**Criterion A: Planning**

**Defining the problem:**

My client Mister Dayanand Sharma is a French teacher. He runs a tuition centre where he teaches French to students, and he helps the students in the preparation for French diplomas and certificate courses; he also conducts classes for the curriculum designed for CBSE, IGCSE, and IB boards.

Currently, With reference to **Appendix-1,** he is maintaining a manual system. He keeps a student list to keep track of the students who have opted for different courses of French diplomas. He has to keep a record of the student results as well.

However, many students have started to join his classes, and since Mr. Dayanand doesn't have a system, he frequently witnesses complications with the records. Moreover, his Work has become complicated since it takes much time for him to maintain and find the manual documents, and sometimes he is unable to find old records of the students since everything is written in notebooks and sometimes he loses track of the students and the courses they are enrolled into. This problem is creating much chaos for him and is affecting the productivity of the tuition centre.

As I was a part of this centre, so my teacher insisted me to develop a system for him. His requirement was to develop a system that has more interactivity and should be easy to learn.

Therefore I decided to create a system which will have easy to use interface, like forms to feed data and also will be easy to develop.

**WORD COUNT: 250**

**Rationale for a proposed solution:**

After directly observing the client site, I decided to develop a system that should have GUI-based capabilities which will then support easy usability.

I have chosen object-oriented programming, as it is a good solution for Mr. Sharma’s system as implementing the GUI functionality will become easy and at the same time, extensibility will be achieved with less effort. I chose Python as a medium because it has a straightforward syntax and is not very much complicated. Python codes can be easily written and executed much more rapidly as compared to other programming languages.

Moreover, Python has excellent libraries which provide a good amount of inbuilt methods which saves time during the development phase. Therefore I find Python a good programming language to develop the software for my client. As a backend support, MySQL is used through workbench because of its easy availability and graphical interface which made my work easy.

**WORD COUNT: 147**

**Success criteria for the IA:**

1. A login form with 2 radio buttons to login one for the main admin and one for the second user
2. Submit button click event is imposing:
   * Verification of ID and password is done
   * If either of the fields is kept blank appropriate error message is generated
3. The course tab is used to manage the course details
4. The student tab is used to manage the student details
5. The marks tab is used to manage the mark details
6. The view student result tab is used to display the result on the basis of the student’s Roll

No.

1. Save Button should add the data when clicked
2. For superuser, the Delete button should erase the data when clicked
3. Junior user cannot perform the delete action.
4. The update button will make any changes in the data when clicked
5. Clear Button will hide all the data and present blank entry fields when clicked
6. Search button should fetch and show the details to the user when it is clicked
7. Logout button should log out the user from the application
8. Exit button will close the application