

MIST Medical Center Management System

Group: 10

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Abstract—The medical center of MIST is one of the most important installation of the campus. Here all the students and MIST faculty can take medical support anytime required. But it is difficult to maintain this huge number of patient per day as number of staff and assistant is very limited. And the documentation and keeping the records is a huge task. Probability is always there to make any mistake. As the records are not digitalized, so there is always loophole in the system. So, we came up with a digital solution to make the whole system digitalized and reduce the workload and reduce the vulnerability of the system.

I. INTRODUCTION

Currently the sick report management system which is being used in medical is manual. Students have to come to medical center and endorse his name for the sick report. As writing so many things is time consuming, when there are so many patients comes every day, they may sometimes avoid signing the entry which may lead to security issues. Per day almost 100 to 200 patient come to the medical center for taking medical support. So, it is very difficult to monitor and keep the accountability of such huge number of students. So, our aim is to reduce the workload and maintain a very efficient way to keep all the records in a digitalized form so that no student can take chance and the information are kept in a reliable process.

II. LITERATURE REVIEW

Currently in our country, this is fully new and innovative idea. There is no website based university medical center in our country. But in outside countries, there is some medical center which are fully website based management system.

III. GLOSSARY

Medical Center- Name of the medical installation of a military institution, MIST.

1. Stakeholders: 1.1 Students 1.2 Course coordinators 1.3 G2 1.4 Doctors 1.5 Medical Assistants

2. Information Gathering: 2.1 Interviewing the stakeholders. 2.2 Open opinion by the stakeholders. 2.3 Set questions to stakeholders.

IV. USER REQUIREMENT

1. Students should not do any cheating with the entry for seek report and.

2. Course coordinator should be able to monitor their students health report at any time for evaluation and an automated system will be there to notify him if any of the student go for reporting sick.

3. All the information and medical history will be present in the system so that the doctor can access and maintain it any time required.

4. Able to sort out the students who all are coming frequently and missing the class.

5. Auto-generated prescription.

6. System to contact the blood donor any time required.

V. SYSTEM REQUIREMENTS

After analyzing all the user requirements we found the followings as the functional requirements

A. Functional Requirements

1. Students should not do any cheating with the entry for seek report. 1.1 Student will just give doctor id as input after checking the ID card doctor will get the info from the database. 1.2 Students Information and medical history should be maintained by the system itself. 1.3 Separate login system will be there for each stakeholders so that the authorized persons can the full access of the system.

2. Course coordinator should be able to monitor their students health report at any time. 2.1 Auto generated message system: Course coordinator will receive a notification if any report is done in the hospital. 2.2 He can access the database to see which student went for sick and the details about the disposal as well. 2.3 Concerned authority will be notified if a student comes very frequently and miss classes as monthly summary. 3. All the information and medical history will be present in the system. 3.1 Each disposal and entry is recorded in the database. 3.2 How many times he is coming should be recorded. 3.3 Previous medical history of patient and family as well. 3.3 Separate section for monitoring the medicine entry and distribution among the students.

4. Some steps will be taken for missing the classes in a regular basis. 4.1 Students entry and disposal will be kept track of. 4.2 In case of 5 days of reporting in a month, a summary report will be generated and sent to the course coordinator.

5. Auto-generated prescription: 5.1 Similar to the present prescription format. 5.2 The medicine info will be generated through an efficient method. 5.3 Name of the Lab tests will be there and saved in database.

6. The blood donor can be easily sorted out. 6.1 The students can be sorted out from database according to their blood group. 6.2 The contact information of the blood donors will be there for emergency requirements.

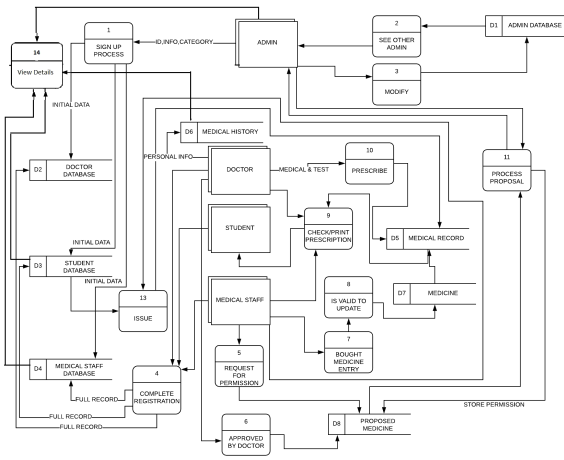


Fig. 1. Data Flow Diagram.

