OpenEHS Software Project Management Plan

**Project Name:** OpenEHS

**Date:** 1/21/11

**Revision: Version** 1.0

**Project Managers:** Matthew Kimber & Austyn Mahoney  
**Team:** Dahln Farnes, Cameron Harp, Peter Lister, JD Russell, Kevin Russon, Brian SneddonSoftware Project Management Plan

# Project Summary

|  |  |
| --- | --- |
| Project Name | OpenEHS |
| Customer Name(s) | Korle Bu Teaching Hospital & Martin Luther King Memorial Clinic |
| Project Leader(s) | Austyn Mahoney & Matthew Kimber |
| Business Manager | Richard Fry |
| Project Start Date | Jan 4, 2011 |
| Project End Date | April 20, 2011 |
| Development Platform | ASP .NET |

## Project Objectives and Scope

Korle Bu, the primary health facility in Ghana, currently uses paper processes for managing information. Some forms of this information are patient records, billing, and the management of the inventory of drugs and supplies.

We propose to create an Electronic Healthcare System (EHS) that maintains a limited medical history of each patient, manages an inventory of pharmaceuticals, generates reports for administrators and improves communication between physicians, nurses, and staff. With this system, the process of seeing each patient will be accelerated, communication errors reduced and the overall quality of service to patients will be improved.

## Abbreviations and Definitions

## Project and Customer Contact Personnel

|  |  |  |
| --- | --- | --- |
| Name | **Roles** | **Contact Information** |
| Austyn Mahoney | Project Manager / Software Engineer | Email: [austynmahoney@gmail.com](mailto:austynmahoney@gmail.com)  Skype: austynmahoney |
| JD Russell | Developer / Test Engineer | E-mail: jdrusse@gmail.com  Skype: jdrusse |
| Kevin Russon | Developer / Build & Release Engineer | E-mail: kevin.russon@gmail.com  Skype: kevinrusson |
| Matthew Kimber | Project Manager / Software Engineer | Email: matthew.kimber@gmail.com  Skype: matthewkimber |
| Peter Litster | Product Information Engineer / Team Webmaster | Email: [aholibamah@gmail.com](mailto:aholibamah@gmail.com)  Skype: N/A |
| Dahln Farnes | Software Engineer | E-mail: dfarnes@gmail.com  Skype: N/A |
| Brian Sneddon | Software Engineer | E-mail: brianghana@gmail.com  Skype: N/A |
| Cameron Harp | Software Engineer/Test Engineer | E-mail: charp5257@gmail.com  Skype: cameron-harp |

Commitments Made to the Customer

|  |  |  |
| --- | --- | --- |
| Seq No | Milestone Date | Stage:  Deliverables |
| 1 |  | Requirements:  Revised Requirements Document  Project Schedule |
| 2 |  | Design Changes (if applicable):  Includes changes to database, programming language choices, UI |
| 3 |  | Implementation:  Acceptance Test Plan (especially Beta) |
| 4 |  | Acceptance Test & Delivery:  Acceptance Test  Final Code  Users Manual?  Training? |

## Assumptions Made while Planning

<List here any assumptions that the schedule depends upon>

# Project Planning

## Standard Process Followed

Deliverable due dates and development stages (Req., Design, Code) may only be changed with a signed approval from both the customer and management (Professor Fry). Alternatively, low priority features may be dropped in order to achieve a deadline, with signed approval from the customer and management. Upon approval, the Requirements document and/or Schedule/Status Report shall be modified to reflect changes.

Due dates or task re-assignments within a development phase (e.g., Requirements, Design, Code, Test) do not require signatures from the customer or management. However, the status report reflecting the change must indicate that a change in schedule has occurred and why.

## Work Breakdown Structure

Please see our Microsoft Project Document -> ***OpenEHS - Project Plan.mpp***

## Development Environment

Development will be done in Visual Studio 2010 in ASP .NET using C# as our programming language. We will be using the ASP .NET MVC3 (model-view-controller 3) and Entity frameworks. Object Relation Mapping (ORM) will be used extensively to map objects from the database into their respective objects. TortoiseSVN will be used to connect to our subversion repository.

