**Problem Statement and Project Proposal**

**Abstract**

This project is a medical website called Medhisive. This website will bring patients and doctors closer together by allowing them to better perform their tasks, as well as fostering better communication between patients. Patients will be able to log into the website and, from there, they will be able to schedule appointments, view medical test results, and send notifications to their doctors. Doctors will be able to input a patient’s test results and send the result to the patient. Doctors will also be able to respond to their patients’ messages and view their scheduled appointments. This website will help improve the relationship between patients and their doctors.

**Description**

The Medhisive system will allow doctors to better serve their patients in the wake of an increased number of people signing up for health care. Since Obamacare was passed, more people have enrolled in health insurance and become doctors’ patients. The result is that doctors are now seeing more patients on average. If no processes are put in place to help doctors manage their patients, each patient will, on average, receive less time with their doctor. If that happens, the patients’ relationship with their doctor will suffer. To foster a better relationship between patients and their doctors, patients and doctors need a way of communicating with each other and managing their medical tasks.

The solution which I am proposing is a website where doctors and their patients can communicate with each other. Doctors can sign up for the website using their first name, last name, title, specialty, email, office street, address, office city, office state, username, and password. Patients can sign up for the website using their first name, last name, email, username, and password. Once a patient has registered for the website, he or she can search for a doctor by name and/or specialty. When a patient finds the doctor that they want to communicate with, they can request to be added to a doctor’s patient list by sending the specified doctor a patient request message. The doctor can view a list of patient requests and add the patients that he or she wants. Once a doctor has added a patient, the patient can now send messages to the doctor, review any medical tests, and schedule appointments with the doctor. The doctor can enter a patient’s test results and send it to the patient. They can also respond to any patient concerns.

The website will be displayed with a login page asking for username and password. When a doctor logs in, they see their doctor dashboard. The doctor’s dashboard consists of options: patient list, schedule, and messages. The patient list, when clicked, displays a list of patients which includes current patients and patient that have sent a patient request message to the doctor. The doctor will be able to search for patients based on their name. Next to each patient, there will be three options: send message, view patient test results, and send patient test results. Doctors will be able to send a message to the patient’s message inbox on the website. Doctors will also be able to enter a patient’s test results and send it to the patient’s test results inbox. The schedule dashboard option will allow doctors to view their list of scheduled appointments with patients. The messages dashboard option will allow doctors to view any messages that their patients have sent them, as well as send messages to their patients.

When a patient logs in with their username and password, they see their patient dashboard. The patient’s dashboard consists of five options: schedule appointment, doctor list, test results, schedule, and messages. When the schedule appointment option is clicked, the system displays a page that allows the patient to choose an appointment time with a doctor and then schedule an appointment with that doctor. When the doctor list is clicked, a list of doctors that have approve the patient is displayed. It is imperative that patients can be approved by more than one doctor because they might need to be a patient of several types of doctors, each with their own specialty. So, the patient should be able to see a list of all of their doctors. Beside each doctor’s name will be an option to send the doctor a message. When the test results option is clicked, a list of all the patient’s test results will be displayed. When a test result is clicked a list of the patient’s test results will be displayed. Each patient’s test results will include: normal range, actual result, date of the test, and a doctor’s note. The results will be displayed in table form for easy viewing. When the schedule option is clicked, patients can see a list their upcoming appointments that they have scheduled. The list will include appointment time, appointment place, and doctor. Finally, the message option will allow the patients to send messages to their doctors, and view any messages they have received from their doctors.

Both patients and doctors will provide an email when they register, so that they can optionally receive email notifications whenever they get inbox messages. This will ensure that patients will be aware of any changes just by checking their email, since patients most likely won’t log into the website on a regular basis.

This website will be able to connect patients and doctors in a variety of ways and allow patients and give doctors and patients more flexibility and ease with performing their tasks. For example, when a doctor receives a patient’s test results, instead of calling the patient or leaving the patient a phone message about the test results, the doctor can simply input the test results and send them to the patient’s test results inbox on the website. This allows the patient to have a long-term record of medical test results, whereas a phone call will not be recorded and will most likely be forgotten. Another benefit is that a patient can request an appointment time whenever he or she wants. Most doctors’ offices operate during business hours, so very often patients can only call during business hours to schedule an appointment. With this solution, the patient will be able to log into the website and schedule an appointment with any of their doctors. Since, they can access the website any time of day and any day of the week, they can log in at their own convenience and schedule their doctor appointments. Another advantage is that patients can get appointment reminders through their email, which is much more convenient than receiving a robot call from the doctor’s office. Finally, if a patient has symptoms and is concerned, he or she can send the doctor a message, and the doctor can analyze the symptoms and respond to the patient with a suggestion of what to do next, whether that is to schedule an appointment or perform some home remedies. This website will make doctors’ jobs easier and better able to serve their patients. The website will also improve the relationship between patients and doctors.