7. Separate record for medical testing in lab. 7.1 The lab tests will be generated in a separate list recommended by the doctor.

B. Non-functional Requirements

1. User friendly: 1.1 The interface should be very friendly as the stakeholders are not that much expert on computers. 1.2 The training on the project will be given to the users after completion of the project. 2. Security: 2.1 We will use a secured system in case of php to make the system much secured. 2.2 The database cannot be breached from unauthorized users. 3. Maintainability: 3.1 Properly maintainable process should be followed. 3.2 System should be fault tolerant. 3.3 The system must provide reliable information.

4. Portability: 4.1 The system should be portable so that different users can use it from different places.

VI. DIAGRAM

Fig. 1 shows the Data Flow Diagram .
Fig. 2 shows the Use Case Diagram.
Fig. 3 shows the Class Diagram.

VII. APPENDIX

During the information gathering process we took the interview of following persons and Asked the following questions:

Dr. Mahbuba Alam:

(In charge of MIST Medical Center)

- Time of visiting the doctor
- What are the services provided here
- If any case after the scheduled time.
- How the medicines are provided.
- What are the main challenges faced in existing system
- What are the main limitations of present system
- How many person visit everyday
- Who all monitors the treatment system
- How the report is sent to the course coordinators
- How the patients are referred to the outside hospital

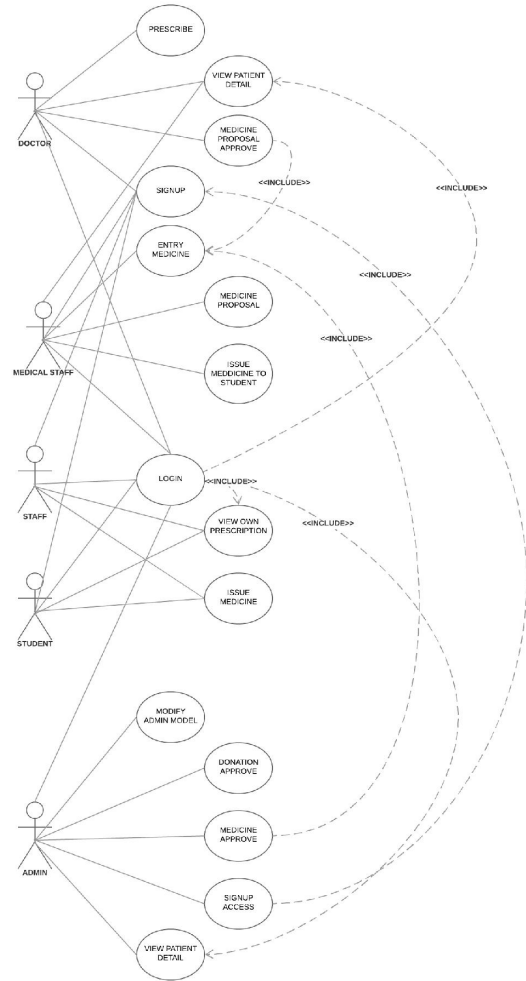


Fig. 2. Use Case Diagram.

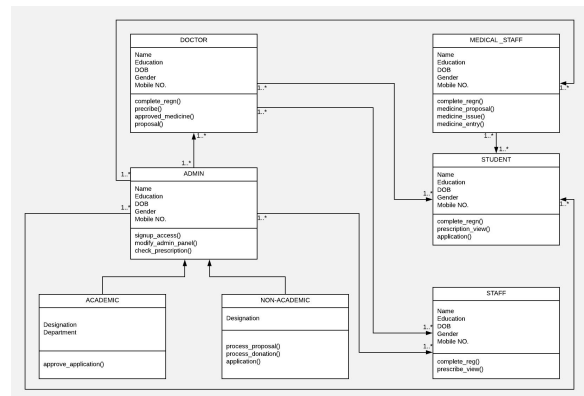


Fig. 3. Class Diagram.

