

## Description of Scenario

My client is **Luciana Maddalozzo**, who is a finance manager at a high-tech company in the San Francisco Bay Area. An aspect of being a finance manager is that she needs to control the budget. To do this, Luciana uses Excel to estimate the forecast of the budget by the end of the quarter. **(Lines 29-32)** Having done this same task many times, she has realized that there are many issues with doing all the work on excel. The first one was that this process is very manual. **(Line 29)** As she said, she needs to submit a forecast four times for each quarter. **(Lines 70-71)** When doing this, she needs to find out how much she is going to spend on expenses. These include expenses like headcount, discretionary, controllable, and outsource expenses. **(Lines 62-66)** All these numbers that need to be inserted bring up the issue of this task being time-consuming and very prone to human error as one mistake has a chain effect and can ruin future calculations. **(Lines 31-232)** Her last problem was that there was little visibility of her data which made it difficult to have a good estimation of her forecast of her numbers. **(Lines 29-31)** With all the numbers on her spreadsheet, it was difficult to see the costs of things and compare one forecast with the other.

*Line numbers reference the Appendix A transcript*

## Rational

When consulting my client, I suggested two possible solutions, which were either an application specifically designed for her computer or an online website. I decided to do a website because of certain limitations with an application. The first limitation was that everything would be stored on her work computer meaning if it were stolen or damaged, all her data would be lost. Along with that, creating an app on her computer would mean her coworkers would not be able to see the forecasts or use the app for themselves. This website will have all the requirements that she asked for. The first thing that this website needs is the ability to show a breakdown of the expenses spent in previous quarters, such as headcount. These expenses need to be grouped under four types, headcount, discretionary, controllable and outsource expenses. **(Lines 119-124)** In order to make certain things more visible, the website needs to be able to calculate a forecast based on the information inserted about the expenses. Once this number is calculated, it needs to show a visual which compares the forecast, the actuals, which is the number gotten for that month, and the budget. **(Lines 133-134)** The last requirement was that she needs to be able to compare the forecasts from the current quarter to previous quarters. **(Lines 135-136)** This means that this website needs to incorporate a large database to store data from other quarters. All this information needs to be private since the public should not see this. This website needs a login page, one for an admin and another for a viewer. The admin would be Luciana, or someone who has permission and oversees the inserting of numbers to be calculated. The other login might be for someone like her boss, who is not in charge of doing the forecast but needs to be able to see what the forecast says.

Coding Language	Reason
MySQL	MySQL is going to be used since it allows me to create large, highspeed databases to store information that can be updated.
PHP	PHP will be used because it works well with MySQL and is a very stable and reliable language.
HTML	HTML will be used to create tables and other visual things on pages and works well with PHP.
CSS	CSS will be used to design the page and make it look professional.

*Line numbers reference the Appendix A transcript*

#### Success Criteria

1. Needs to have one login screen for the admins who insert the numbers into the website and for coworkers who need to view the forecasts for themselves
2. Needs to be able to register accounts for coworkers
3. The system will only allow valid authenticated logins otherwise it would throw up an error.
4. Allow the users to reset their passwords even when they are not signed in.
5. Needs to redirect admins and coworkers to separate landing pages
6. Needs to allow admins and coworkers to change their passwords.
7. Needs to allow users to select a specific admin's data to view using search bars.
8. Needs to show a visual for the breakdown for previous and current quarter expenses
9. Needs to group the visual breakdown under the four types, headcount, discretionary, controllable, and outsource expenses. **(Lines 119-124)**.
10. Needs to be able to visually compare the forecast, the actuals, and the budget for the quarters in one graph.
11. Needs to calculate an accurate forecast for each quarter.
12. Needs to allow the viewer to see the forecasts or data from different admins other than just my client.
13. Needs to be able to store information of forecasts and display them.
14. Needs to allow users to view data in a table format that can be organized in different ways.
15. Allow the users to give feedback for the web page.
16. Needs to be able to register accounts for admins
17. Needs to have a form to insert the time frame for the quarters for each year.
18. Needs to have a form to insert information, like actuals, the budget, and different types of expenses.
19. Needs to allow admins to update information like actuals, budgets, and different types of expenses
20. Needs to allow admins to delete data
21. Needs to save information about the admins and coworkers, like email, first name, and last name.
22. Needs to encrypt the passwords and store them in a database.
23. Needs to save the calculated number for the forecast for each quarter in a database.

*Number of words: 540*