



# DSA SEMESTER PROJECT

# 

28 December 2023

REG. ID # FA22-BCT-023

**CYBER SECURITY**

NAME: MUHAMMAD HUZAIFA OWAIS

INSTRUCTOR : Sir Zahid Anwar

Hospital Management System:

Classes :

Time :

Date :

Patient:

Doctor :

Appointment:

Features:

File Reading :

File Writing :

Data Structures:

Object Stacks:

Multiple Object List :

Description Of Functionalities :

Set Appointments: Takes input from the user ask for their Emergency status and name then it ask the Specialization of Doctor and Adds the Appointment while allocating time from available doctor’s time slot.

Add Patients:

Ask User for patient details and add the patient details in a Dynamic List . keeps the patient details till the programs keeps running.

Delete Appointments:

From Appointment Id the Appointment of Patient is deleted.

Displaying Doctors Timeslots:

The stack storing the doctors Timeslots are used to display the availability of time of doctors.

Displaying Patient :

The all the patients are displayed because their record is stored in a linked list.

Updating Doctor’s Timeslots once it is allocated to appointments:

Time slot of doctors in stack is removed once it is allocated to a patient.

File Reading of Doctors :

A txt file is used to keep the Doctors information and upon running the program the doctors are read and stored in a linked list.

File Writing of Appointment:

Appointment History are saved in a file.