Criterion E: Evaluation

Product Evaluation¹:

1. A data entry form that adds a student with their specific subject selection.

Met. Students with their details can be entered in from the student entry form for the admin, configured into various slots and their subject combinations can be configured with the radio buttons.

2. A data entry for marking them present or absent based on user input.

Met. Using radio buttons, the teachers can select the student as present or absent through the Attendance Form. They select the date first, and then mark students off by selecting the required slot.

3. A daily user generatable report which shows the attendance of students during all lectures within a day.

Met. After date selection of the report, a report showing the lectures for which students were present and absent are shown. Students with irregularities and absent markings are given red demarcations.

4. Any entry or modification of any data of the system is password protected.

Met. A sign in is required wherein only the administrator has the rights to add/delete students, teachers or make reports. Teachers require user IDs and passwords to record attendance.

5. Administrator has the rights to add/delete any data on the general database with regards to students and teachers.

Met. Only the administrator can access forms that allow them to add/delete students/teachers from dropdown lists that show students/teachers within the system.

6. The ability to view teacher and student details.

Met. Details of teachers and students are made in separate tables which can be viewed only by the administrator.

¹ Refer Appendix-B for Second Interview

7. An algorithm which validates and verifies user input.

Met. The inputs for all forms validate data by checking the type of data entered within the database as the data requires appropriate types. Failure of which shows an error. Verification is done in the removal of students/teachers wherein the user is asked to confirm their removal.

8. The solution must have an interface wherein the teacher can record the attendance by just mouse clicking.

Met. The interface allows teachers to click on buttons to mark students absent/present.

9. A digital manual giving instructions on how to operate the system.

Not met. Due to time constraints an electronic manual was not made.

The product works in accordance to the success criteria except without a manual to guide users.

Recommendations for Further Development

Minor Improvements

- The need for reordering of student and teacher data. As it is a school, the coordinator requires the ability to reorder data in addition to adding/deleting data.
- Putting the names of the functions/destinations on buttons instead of "Click here"
- Authorized way of creation of accounts. Unauthorized manipulation from external users just making an account can be avoided.
- Automating student Roll Number and Teacher ID generation instead of manual entries. With auto-increment functions for both, there's prevention of human error during entries.

Major Improvements

- Complete exception handling: Whilst present, exception handling is not implemented throughout the solution and hence incorrect/inappropriate data can cause the application to crash. With complete exception handling, appropriate error messages would be shown.
- A visually better-looking interface: The entire solution was utilitarian and thus, adding elements like logos or backdrops were negated towards functionality. The Labels can be redesigned for entries to give better confirmations and appear when required.

Extensibility

The client was satisfied with the final product. Post training, the client gave feedback on the

product's extensibility. We concluded on the following modifications:

• Can be optimized to run on smartphones as they're commonly used by teachers, given how

school computers in each classroom are slow.

• Allowing late attendees by giving the Coordinator attendance recording abilities

Word Count: 598