Criterion A – Planning

**Defining the Problem**

My client **Mr. Bhanwar Yadav** has long been running “Hotel Sinjara” in Jaipur. The hotel serves the people visiting the nearby area of Sodala, Ajmer Road. He currently employees a handful of people who help him run this hotel.

At present, his hotel maintains a physical leger to keep track of all daily transactions. This *“manual system”* of keeping all the records has now become *“tedious and inadequate”.* He often *“loses”* his legers in which he records the transactions. His customers have stopped visiting the store because of the *“long time that it takes to record transactions”.*

It has become increasingly hard for Mr. Yadav to manage bookings in his hotel. Since the hotel is rather *“huge”*, he does not know the exact numbers of booked rooms, and therefore, does not what room to provide. Furthermore, the employee records are also not maintained well. The employees are frequent victims to, *“payroll errors”.* I have received this information after interviewing my client – attached in **Appendix-1**.

Since I am a student of computer science and customer of the Hotel, Mr. Yadav has requested me to provide a technical solution in order to revamp the functioning of his store. He has requested me for a *“user friendly software”* which his employees and him can use with ease. This would help him maintain his records as well as organize his bookings, ultimately making the hotel more efficient and effective. **(Word Count: 222)**

**Rationale for Solution**

After spending a day at Mr. Yadav’s hotel, I realized that the solution had to be “personalized for the hotel,” and “easy to learn and use”. I suggested implementing a computer software on an unutilized computer in the store. Mr. Yadav was pleased with the idea, and he urged me to create and, “interactive and intuitive” software for the hotel.

I decided to create the software using **JAVA** for the actual application and **MySQL** for data storage. I decided to use **NetBeans** to create the application for several reasons: it’s free of cost and easy to install, forms can be created simply by dragging and dropping, GUIs can be developed and updated easily, it provided immediate bug detection. My software revolutionizes the operations of the shop. I aim to create comprehensive, yet simple inventory and employee management systems. I will use MySQL through **phpMyAdmin**, where I will store the data and the records. This is efficient since phpMyAdmin allows for control of the system through the web. This backend, will be separated from the rest of the software. The relational database system will solve the data integrity and redundancy issues. Additionally, the use of a JAVA application and web-based version of MySQL is that it allows for portability of the software. **(Word Count: 228)**

**Success Criterion**

1. The application will provide a login page which allow administrators and employees to login to their accounts.
2. Home Page that contains Book Now Button
3. Home Page that contains Add new customer option.
4. A data entry form which will allow the employees/administrators to add new customers.
5. A data entry form which will allow the employees/administrators to add new booking
6. A data entry form that will allow the administrator to add employees.
7. The application will provide a view page that will allow administrators, employees to view different Bookings.
8. The application will provide a view page that will allow administrators, employees to view different customers.
9. The application will provide a view page that will allow administrators, employees to view different rooms.
10. The application will provide a view page that will allow administrators to view different employees.
11. A button which will allow administrators and employees to change their passwords.
12. This application will provide set new password page.
13. The application will be able to search for customers using customer’s name.
14. The application will be able to search for bookings using booking id.
15. The application will be able to search for employees using employee’s name.
16. The application will be able to search and view for available rooms.
17. Logout Button to log out current user and start a new session.

**Criterion A Word Count: 699 words**