UNIVERSITY HEALTHCARE DATABASE SYSTEM

Milestone: - Project Proposal

Group 14

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BACKGROUND INFORMATION

The need for well-organized, well-maintained, and user-friendly databases in the healthcare industry is greater than ever due to the quick development of technologies utilized in the industry and changes in healthcare operations following COVID-19.

The healthcare database system helps us the address the following issues:

- Affordability and timeliness of care
- Barriers to seeking healthcare
- How appropriate or necessary are the services
- Whether the healthcare facilities are adhering to best practices
- Availability of patient information to clinicians and other institutions
- Whether patient information is accessible to physicians and other institutions
- Whether the services are appropriate for the recognized healthcare issues
- The application of innovation in healthcare delivery, including financing medical facilities and other issues

A manual system for managing healthcare records cannot support the expansion of the healthcare industry, the rising demand for healthcare services, or the requirements of the healthcare regulatory framework.

Large amounts of records can be managed manually, however doing so is costly both administratively and monetarily for the following reasons:

1. Inadequate data and information security
2. Data and information about customers could be subject to illegal change.
3. A manual record management system is expensive to maintain.
4. Inadequate data access control

Our fundamental objective is to promote open science, responsible data exchange with universities, and open research. Its secondary goals are to advance research and public health as a whole and to improve the health of young people in the USA.

BUSINESS PROBLEM

When a student walks in, a doctor may not have the time to go through mountains of data. As a result, the information must be queried, filtered, and retrieved using the appropriate technology.

Universities across the United States are planning to create a database system to address the problem with the respective university's healthcare database, where students must fill out the student health history form, and the data is stored not only in the university's record but also the hospital based on the zip code that each student enters. As needed, students can seek medical attention and receive the necessary vaccinations based on their previous records.

If a student needs the assistance of medical professionals from other facilities, a database system enables information interchange to be in place. With this university healthcare database system, the centre will be able to retrieve easily, update, and report patient data, assisting medical professionals and doctors in providing prompt, accurate diagnoses.

BUSINESS REQUIREMENTS

1. The US Healthcare Department manages the database for all the universities in the United States.
2. Officials will need to log in with their respective university login credentials to access their University's Healthcare Database in addition to the details of the nearby healthcare service providers, depending on their location and zip code.
3. Universities can have access to healthcare service providers' details from the University Healthcare Database based on their location and zip code.
4. All the healthcare service providers within the location of the University will have access to those universities' databases to provide facilities when needed.
5. Each student will fill the forms with their respective University's student login credentials, which will then be stored in the database system.
6. With the help of the details provided by the students, vaccination providers can also set up how many vaccinations would be needed per university in the upcoming days/months.
7. A student can fill out multiple forms to report any condition or update in their medical history, which will be updated in the database system against their previous instance.
8. Health care providers who are no longer affiliated with the organization and whom the students may have named on the medical form will not have access to the database, demonstrating the various levels of security that this database system will have.