Criterion A: Planning

Defining the problem

XX (client) is an employee of the XX of DBA, a multinational bank. He is in charge of booking the requests for appointments for several meeting rooms for all the employees at DBA. The current method of booking a meeting room involves the use of a central point of a help desk. Employees make a call to this help desk, which is attended to by one of XX's team members. The team maintains an excel sheet containing the details of all the bookings. Once a call is received they check the sheet and based on the availability, the booking is confirmed to the requester. XX found this method to be very inefficient and time consuming. XX wants a more competent automated method to manage the booking requests. Hence, I decided to develop a programming solution using Java to make a more efficient method of booking appointments at DBA. The adviser that I have chosen is my uncle, XX. He is a senior system analyst at HSBC. We conversed through emails, phone calls, and face-to-face meetings.

The proposed solution should take care of the issues such as:

1. Currently, the telephone number has to be manned, so the booking process is available to employees only during office hours. By building an online application, the service can be made available 24X7.
2. The program will reduce resource wastage, as the request process is now performed by the requestor.
3. Currently, cancellations of booked rooms are missed out and so room resources are wasted in many instances. The new system will allow easy cancellation of a booking.
4. Useful reports of usage of rooms can be generated and in future could use for department charging if needed.

Justification for the proposed product

NetBeans was used as the integrated development environment (IDE) because of the simplicity of its GUI design-tool, which may be used to prototype and design Swing GUIs.

I decided to use Java over any other programming language because:

- It is the language I am most well acquainted with ("Advantages of Java").
- It is object-oriented, hence providing me with the advantages of modularity ("Advantages of Java").
- Java has the ability to move easily from one computer system to another, and since it is platform independent, it can run programs on many different systems ("Advantages of Java").
- Java maintains multithreaded programs. This means that the application can run more than several tasks at the same time.

- Java requires no licensing or payment and hence, is free to use.

Success Criteria

- User can perform a new reservation for any given employee.
- User can modify a current reservation for any given employee.
- User can cancel a current reservation for any given employee.
- User can successfully exit the system.
- User can demonstrate an error if a selected date and time is already taken.

Word count: 408