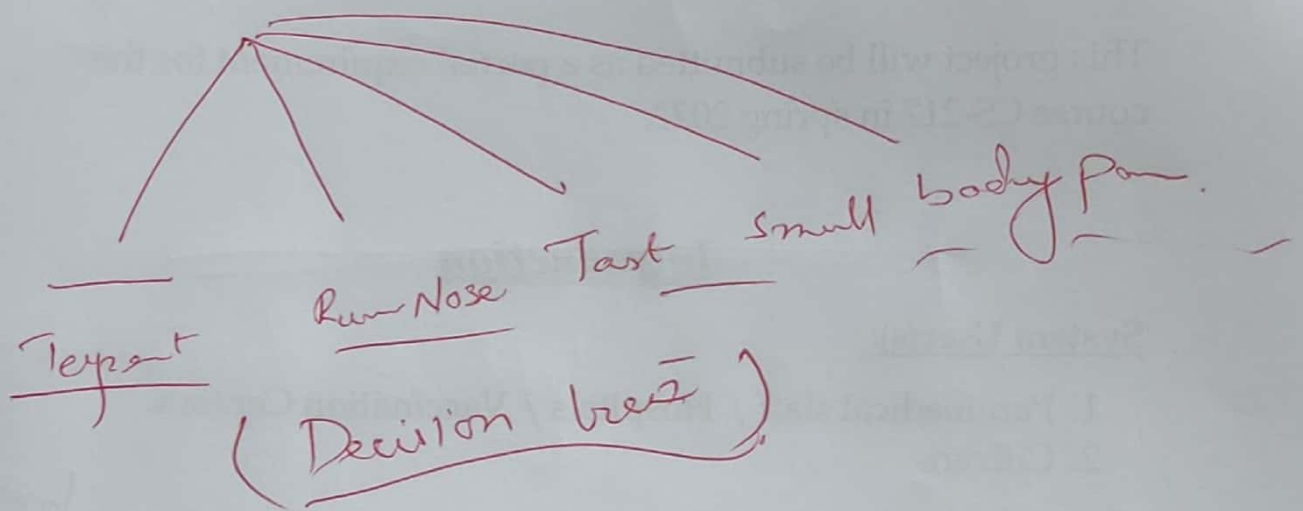
- Supply of Covid-19 vaccines to hospital, Centers & mobile units.
- Availability of Doctors (their duty timings)

For Citizens:

- Covid-19 vaccination services & information to Citizens. Such as:
 - ❖ Pre-Registration for vaccines.
 - ❖ Availability of different Covid vaccines.
 - ❖ Recommended Doses.
 - ❖ Nearest Hospital/Mobile Units for vaccination.
 - ❖ Providing with a booking code when eligible for the next vaccine dose.
 - ❖ Next dose reminder.
 - ❖ Can check his or her status of vaccination registration.

Additional Feature:

- Covid-19 statistics such as:



- ❖ Active Cases.
- ❖ Deaths.
- ❖ Recovered Cases.
- ❖ Popular Vaccines.
- ❖ Daily-First dose.
- ❖ Daily-Second dose.
- ❖ Daily-Booster.
- ❖ Total-First Dose.
- ❖ Total-Second Dose.

Basic Functions:

1. Login of the user (when registering for vaccination)
2. Displaying Nearest Hospitals/Mobile Units.
3. Generating time and location for vaccination.
4. Managing and storing covid-19 data that is supplied by the hospitals & mobile units.
5. Supplying Hospitals/Mobile Units with required Vaccines.

Techniques:

- Abstraction
- Classes and Objects
- Encapsulations
- Inheritances

- Polymorphism (Both overloading and overriding)
- Conditional and looping structures
- Data structure such as arrays, an array of objects, etc.
- Constructors and destructors
- Filing and data storage systems
- Exception handling

Libraries

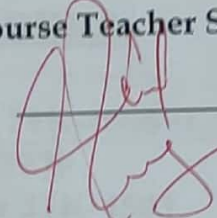
- `#include<iostream>`
- `#include<string>`
- `#include<unistd.h>`
- `#include<iomanip>`

Schedule:

To be submitted one week before the final exam of the spring 2022 semester.

- ☒ Accept
- ☐ Reject

Course Teacher Signature:


01 March / 2022