Criterion A: Planning

1. Description of Scenario

My client, Adele Liao, is the VPHR of our JA Company Program, and she is required to track the attendance and overtime of members and calculate their wages accordingly. Adele had previously mentioned having trouble with calculating the wages of the members. When I interviewed her, she stated that she didn't have much experience calculating wages and she thought that the way the company wages were structured was a bit confusing. She keeps all the attendance records in Google Sheets, and wants help with calculating the amount of money each person will be walking away with at the end of the program. Adele said that she previously tried using Google Sheets to calculate the wages, but found it too difficult because she only has experience with record-keeping in Google Sheets, and none with calculations.

I began to think of a solution for the problems faced by Adele and came up with the idea of creating a database program to store information, one that was easy-to-use and could be presented during meetings.

To solve these issues, I held a second interview with Adele and suggested creating a program that could calculate the wages automatically from the data given as well as having a website that could be accessed by her since she has little familiarity with programming. Adele said she wanted the program to display all the members' names, their hours tracked, and their wages as a percentage of the total and a dollar amount. She said she had all the information in a spreadsheet already and she wanted to upload the spreadsheet into the program and have it do all the calculations for her. The interviews are documented in the **Appendix**.

My advisor for this project will be Anushka, the VP of Finance of the company and she will guide me on how the wages will be calculated.

2. Rationale for Proposed Product

The rationale for the proposed product is that it is in a format that Adele is familiar with and can decrease Adele's workload. By using the product, Adele will be able to calculate member wages and display them for the company.

In our interview, Adele emphasized that she wanted the website and data to be easily understandable to the members of company when she presents the information to them. To ensure this, the program will include a page specifically for presenting the data to the company, which will be organized by decreasing wage percentage. It will also include a page to display the wages of a specific member.

I will be using Flask, Jinja, and HTML to create the webpages because:
-   They are considered industry standards for web development
-   Jinja can be used to create dynamic pages in HTML
-   Flask's microweb framework is intuitive to me

I will be using Python and SQL for the backend development because:
-   I have previous experience in Python and SQLite
-   Python can extract data from .csv files
-   SQL is optimal for managing databases and easy to implement

3. Success Criteria

1. Program will display a title and webpage upon starting
2. Program will display a functioning website navigation bar upon start
3. Program will allow user to upload .csv files upon running
4. Program will display all information in the .csv files in a table
5. After uploading files, displays file names in the file input box
6. Program will display error messages when data has not been uploaded
7. Program will allow user to search for member wages
8. Program can accurately calculate wages

9. Program can output projected wages when given profit

10. Database follows first and second normalization forms

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