

# MLKMC Electronic Healthcare System

## Project Proposal

**Date:** 11-Sep-2010

**Project Manager:** Ryan Olson

**Team:** Tyler Bradovich, Cameron Harp, Matthew Kimber, Ryan Olson

**Sponsor:** Professor Fry

**Client:** Martin Luther King Memorial Clinic

**Website:** <http://kaizen.matthewkimber.com/>

## Group Information

Name: Kaizen Consulting

*Websites:*

- Client Site – <http://kaizen.matthewkimber.com>
- Project Management Site – <http://kaizen.unfuddle.com>

## Team Profiles

### **Ryan Olson**

*Assigned Jobs:*

- Project Manager
- Programmer
- Implementation Manager

*Bio:* Ryan has been working with computer development since high school. He has since worked as a Network Administrator and is currently self-employed developing Android applications. Strengths include: application development, UI design, management, deployment and SQL.

### **Matthew Kimber**

*Assigned Jobs:*

- Designer/Architect
- Programmer
- Implementation Manager
- Change Manager/Toolsmith/Webmaster

*Bio:* Matthew has worked off and on in the software industry beginning in 1999 when hired to develop web software using ASP and VB COM objects for the local newspaper. He currently works as a Network Administrator/Software Developer creating in-house applications and maintaining the computer infrastructure for a family owned business. Strengths include application design and architecture, implementation, deployment, as well as user experience and user interface design.

### **Tyler Bradovich**

*Assigned Jobs:*

- Quality Assurance
- Programmer
- Implementation Manager

*Bio:* Tyler began studying computer science at Weber State University in 2008. Prior to this he had little experience working with computers. Very quickly though, he discovered that he loved doing it and he excelled in his coursework. Tyler is a strong programmer, and also strong with UML, database design/queries and designing user interfaces.

### **Cameron Harp**

*Assigned Jobs:*

- Analyst/Customer Liaison
- Programmer
- Implementation Manager

*Bio:* Cameron has been working with computers for the last 3 years, when he became interested in the field of computer science. He has worked mainly with C++ but is trying to gain an

understanding of ASP.NET and databases to help his knowledge grow in computer science. His strengths include UML design, database design, management, and being a liaison/facilitator to the customer.

## Project Description

The Martin Luther King Memorial Clinic is a small medical clinic where the staff is currently using spreadsheets and paper documentation forms to track clinic and pharmacy inventory as well as patient records. This process is time consuming and error-prone. We propose to create an application that helps manage inventory, patient records, generate reports, and improve communication between doctors and nurses. With this application, the process of seeing each patient will be accelerated and improve the overall quality of service.

The application we propose to develop and implement will contain the following features:

### Provided Services:

- Patient Services:
  - Easy patient search - Able to search by various qualifications (name, patient number, etc) to find the specific patient.
  - Patient history - Can review information from previous exams/visits.
  - Record vitals (initial exam by desk nurse) - Record patients height, weight, blood pressure, heart rate, temperature, reason for visit, and any symptoms observed or reported by the patient.
  - Record diagnosis (doctor) - Once the doctor finishes the exam, they are able to easily add the diagnosis to the patient history.
  - Issue prescriptions (doctor) - Print off a prescription slip or send the prescription to the pharmacy for fulfillment.

- Bill patients - Maintain a basic ledger of payments received and generate receipts for patients. This will also record visits by patients with medical insurance so that money may be recuperated from the government.
- Reports:
  - Create reports that allow the administrators to report insurance claims to the government.
  - The number of patients seen each day, month, and year.
  - View statistics for inventory usage.
- Pharmacy:
  - Inventory management - View current inventory and order new medications.

Typical Customer Description/Tasks:

- Nurse/Desk nurse:
  - Input vitals, patient search, billing, and create new patient profiles.
  - If the desk clerk is not a nurse:
    - Look up patient or enter a new patient into the system, and get records ready for the nurse and doctor.
- Doctor:
  - Input diagnosis, choose prescriptions (if necessary), look at patient history and input any patient notes.
- Pharmacy Tech:
  - Billing for prescriptions, inventory reports and control inventory.