Criterion A

Problem Statement:

The firm UOI (Union and Oji Interpack Ltd) is taking extra amounts of unneeded time to manually calculate production costs and production time.

Description of scenario:

The firm, Union and Oji Interpack Ltd is facing an issue where they are facing inefficient business practices where production costs must be manually calculated every time in addition to production time and storage volume. This has led to the firm having issues with some incorrect calculation of costs as well as inefficient time and space management, leading to incorrect calculation of profits and purchase orders being completed late. This results in time waste and inefficient business practices. In addition to this, the firm also faces standardization issues with communication of data between employees within the financing department. I volunteered to develop a program using java that organizes the firms information regarding their products and purchase orders such that it allows the firm to efficiently calculate all the information it needs as well as standardize communication between the financing department employees.

Rationale for proposed product:

A computer program is a good approach towards a solution to the issue that the firm has due to its nature in being able to easily standardize across the financing department as well as not requiring a large amount of employee training to operate properly in comparison to manual financing calculations. Because of this, a computer program which would allow for easy calculations of production cost and production time as well as standardization throughout the finance department would be a good solution to the issue.

The programming language java is a good choice to be using for this project as it is a programming language that the IT department at the firm is already familiar with, although they code mainly in C++. This means that by programming this project in Java, employees in the IT department will find it easier to fix the program if any issues come up, as well as find it easier to explain other employees to use it, in other words, to make the training process easier.

Success Criteria:

- UI is simple and easy to use
- Successfully implement algorithms that help the firm calculate total production cost, time, and storage volume of product
- Successfully implement a function in the program that helps firm keep track of when purchase orders are received and when they are the planned completion date is

- Program must have a functional option that allows user to edit information on a product model or a purchase order
- Program must have a functional option that allows user to search for a specific product in the database
- Program must be able to sort through the array of products/purchase orders in the database such that it displays them in order of product model.

Word Count: 312