SCHOOL OF COMPUTING & INFORMATION TECHNOLOGY

Programming 1 – Individual Project (30%)

BROCKLINE MEDICAL CENTRE EMERGENCY PATIENT MANAGEMENT SYSTEM – UE3

A private health institution, Brockline Medical Centre (BMC), at any given day and time has a long line of patients waiting in its emergency department. The triage nurses manning the department wish to keep better track of those waiting in line and so its head nurse, Angela Dawson, has solicited your assistance with developing an emergency patient management system. The development is to take place on a phased basis with specific requirements for each phase.

Part 4

Given: March 30, 2015
Due: April 10, 2015
Weighting: 10%

Part 1 of the project required you to determine the level of the patients and the severity of their emergency. Part 2 of the project asked you to determine the referral cost. Part 3 required you to process an unlimited number of records and determine, amongst other things, the referral cost for each patient. **Part 4 requires the use of arrays**.

Provide an attractive menu to the user with basic menu options such as the one below:

BMC Patient Management System
→ Enter patient data
→ Display Total Cost Report
→ Determine Patient Occurrence and Cost

The requirements for each menu option are described below. Use attractive layouts for the display of information.

Enter Patient Data

- Process an **unlimited number of patients, up to a maximum of fifteen (15)**.
- Accept from the user the patient number and referral cost. A patient number can be entered more than once to represent that the patient has visited the emergency department more than once. Use arrays to store the data entered.

Display Total Cost Amount

- List each patient number and its associated referral cost.
- Tally the number of patient records entered and display this number as well as the total referral cost amount.

Determine Patient Occurrence and Cost

- Accept a patient number.
- Determine and output how many times this patient has visited the emergency department and the total referral cost for that particular patient.
- If the patient is not found, display an appropriate message.

Required:

i. The pseudocode which correctly expresses the logic as described above.
ii. A C program which implements the logic in your design.

Mark Scheme

Deliverable	**Marks**	**Notes**
1. Pseudocode (accuracy of logic)	20	
2. C program (fully documented – purpose of program, useful comments throughout, useful variable names)	20	
3. Overall Presentation (attractiveness of layout, timely delivery, neatness, readability, ability to explain design if required)	8	
4. Declaration of Authorship Submission	2	
Total	**50**	