Background

MedAdherence is a healthcare informatics company with a cloud based solution that allows patients to manage their healthcare through their mobile phones. As part of their ongoing expansion of the product, they are interested in developing a tablet (iPad or Android) based application that allows healthcare workers to view and manage patients on a tablet device. For this project we are looking at design the application and building a prototype as a preliminary step before building a working application. The prototype needs to demonstrate how the tablet capabilities can help support the functional needs while demonstrating the user interface for our targeted customers.

MedAdherence Architecture

The MedAdherence product is called CarePlanManager™ and is hosted in the cloud at a HIPAA compliant data center. The architecture is LAMP (Linux, Apache, MySQL and PHP 5.0). The application incorporates some AJAX and JAVA.

Note: We have no specific technical requirements for the tablet application as long as the production version will be able to interface to the hosted service. The current version of, CarePlanManager does already work in any browser. We will be able to take advantage of some of the existing applications on the tablet as necessary to prevent reinventing the wheel.

Project Description

We would like to design and build a prototype of a tablet based application that will allow a healthcare professional to perform the following:

1. Login to CarePlanManager secure website
2. Provide Tablet user with these capabilities
   - Enter a new patient
   - Search Existing Patients
   - Send Message to patient
   - Exception Report – Identifies patients that need attention
   - Drill down into individual patient dashboard
   - Add Patient Survey Data

The prototype will not be required to perform the analysis or programming for the above features. It will need to demonstrate how the user interacts with the tablet and what the expected results will be.
Expected Deliverables

- **Weeks 1-5**
  - MedAdherence team will work jointly with students on defining the exact business and functional requirements
  - Technical Design – student will define their proposed architecture for the front end

- **Weeks 6-9**
  - Basic UI – MedAdherence will provide detailed UI support after initial UI is defined
  - Test Plan – MedAdherence will work with team to develop test plan to test the prototype

- **Weeks 10-15**
  - Build Prototype – tablet application without backend integration
  - Test Prototype