భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
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# BM2043 - Algorithms and Data Structures

PROJECT WORK

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**IIT – HYDERABAD HOSPITAL HELPDESK PORTAL**

Congratulations! Your team has been selected to develop a software for Helpdesk Portal of IIT-H Hospital.

The helpdesk portal of IIT-H Hospital is a multipurpose system which has the following main features.

➢ Directory of Doctors

➢ Directory of Patients

➢ Appointment Management System

➢ Feedback Management Portal

**Salient features of directory of Doctors/Staff:**

➢ The directory of the doctors should contain the following details of the staff:

1. Name of the doctor

2. Department of the doctor

3. Type of employment

4. Period of availability

5. Feedback Rating

6. Phone No

7. Email Id

8. Number of patients

➢ The directory should always be sorted in alphabetical order of the name.

➢ The directory allows insertion of details of newly appointed staff and it also allows deletion of details of doctors/staff on resignation.

&#10095; The directory should never have duplicate/repeated details of any doctors/staff.

&#10095; The details of the doctors can also be updated based on requests.

&#10095; The most useful feature of this directory is searching. It can search and identify the doctors/staff from any of their sub-details (Eg: Phone No,Name etc.)

**Salient features of the directory of Patients:**

&#10095; The directory of the patients should contain the following details of the patients:

1. Name of the patient

2. Department of the patient

3. Type of employment

4. Roll no (if student)

5. Phone No

6. Email Id

7. Address

8. Past appointment history

9. Ethics Rating

&#10095; The directory should always be sorted in alphabetical order of the name.

&#10095; The directory allows insertion of details of new patients and it also allows deletion of details of patients who left the campus.

&#10095; The directory should never have duplicate/repeated details of any patients.

&#10095; The details of the patients can also be updated based on requests.

➢ The past history of the patients should have the details of his past appointments in the hospital.

➢ The most useful feature of this directory is searching. It can search and identify the doctors from any of their sub-details (Eg: Phone No,Name etc.)

**Salient features of Appointment management system:**

➢ The appointment management system has all the details of the visited patients and doctors on each day.

➢ This system checks the availability of the doctor and provides the details of the earliest available appointment to the corresponding patients.

➢ This system has all the details of the past visited patients to a particular doctor on a particular day.

**Salient features of Feedback system:**

➢ The feedback system takes the feedback of the patients corresponding to the doctor he/she has visited.

➢ The system firstly verifies whether there was an appointment with corresponding doctor and then it takes the rating and updates the feedback rating of the doctor using most suitable statistical estimations.

➢ The doctors can also report any unethical behavior of the patients which will affect the ethics rating of the patients.

**Write an algorithm for the helpdesk portal which should be able to meet all the requirements of the portal. The code should be uploaded in Git-hub repository and a report should be submitted in the classroom.**