Dental College Medical Records Management System

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INTRODUCTION:

One of the most important challenges that The Dental College Students at Umm Al-Qura University face according to the students is not having an electronic medical file system. Moreover, students have to spend a long time searching for patients to fulfil the needs in the practical point system. For every level students need to fulfil certain number of cases according to the theoretical knowledge they achieve. For example, second year students usually perform cleaning, tooth impressions, etc. whereas final year students might need to perform several implants. Students need to perform charting for all their cases and need to find appropriate voluntary patients to perform on the treatments. The search process is a long process which takes a lot of time of students and sometimes it's difficult to get the right case to the correct student level.

PURPOSE:

The dental management system will provide a website for Umm Al-Qura University teaching hospital members as they have been struggling with manual paperwork and solve the problem of finding patients and alignment with students.
As computer science students at UQU we wanted to use the knowledge we have gained from our bachelor's degree form Computer Science College to return our appreciation to UQU by solving the challenge.

NOVELTY:

The Dental Teaching Hospital student face a lack of cases (patients) to sharp their skills and train on them, which educational plan indicate.
Our website provide a way for voluntary patients to register as voluntary for the hospital which save students time & effort finding patient which fit the need.

RESULTS:

The project is capable to:
1. Voluntary patients registration.
2. Follow up all electronic patients' files.
3. Coordinate appointments between students and voluntary patients.
4. The doctors approval of students work.

CHALLENGES:

1. Many similar systems are available online.
2. Inability to access and use the previous system (R4).
3. Many libraries to deal with for the first time.
4. Validation of voluntary patients information.
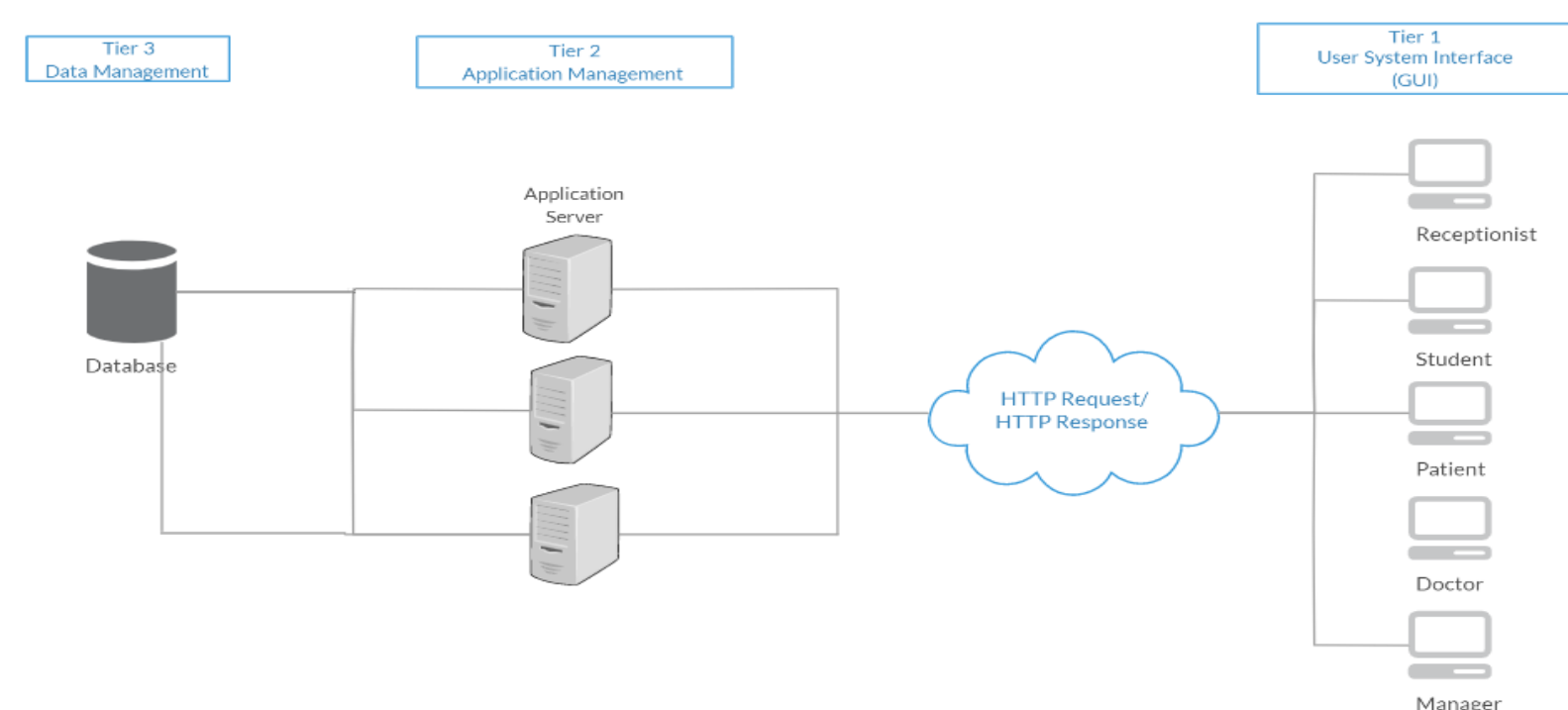5. Maintaining the security of the database.

SYSTEM TESTING:

The system was programmed, implemented and tested by potential default scenario due to the pandemic of the Coronavirus the testing process has not been on the real data.

OBJECTIVES:

1. System Ables to save all the patient record and access to patients records anytime.
2. System able to provide electronic charting.

3. System able to access and coordinate voluntary patients.
4. System able to check the available date and time to make appointment between student and voluntary patient.

MAJOR MODULES:

MATERIALS & TOOLS:

CONCLUSION:

The Dental Management System is a first step to change the methodology of medical paperwork in the Umm Al-Qura teaching hospital to save patient data as well as other important information. This system will help users manage dental information and ensure that all important data will be able to be used at any time. The service of patient, student alignment may be commercialized and used by other dental colleges in the kingdom as it is an challenge in various universities in the Kingdom.

FUTURE WORK:

In the future, we a plan to enhancements some function in our system to present the users of Teaching Dental Hospital system (DMS) with a better experience:
1. Use an offline library that tracks the student work on the patient file.
2. Develop mobile app for the system by another programming language.
3. Enable the patient to schedule his appointment or update his information and communicate with the receptionist directly.
4. Add tutorials and enhance learning by augmented reality to the system.