## **Defining the Problem:**

The client enjoys investing in different business and companies in order to gain profit and to support businesses that he believes in.

In order for the client to be confident in investing in certain companies, he researches and does multiple calculations based on different values, such as cash flow, weighted average cost of capital, net present value, etc. This research then allows him to evaluate whether the business is meeting certain standards to later be profitable and whether or not it would be a good idea to invest in that business. Due to the fact that there are multiple factors in order to evaluate the later success of a particular organization, it takes the client a lot of time doing all of these calculations. As well as that, the client is looking at multiple businesses, so when going over different companies, he has trouble and spends extra time storing and managing the financial information for each business. Due to both of these factors, the client is spending and wasting a great amount of time and energy that is not needed to be spent.

After hearing and understanding all these issues, I proposed a solution, to my client, of an automated system that could manage and perform the financial calculations necessary based on the research that the client inputs.

Word Count: 218

## **The Rationale for the Proposed Solution:**

This application is beneficial for the client because it allows them to obtain more accurate financial information for investments. Furthermore, it would be beneficial because it would allow the client to spend less time manually calculating for all the financial information of a business. This would provide the client with a better opportunity to evaluate and invest in more businesses, and thus, allow them to gain more profit. Another way this program helps the client is by providing them with a management tool in order to make managing different financial information easier. Finally, this program would be beneficial because it would reduce the time required to maintain and compare potential investments.

Based on the multiple calculations and the variety of information that the application would have to manage, I will utilize Java and OOP (Object Oriented Programming) in order to tackle the complexity of the problem with the proper organization as well as to allow for the system to be reusable.

Word Count: 161

## **Success Criteria:**

- 1. Database must be only accessible by login information, and each new login should add data to a table.
- 2. System must be able to calculate for the Weighted Average Cost of Capital of a business.
- 3. System must be able to calculate for the Risk of a business based on different risk factors.
- 4. System must be able to calculate for the Working Capital of a business.
- 5. Feature to generate a balance sheet with a business's liabilities and assets.
- 6. System must be able to calculate the profits of a business for certain times.
- 7. Feature a method to calculate and display the annual cash flow of a business.

- 8. Feature a method for generating the Net Present Value based on financial information given by the user.
- 9. Feature a method to store all this financial information in a database table.
- 10. Feature a way for the user to update given financial information on a business.
- 11. Feature a method for resetting password if the user forgets their login password.
- 12. Provide a user-friendly interface that allows for meaningful errors when the user enters incorrect information.
- 13. Feature a display of all the previous businesses that were submitted into the account in alphabetical order.
- 14. Allow the user to enter a certain time, and present the business that was already logged with the best net present value based on that amount.