

# Computer Science – Criteria A

## DEFINING THE PROBLEM:

My Client is XXX Hospital, a multi-speciality hospital located in Karelibaug suburb, Vadodara. It is owned by Dr X and Dr Y. Commencing operations from 2002, the hospital has grown exponentially and has made a name in this locality. After its expansion five years ago, the hospital has seen rapid growth in the context of its scale and operations. There is an in-house pharmacy store that requires software that needs to store:

- Medicine data
- Supplier data
- Customer data
- Transaction details and invoice

The software currently used is unnecessarily complex and has several bugs. Due to increasing medicine sales, the medical store staff is not able to record and tally each sale efficiently. The client wants an integrated and feasible platform for the medical store. Another requirement for the programme is simplicity as it will be used by semi-skilled staff. It should also be interactive so that the staff can remember to enter all the relevant details at the time of purchase.

Hence I will have to create a **Medicine Stock Management System** for ease of the medical staff which accurately records entries for medicines, suppliers and customers and makes it easier for the medical store workers to maintain records and display reports for important information like sales and stocks. For this, I called the owners to understand their requirements and had a face-to-face meeting to finalize the product design and functionality.

Word Count:231 words

## RATIONALE FOR PROPOSED SOLUTION:

The main aim of the proposed solution is to simplify medicine transactions for the staff and thereby reduce staffing requirements in the medical store. The hospital uses Windows OS and hence I will make a web application for Windows. This is useful as the changes in the database entry can be seen instantly whenever the user logs in. Additionally, the app will be

much faster to operate and will increase efficiency in the long run. It is essential that I make the app as interactive as possible.

The app will be divided into two subparts: first is the login page for employee details and login instructions and the second will be the dashboard platform which consists of all the details. Front-end coding will be done using PHP, HTML and JavaScript and back-end development will be done by MySQL.

I chose to continue with HTML because it is an ideal platform for web applications and will assist me to make a plausible application. I also ensured that the GUI is much more improved as it is quite easy to manoeuvre and has all the functionality in one place.

Word Count: 187 words

### **SUCCESS CRITERIA:**

After discussing with the owners, the success criteria formed is as follows:

- **Creating a functional and secure Login Page using PDO exception handling**
- **Adding and deleting new medicines and suppliers to the relevant databases for storing medicines, supplier and customer data**
- **Viewing all medicine and suppliers to check records with the actual stock levels**
- **Recording transactions and generating accurate invoices displaying all the relevant information**
- **Creating Sales, Stock, Suppliers and Customers Reports**
- **Accurately managing stock levels in databases by calculating the close quantities from medicines purchased and sold**
- **Providing timely Expiry Date Alerts for medicines**

Word count:83 words