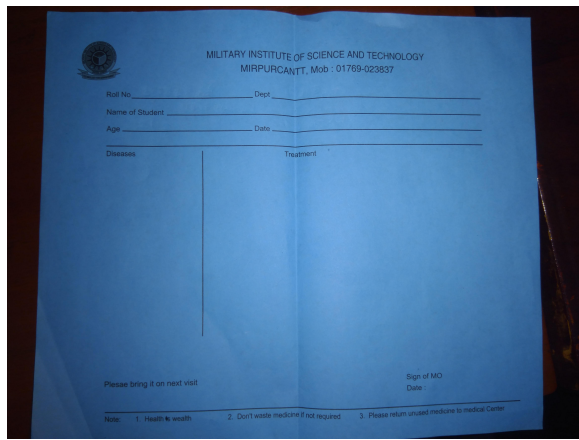


Fig. 4. Prescription of MIST Medical Center.

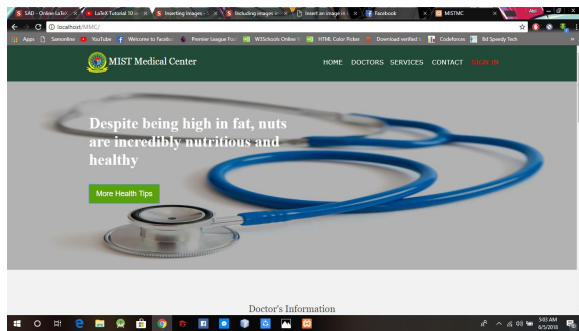


Fig. 5. Home Page of MIST Medical Center.

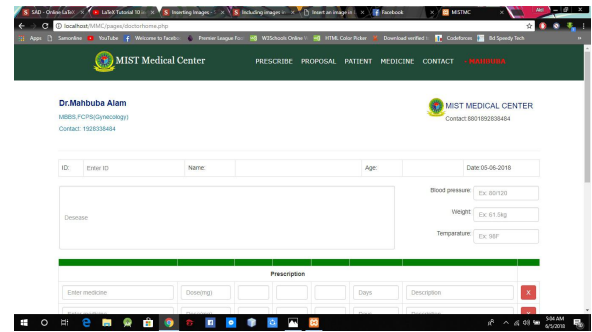


Fig. 6. Doctors page of MIST Medical Center.

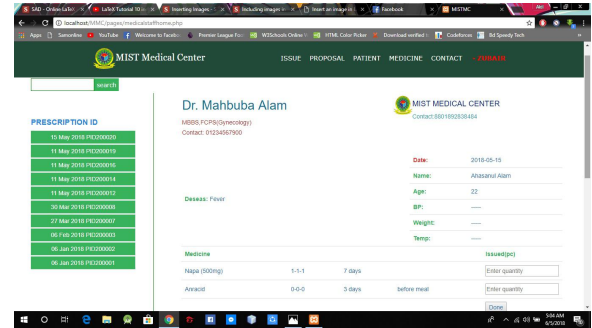


Fig. 7. Medical Staff page of MIST Medical Center.

xi. Procedure for various testing in the lab.

Zubair Hossain:

(Medical Assistant of MIST Medical Center)

- How the existing registers are maintained
- How the medicines are stored and distributed
- From where the medicines are collected
- Procedure followed for collecting medicine
- How the ambulance are contacted for emergency.

Yousuf Ahmed Antu (Patient), Mahmudul Hasan (Patient), Kamrul Hasan (Patient)

- How they come and report to the medical center
- What are difficulties in the procedure
- How they collect the medicine
- How they maintain their prescription
- How they do their various test recommended by doctor

Fig. 4 shows the Prescription of MIST Medical Center.

VIII. OUTCOME

Every day there are many students,staffs who visit our MIST Medical Center.Using this website they can easily communicate with Doctors,Medical staff as well as Course Coordinators or Instructors. They can generate Prescription.Medical staff can maintain the records of medicine and patients.Medical staff can issue medicine.Patients can have auto generated

prescription so that they have records all his/her previous prescription in database of this website.

IX. FUTURE PLAN

Future plan of this project is huge.We want to maintain not only the MIST Medical Center but also all the medical hospitals of our country in a single website based server.Patients can appoint their doctors via website.Cabin or ward book can be handled by this site.Managing the blood bank by this site.Emergency alert can be maintain by this site.

X. CONCLUSION

Maintaining and providing best health service is always a challenge for our country.To make it better and better we have to think more innovative idea.Our project can be one of this.This MIST Medical Center will help many Students,Staffs etc. and also for others who are related to this.