Criterion A: Planning

Defining the problem

My client is Kimmico Mehta, who is the founder and owner of a restaurant called Minus 18 degrees located in Baner, Pune. The problems faced by my client in reference to the restaurant are four fold. Firstly, it is hard to gain customer information such as email ID, since customers rarely fill the feedback form given at the end of the meal. Thus, Kimmico Mehta is unable to send emails to customers to make them aware of the latest modifications, thereby decreasing customer loyalty. Secondly, it seems like the customers these days are becoming very health conscious and want to know the ingredients that go into each dish. However, the waiters are not trained to learn so much information, therefore leading to the dissatisfaction of customers. Thirdly, customers desire to know how their dish would look like before placing an order to ensure they made the correct choice. Lastly, customers would also like to be aware of their total bill amount while ordering instead of at the end of the meal. All these problems show that there is a communication gap between the customers and the chef, which the waiting staff is not being able to carry out efficiently. Kimmico Mehta has consulted one of her IB students to help her out and provide a solution.

(216 words)

Rationale for the proposed solution

I thought that the best solution for these problems was to create a software connected to a database which would represent as a menu for the customers. To gain entry into the software the customers would need to provide their details such

as email-id. This information would then be stored on an external database, which could be used to send emails when necessary. I chose Microsoft Office Access as the external database since issues such as data redundancy and data integrity would be easier to manage in a flat file database.

Once customers gain access into the menu, they would be able to get more information about the ingredients in each dish and would also be able to see pictures of what the dish would look like. This would help customers make a more informed decision. If the customers like the details presented regarding the dish, they would then order it and the software would produce a bill. This bill would then get printed and be sent to the chef. I thought of using JAVA language and Swing Graphical User Interface since I am most familiar with JAVA and it runs on multiple platforms. I chose Swing for implementation since it follows the Model-View-Controller paradigm which provides a more flexible user interface. (212 words)

Stating success criteria

- Make certain that the details of customers get stored in Microsoft Office
 Access as records in the flat file database.
- Allow Kimmico Mehta to add email ID's or search for certain ID's in the database to ensure a greater audience is reached.
- 3. Ensure that there are presence checks that certify customers cannot go forward without entering certain personal details such as email-id.
- Guarantee that the correct table number is entered so the waiting staff knows which table to deliver to.
- 5. Develop an attractive, user-friendly interface so that customers can easily place an order.

- 6. Ensure that the ingredients are present for every dish a customer chooses.
- 7. Ensure a picture is alongside every dish to certify maximum customer knowledge.
- 8. Develop a bill after an order is placed which shows the total amount to pay.