Benjamin Tate, Tanner Quesenberry, Ricky Ngo, Ivan Xa, and Andrea Dias
Group 10
04/30/2017
CS 361 -- Section 400
Weekly Update 3 for Project A
Due: 11:30 pm

What we accomplished this week:

- Held a call on 4/27 at 7pm Pacific Time on Google Hangouts
    - Discussed which of our ideas from last week we should actually implement
    - Discussed plans for the rest of the week and next week
- Held a call on 4/29 at 7pm PT on Google Hangouts
    - Worked on unstructured text with fit criteria
    - Polished what we have so far for the project
- Finished the functional and non-functional requirements of the project
- Since the project requirements are largely interconnected, we decided to work on the pieces together rather than divide them all up amongst ourselves.
- We came up with a definitive plan for what our system is going to do:
    - Additional Features:
        - Advertisement of EMR systems (EMR X can advertise to people using the site to use their system)
    - Expansion of search:
        - geographic location
        - most referrals coming in
        - quantity of records/patients
        - field/speciality (what oncologists, dermatology, etc. use)
        - cost of implementation
    - Now patients can also use this site, not just owners of the new hospital. Patients want to find a clinic that use the same EMR system for easier flow of information (or that they don't need to fill out another form)
    - EMR rating system that doctors or other health care providers can log into, have a type of verification to confirm that they are in fact working health care providers. The person logged in can rate their EMR that they use. The application will take the info and store in a database, and users of the site can read the reviews and see the number rating (sort of like Yelp).
- Did some research into what exactly EMRs are to better understand the goals of the system (see notes below)

Who completed or helped in each task:

- Ivan, Andrea, Ben, and Tanner were present for the meeting on 4/27
- Ivan, Ricky, Ben, and Andrea were present for the meeting on 4/29
- The work on the project was shared by all team members via Google Docs

Did you accomplish all that was planned?:

- Yes, we came up with a definitive plan for what our system is going to do.

What are your goals for next week?

- Contact customer for details on the following questions:
    - What kind of information does an EMR hold?
    - How are EMR systems incompatible with each other?
        - Encrypted, different formats, password protected, etc?
    - How are EMRs chosen?
        - Sales Reps? Reputation? Cost?
- Describe our updated plan for the system to the customer
- Collaborate to finish diagrams and drawings sections, and then the architecture sections

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Notes:

We will have to complete a national survey to get every hospital's or clinic's EMR system. Then we can implement the application.

Differences between electronic medical records, electronic health records, and personal health records:

Electronic Medical Records

Electronic medical records (EMRs) are ***digital versions of the paper charts*** in clinician offices, clinics, and hospitals. EMRs contain notes and information collected by and for the clinicians in that office, clinic, or hospital and are mostly used by providers for diagnosis and treatment. EMRs are more valuable than paper records because they enable providers to track data over time, identify patients for preventive visits and screenings, monitor patients, and improve healthcare quality.

Electronic Health Records

Electronic health records (EHRs) are built to go beyond standard clinical data collected in a provider's office and are inclusive of a broader view of a patient's care. EHRs contain information from ***all the clinicians involved in a patient's care*** and all authorized clinicians involved in a patient's care can access the information to provide care to that patient. EHRs also share information with other health care providers, such as laboratories and specialists. EHRs follow patients – to the specialist, the hospital, the nursing home, or even across the country.

Personal Health Records

Personal health records (PHRs) contain the same types of information as EHRs—diagnoses, medications, immunizations, family medical histories, and provider contact information—but are designed to be set up, accessed, and ***managed by patients***. Patients can use PHRs to maintain and manage their health information in a private, secure, and confidential environment. PHRs can include information from a variety of sources including clinicians, home monitoring devices, and patients themselves.

Email we sent to Customer:

Hi Dan,

We just met up to discuss how to expand the scope of your original proposal. We wanted to add in the following features/functionalities to the project.

- **What our system is going to do in addition to the original plan:**
    - **Additional Features:**
        - **Advertisement of EMR systems (EMR X can advertise to people using the site to use their system)**
    - **Expansion of search:**
        - **geographic location**
        - **most referrals coming in**
        - **quantity of records/patients**
        - **field/speciality (what oncologists, dermatology, etc. use)**
        - **cost of implementation**
    - **Patients can also use this site, not just owners of the new hospital. Patients want to find a clinic that use the same EMR system for easier flow of information (or that they don't need to fill out another form)**
    - **EMR rating system that doctors or other health care providers can log into, have a type of verification to confirm that they are in fact working health care providers. The person logged in can rate their EMR that they use. The application will take the info and store in a database, and users of the site can read the reviews and see the number rating (sort of like Yelp).**

Before we implement this system we will have to do a nationwide survey of every single private practice, clinics, hospital, etc. And we are assuming that most people are going to respond back honestly.

We also have some other questions in general:

- What kind of information does an EMR hold?
- How are EMR systems incompatible with each other?

    - Encrypted, different formats, password protected, etc?
- How are EMRs chosen?
    - Sales Reps? Reputation? Cost?

Can you elaborate on these above?

Thank you