

## Criterion A: Planning

### **Inventory, Order and Recipe Management System**

#### **The Problem:**

My client is a small company called Lean Meal co. that delivers healthy, calorie counted meals to customers. Mr. Jay Krishnannunny said that their transactions range from buying the raw ingredients for the meals, cooking them and delivering them. They have hired 2 chefs who work in a small kitchen. Since they are not well educated, they find it difficult to calculate the needs of the inventory and dishes that are ordered. The owners have to be present in the kitchen at all times to take care of this.

Currently, the raw materials are ordered in advance and once the inventory is about to get over, they reorder the ingredients. Sometimes, the chef uses up all the ingredients and there might not be enough for the next meal. They find it difficult to keep a track of all their inventory and determine how much of one ingredient they have used in a day. They also need record of orders. They need a system to do this for them.

Since everything is done manually, it is tedious and difficult to keep track of when an ingredient was ordered for their inventory and at what time a customer had ordered with all their unique specifications. There might also be a few mistakes which are not affordable and is very inefficient. Since the company has many recipes, they need a database of recipes. The owners want to give more responsibility to the chefs because they need to interfere in other aspects of the business. They also said that as the company grows, it gets harder to keep a track of the inventory and keep track of orders.

#### **Rationale for Proposed Solution:**

I aim at making a program that will help keep a track of the inventory. Since the majority of ingredients are repeated, it can notify them if the one ingredient is running out. It will also calculate the total amount of inventory used based on the amount of orders made. I will be providing them with one platform which will handle all their needs inventory management, order tracking and a recipe database.

To make this software, I will use Python coding because I am familiar with the basics so using it will be faster to carry on with prior knowledge than to learn a new language because this will enable me to deliver the product to the clients on time. There also are many resources available so I can learn the language well. The code is readable and maintainable. This is good because I am a beginner and making changes, improving and fixing bugs will be easier. Using Python will be more efficient because of its simplicity and clear readable syntax. In order to store and analyze this data, I will need to use a database. I will use django as my database since it is widely used and the communication between the two platforms is convenient.

### **Criteria for Success:**

- Make handling the inventory easier by making data entry forms
- Keep detailed records of the inventory by having tables with all its properties
- Keep detailed records of the orders tables with all its properties
- Maintain a list of recipes with tables
- Reduce need for human interference automatic update of inventory stock based on orders placed
- Provisions for making specifications for particular dish ordered is available through a form
- Details of the proportion of ingredients for each dish to be made available in the system
- Enable easy searching of inventory, recipes and orders by providing a search field

Word count: 593