

## Criterion A: Planning

Client: Usman Arif

Advisor: Hafiz Ghazali bin Muhammad Amri

The transcript of the interview held to consult with my client is Appendix 1 (First Interview).

### **Defining the problem**

My cousin, Usman Arif, who currently lives in England runs his own business called Masterclass Cricket Academy where he is a professional personal coach to pupils who want to get better at cricket. He coaches beginners and professionals alike, as he himself is a national level player. I was talking to him and I learnt that his business is growing rapidly and he still keeps count of all his pupils manually in Word and Excel files. He himself claimed that this was inefficient and disturbing his work. Currently he has over 70 pupils, and the number is growing. Since he cannot note down everything, he has to rely on memory, which is bad for his business. The current system he uses to hold data can be seen in Appendix 4 (Client's Current System). He also manually calls his clients one week prior as a confirmation for their coaching session, which he also had to arrange manually. The more his business grows, the more unfeasible this manual method becomes.

Overall, he seemed to be worried that he wasn't able to hold data on his clients which could be quite unsafe for him, as was made evident by him in the interview. Hence, I thought it fit to make him my client for this project and make him a program which would take care of all of these problems. I will try and address the worries he has, especially about his company growing beyond his management, by writing a program that can take care of this.

### **Rationale for proposed solution**

I decided that a simple yet efficient multi-window Java program would be best for my client. This program will be a database which he can interact with. Functionality is key, my client has lots of information which he needs to hold for every single one of his pupils. On top of that he needs to be able to send automated emails to confirm the coaching sessions with his clients. This will make his work much easier and allow him to be more organised. I think utilising the features of object-oriented programming will allow me to create very specific functionality for each pupil. This will allow him to hold as much data as he requires and also be able to sort, search and manipulate it. I can directly make changes to different variables meaning that different properties of my client's pupils can be easily changed for every object, which can further be held in data structures. Since his work is mobile and he isn't always online, I will code my program as a desktop application as he uses his laptop for all his work. To store and back up the data, I will use a MySQL database, which my client will also have to install. Since some of the data is also quite private, my client has also asked specifically for a password protected application so that personal details do not get altered or recorded.

Overall this will make his work more efficient and he will not log everything manually. His application will be platform independent as I am using Java and the GUI will be easy to use and aesthetically pleasing too. SQL will allow him to back up data and also maintain security. Moreover, SQL is sensible to use as it is allowing for direct access to tables and rows in your database, whereas in a word file it would be less efficient as you would have to go through the entire document.

## Success Criteria

Here I have tried to meet the requirements set out by my client in the interview.

1. My client will be able to store as much necessary information on their pupils as they want. Some of these fields will be:
  - Name
  - Age
  - DOB
  - Phone Number
  - Emergency Phone Number
  - Email
  - Forthcoming Coaching Session
  - Payment Plan
  - Cricket Experience
  - Cricket Aspirations
  - Current Cricketing Level
  - Batting Hand
  - Medical Information
  - Other Information
2. All of the data in these fields can be altered, deleted, and correspondingly be updated on SQL server. Error checks are in place.
3. All information will be sorted to make the application organised and searching ability will allow my client to find any pupil by simply searching any field.
4. The database is password protected and login details can be retrieved if lost or forgotten.
5. Automated E-mails can be sent to pupils to confirm their next coaching session. If a pupil emails my client back to make a change, he can make the changes in the program and therefore stay in quick and easy correspondence.
6. For the current week, all sessions with all different clients will be listed and then can be ticked off as they are completed.
7. If there is an emergency, there will be an emergency form which will be filled out for the specific pupil. This form will be stored on the database and entirely editable to contain information like:
  - Time of injury
  - Injured area
  - Who to inform
  - What to do
  - First Aid requirements
8. There will also be specific information for my client and his company, for example his estimated monthly income and other company information.
9. My client will also be able to store documents of any type in the database and also be able to open and access them
10. Using the SQL Database, all of this will be backed up into the hardware.

**Word Count:** 594