

End of the Year Project - Design Document

Stage 1 - User Centered Design

- 1) Who uses it?
 - Restaurants, households, small people.
- 2) Why does he use it?
 - Because he needs to restock products and materials.
- 3) What is he trying to accomplish when he uses it?
 - Keep track of what needs replenishing.
 - And receive clear directions how to actually order the items through given links to those items from various stores.
 - (Offer to place the order for them or to give a list that the user can take and go buy in person).
- 4) What functions does your software provide to the user that help him achieve his goal(s)?
 - Ability to add new products to the list.
 - Ability to find the cheapest price of a product from a few specific stores and give the customer the option about which stores to place the order from.
 - Notify users to create new orders when stock is critically low.
- 5) How does he use it?
 - With a user interface.
- 6) What steps does he go through in order to achieve his goal(s)?
 - He puts his request in, and responds based on what he receives.
 - Inputs current stock levels (whenever you change a product).
 - Adds products to the list of things that he wants to purchase.
- 7) What are the workflows he progresses through when using it?
 - Initially:
 - Input current stock.
 - And whether he needs more of a given product or what's to change what's being ordered.

- Then:
 - Keep track of the shopping list as it gets updated.
 - When low, give the customer a notification and then send them an email with websites to restock from.

Stage 2 - Data Model (OO Principles)

- 1) What data will your system deal with to meet the user's needs?
 - a) Classes: Main class that runs the orders and interacts with the user and the stores in which people are ordering from to find out info about them and their products.
 - b) One class for going online and finding a link for the exact item the customer desires.
 - c) One class for actually buying and ordering (which is accomplished through sending an email to the user with websites to order the food from).
 - d) Class for the different instances of items.
- 2) What data structures should you use to store and access your data?
 - a) Sets, Maps, Lists.