Dept of Computer Science and Information Systems

BSc Final Year Project Form (2015/2016)

1. Proposal

The student should complete parts 1(a), 1(b) and 1(c) below, and then agree the maximum pocket values with the supervisor and put these in part 2(a) below. An electronic version of this form should be uploaded to the Final Year Project page on Moodle no later than Monday 2th November 2015.

(a) Student details

Name: Email:	BSc Project Type 3 (BUCI026S6) BSc Computing

(b) Project details

Title: Patient Records Management System
Objectives: ▪ Reduce the time consumed to store and maintain data ▪ Produce an Electronic Medical Record that replace manual patient records search.
Description: ▪ Design a patient records Management System for general health clinic in Ivory Coast (West Africa). ▪ Refer to project description. Filename: Project_Proposal_akomen01 for more details

Title: Patient Records Management System
Method: ▪ **Use Lean thinking and Agile Methodology based on delivery of a Minimum Usable Product and user behaviour to create success.**
Work plan: **Please Refer to project description. Filename: Project_Proposal_akomen01 for more details**
College equipment required: DCSIS Computer

Project Proposal

1. Description of the project

The aim of this project is to design a patient record Management System for use by health clinics in the Ivory Coast (Africa). The purpose of this project is to enable the Heath Centre to record their patient's personal and confidential details onto a system, lacking in Africa as currently all data is recorded manually.

2. Project Aim and Objectives

2.1   Aim

The system required will be as follows:

▪ Produce an Electronic Medical Record that will replace manual practices using:

  ◦ Back-End Tool: **MySQL**

  ◦ Font-End Tool: **PHP**

2.2 Objectives

The System will reduce the time taken to store and maintain vast amounts of data, as good medical care relies on good patient records keeping.

3. Project Approach

3.1 Design a relational database

The conceptual design can be divided into two parts:

- **The data model**

The first stage is to create an Entity-Relational Diagram (ERD).

- **The process model**

The second stage is to create a **Functional Decomposition Diagram** (FDD) and **Data Flow Diagram** (DFD).

3.2 Website Design

The website design implementation will be accomplished using the college facilities, but in Africa possibly **XAMPP**, which contains **MySQL**, **PHP** and **Perl** will be used. This will be embedded in **HTML** to create interactive forms.

4. Scope

4.1 In Scope

The elements included in the scope are the patient records, listed below:
- Patient history.

- Appointments and meetings with doctors or nurses.

- Diagnostics.

- Prescription records.

- Admission and discharge information for in-patients.

- Billing records.

- Ward records.

4.2   Out of Scope

At this stage the elements to be excluded from the project are:
- Staff records (salaries, etc.).

- Pharmacy records.

5. Deliverables and /or Desired Outcomes

The deliverables produced by this project are:
- Provide an internal and external health service information sharing protocol to hospital staff.

- Improve the accuracy and currency of information, monitor and evaluate the health service provision, and eliminate unnecessary duplication of patient records.

- Store or retrieve patient information for functional purposes.

- Ensure privacy and confidentiality of patient information by introducing access control of information to unauthorized persons.

5.1   Change Management Considerations

The new computerised system will:
- Update the current paper-based hospital system into an electronic and dynamic system that meets the ability of health care professionals to store relevant patient data on each visit. This can help improve the quality of care provided.

- Need an administrator to register and manage the users of the system.

5.2   Constraints

The constraints to consider for this project are as follows:
- The limited time available to deliver the project and the system outcome evaluation.

- The system acceptance.

6. Work Plan

Month	Oct 2015				Nov 2015				Dec 2015				Jan 2016				Feb 2016				Mars 2016				April 2016			
Week	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Project Proposal	▓	▓	▓	▓																								
Project Planning	▓	▓	▓	▓	▓	▓	▓	▓																				
Project Initiation	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓																		
Project Research							▓	▓	▓	▓	▓	▓	▓															
System Design										▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓								
System Testing																	▓	▓	▓	▓								
Report writing							▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓								

Gantt chart of the development of Patient Records Management System