Criterion E: Evaluation

Evaluation of the Product

1. The system should be able to read from Excel spreadsheets.
    a. Succeeded
        i. An import button in the new orders screen is used to choose the excel file through a file chooser.
        ii. The values shown in the table match the values of the import excel file.
2. The system should be able to generate new Excel spreadsheets.
    a. Succeeded
        i. An export button and print button is used to allow the client to generate an excel file and select a location to store it.
        ii. The values shown in the generated excel report match the values calculated and displayed in the table/textfield.
3. The system should reduce distance calculation time for the client.
    a. Succeeded
        i. The entire process for distance calculation takes one minute for the client.
        ii. The values of the distances between two places match the distances in the distance calculator matrix.
4. The system should encrypt the data and protect it from being accessed by any unauthorised source.
    a. Succeeded
        i. A login screen is used that takes username and password as input. It checks if these values match the values in the login details database and only then allows access to the system thereby restricting unauthorised access.
        ii. A password field is also used that encrypts the input by the user.
5. The system should be accessible by all employees across various platforms.
    a. Partially Succeeded
        i. The product works MacOS and Windows devices but not on Linux, Ubuntu devices etc.
        ii. Since the client uses a Windows device, the product runs without any errors.

6. The client should be able to generate reports such as order with max quantity, order with min quantity the database accordingly.
    a. Succeeded
        i. The system has buttons such as view order with maximum quantity, minimum quantity etc. that sorts the values in database tables and displays the appropriate details to the client.
7. Warning messages should be displayed in case of incorrect data entry.
    a. Succeeded
        i. Pop up messages displayed to the user that notifies him to recheck the inputted values and try again when incorrect data is entered.
8. The system should be in sync with the databases.
    a. Succeeded
        i. The system displays the latest updated values for order details and employee details fetched from the database in the appropriate text fields/tables when the user selects an option from the drop-down menu/clicks a button.
9. GUI should be user friendly by having buttons for navigation buttons, drop down menu, tables etc.
    a. Succeeded
        i. The system has large buttons with legible text in the custom font and colour desired by the client.
        ii. The login, logout and import new order buttons are used to navigate between screens.

Black Box Testing

By doing this test, it is acknowledged that the product has been evaluated for usability, features, and user interface (Appendix E). The client found the product helpful and understood its main objective even though they had no previous knowledge of it. Addionationally, he also recommended making some modifications to the application's features.

Recommendation for future development of the Product

1. A button can be added that calculates the shortest distance between the origin destination and final destination while following the route that was imported from the Excel file. This can be made possible by mapping the existing places in the matrix and using Dijkstra's algorithm. This will enable the client to save on time and fuel costs while transporting orders when the shortest route is taken.
2. In addition to generating excel reports, a feature can be added that allows the client to update existing order details directly through the system by enabling him to edit values displayed in the text fields. Another extension could be to allow the client to create a new record directly by inputting details in the text field. These values should get stored in the database and should be available for future reference.

Word Count: 499