

PROJECT PROPOSAL

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1. Title of the project : Medical Records Management Software

2. Overview of the Project

- A software to keep medical records (diagnosis, reports, prescriptions etc.) of a patient. Records are categorized according to the particular branches of medicine which are General Medicine, Ophthalmology, General Surgery, Orthopaedics, Paediatrics, ENT (Ear, Nose and Throat), Obstetrics & Gynaecology, Psychiatry, Dermatology and Anaesthesiology.

3. Objectives of the Project

- Provide a software for the patients keep track of their medical records so that they do not have to carry all the reports in each and every visit to the doctor.
- Provide a software for the doctors to go through their patient's medical records history even if they have not treated that patient before.

4. The Need for the Project

- Patients have to carry reports, prescriptions etc. all the time they go to a doctor. This is not quite good in emergencies. Patients might miss some of the most critical reports as well as medicines when doctor ask questions.
- In case of emergencies, patient may not be conscious. So, that some family member need to tell doctor everything. But if there is a software which keeps medical records history, by looking at patient's records, doctor could come to conclusions easily without wasting precious time.
- Doctors make decisions based on the patient's descriptions. Whenever a patient miss some critical factors, there is a risk of doctor missing important facts.

5. Scope of the Project

- Users roles:
 - Administrator
 - Doctor
 - Patient
 - Lab Assistant
- Functionalities for the Administrator
 - Can view all the patients and their records.
 - Can vary the privileges for doctors belonging to different fields of specialization.
- Functionalities for Doctor
 - Can get themselves registered with specialization field.
 - Can view patient's medical records history in doctor's specialization filed.
 - Can remark particular record of the patient when needed.

- Functionalities for the Patient
 - Can get themselves registered to the system
 - Can view all the medical records associated with his/her account
 - Can add additional information regarding medicine.
 - Can record allergic medicine
 - Can choose other users as family members
 - If chosen as family member, him/her has access to selected user's medical records.
- Functionalities for the Lab Assistant
 - Can get themselves registers to the system
 - Can upload reports and other relevant data to the patient's account

6. Deliverables

- A web application for all the types of users.
- A mobile application for the patient.

7. Overview of Existing Systems and Technology

- ChartSpan[1] is one such application
 - i. <http://www.chartspan.com/>
- In ChartSpan patient always have to upload a picture of the record every time. In my system, since lab assistant is also a user, he/she can upload the record directly to patient's account. Patient also can upload pictures or documents whenever needed. Patient can send the records to the doctor beforehand[2]. But in my app, patient does not have to go through the sending process. Instead doctor can go through patient's profile and view records relevant to his specialization area.
- Technologies used:
 - i. HTML, JS, CSS for frontend
 - ii. PHP
- MyChart is another existing app, <https://itunes.apple.com/us/app/mychart/id382952264?mt=8>
- With MyChart patient can: Review test results, medications, immunization history, while staying in touch with patient's physician, manage patient's appointments, upload health and fitness data, including data from the Apple Health app and view and pay patient's bill [3].

8. References

- [1]ChartSpan. 2017. website. 06 02 2017. <<http://www.chartspan.com/>>.
- [2]ChartSpan. *ChartSpan - Your Medical Records and Health App*. 2016. 06 02 2017. <<https://itunes.apple.com/us/app/chartspan-your-medical-records/id896040502?mt=8>>.
- [3]Epic. *MyChart*. 2016. 06 02 2017. <<https://itunes.apple.com/us/app/mychart/id382952264?mt=8>>.
- Healthspek, LLC. *Healthspek - Personal Health Record & Family Health Record - Complete Medical Record for iPhone*. 2016. 06 02 2017. <<https://itunes.apple.com/us/app/healthspek-personal-health/id658319911?mt=8>>.