Final Project Proposal

CS4389 Data and Application Security

Topic

We will design and implement a system allowing secure medical data to be shared with an authorized third party, such as billing personnel or physicians, on behalf of a patient.

Upon authorization from a patient, such information would be accessible from the third-party's software, transmitted securely. The third-party would be unable to access any information without patient consent. The system would provide easy-to-access interfaces to authentication, authorization, and information retrieval for the various different actors.

Why This Project

This project demonstrates various different data and application security principles working on a real-world problem. The lack of communication between various physicians, patients, and other medical personnel is a significant problem. Our goal is to create an easy-to-use system that can allow various systems to share information, while still remaining secure.

Gwen brings experience in Electronic Medical Records and front-end development, and Jacob brings experience in web application programming.

Group Members

Gwen Eskridge and Jacob Gillespie

Delegated Tasks

- Conceptual Design - Gwen / Jacob
- Data Modeling - Gwen / Jacob
- Frontend Lead - Gwen
- Backend Lead - Jacob

Scholar Paper

We are not interested in writing a scholarly paper at the completion of our project, being already quite busy with other classes, work, and life.