### Hardware Requirements

|  |  |
| --- | --- |
| **Hardware Requirement** | **Date Required** |
| Server Hardware running Windows Server 2003+ (preferable 2008 R2) | March 6th, 2011 |
| Client Machines in each section of the hospital where the software will be implemented | March 6th, 2011 |
| Network connectivity from Server to all client machines that will be running OpenEHS | March 6th, 2011 |

### Software and Tools Requirements

|  |  |
| --- | --- |
| **Software/Tool Requirement** | **Date Required** |
| ASP .NET Server running on Windows Server | March 6th, 2011 |
| Firefox 3.x (4.x when it is released) on all client machines | March 6th, 2011 |
| MySQL Community Server | March 6th, 2011 |

## Training Plan

|  |  |  |
| --- | --- | --- |
| **Training Area:**  **Technical, Business, or Process:** | **Duration** | **Team Member Names** |
| All team members will train people as directed by Rich Fry during Ghana trip | 2 weeks | All scheduled to be in Ghana |

## Inspections

|  |  |
| --- | --- |
| Review Item  (Deliverable) | Type of Review  (Full = 2-person inspection) |
| Requirements | Full |
| Software Project Mgmt Plan | Full |
| Design | Full |
| *Software Code:*  Presentation Tier  Business Tier  Data Tier  Database Script | Full |
| Integration/System Test | Full |
| Acceptance Test | Full |
| Users Manual | Single person review |

## Risk Management Plan

Note: Impact = 1-10, 10=Catastrophe; Probability = %

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Risk | Prob | Impact | Prob x Impact=  Priority | Mitigation Plan |
| 1 | Server hardware not up to spec, or has not been installed yet | 25 | 6 | 150 | Yes |
| 2 | Client machines are not set up properly or at all | 25 | 4 | 100 | Yes |
| 3 | Key team members get sick | 15 | 3 | 45 | Yes |
| 4 | Network connectivity issues during integration testing/training sessions | 75 | 7 | 525 | Yes |
| 5 | ASP.NET or MySQL software not working as intended | 5 | 8 | 40 | Yes |

# Project Tracking

## Measurement Plan

|  |  |
| --- | --- |
| Metric to be Collected | Unit of Measurement |
| Size | Lines of Code |
| Effort | Person hours |
| Bugs | Tickets still open |
| Schedule | Elapsed Time |

## Reporting Status

This table describes the form and frequency of the required types of communications.

|  |  |  |
| --- | --- | --- |
|  | To Management | To Customer |
| Status Report | Status Report due Wednesdays | Every two weeks |
| Schedule/Feature Changes | Minor -Status Report  Major – Signature Req’d | Major – Signature Req’d |
| SPMP Changes | Status Report | Status Report |
| Milestone Reports | Status Report | Status Report |
| Issues requiring clarification | Monday/Wednesdays in class | When necessary |

## Customer Communication

Communication with customer will be performed by Rich Fry and various team members as needed. Our team website at http://kaizen.matthewkimber.com will have a place for client communication, while email will be used for more pressing issues.

# Project Team

## Roles & Responsibilities

### Project Lead Engineer and Managers

* Project Management Plan (the team-wide public version)
* Anything that the rest of the team can't get done.
* Coordination of all the team resources.
* Representative at Graded Team Meetings.
* Delegates tasks to others, as necessary.

### Product Information Engineer and Webmaster

* Web Site management for all updated files.
* Provide a mechanism for collecting and broadcasting PPRs.
* Schedules and coordinates all communication with the client
* On-line help
* Software User's Manual
* Product packaging (media and hard copy)
* Team Documentation, as delegated by Team Leads.

### Build/Release Engineer

* Weekly Project Builds
* Weekly Software Build Release Notes (describes features and bug fixes included in each build, installation instructions, etc.)
* Product Errata Sheet
* Team Documentation, as delegated by Team Leads.

### Test Engineers

* Project Problem Reports (write new ones, close fixed ones, etc.).
* Software Test Plan
* Perform final Software Qualification Test
* Team Documentation, as delegated by Team Leads.

### Software Engineers

* Programs, Implements, and unit tests all modules.

## Team Contact Information

* See section 1.3

## Team Communication

Google Groups listserv: ***CS4750\_Ghana@googlegroups.com***

* When do mandatory meetings occur?
* Each class period on the syllabus is a mandatory meeting. Any time you will miss please inform the team via the Google Groups listserv
* How will people be notified of special meetings or requests?
* Google Groups listserv
* How will work be distributed and shared between team members?
* Escalation Process:
* If someone cannot meet a commitment, how/when should they notify the group?
* If a task cannot be finished by the time specified, update the ticket and notify the team via the listserv so the necessary assistance can be given to get the task back on track. Make sure your team lead (Austyn or Matt) knows of any issues your incur while performing your duties.
* Under what conditions will someone be dismissed from the group?
* If a team member is constantly behind on their work and does not notify the team and will not accept any kind of help they may be removed from the team. This will happen after a meeting with Rich and multiple emails/conversations explaining what needs to be done to continue membership.

# Appendix: Work Breakdown Status (WBS) Report

Please refer to our project plan: **OpenEHS - Project Plan.mpp**