**Assignment** – Prepare a homemade vegetable soup dinner for a family of four that will warm them during the winter. The soup must satisfy as many of the restrictions and preferences of each family member as possible.

Mom - loves carrots and broccoli, but doesn’t care for lima beans. She’s on a low fat diet. She likes chicken stock as a base for soup.

Dad - eats anything except cauliflower, but especially likes corn. He likes his soups to have a tomato base and to include some kind of meat, with a preference for beef cubes. He has high blood pressure.

Daughter - is a pescetarian. She likes peas, carrots, broccoli, cauliflower, beets, tomatoes, onion, green pepper, garlic, and kidney beans in her soup. She must have beans in her soup, or she won’t eat it. She really likes Black Beluga caviar in soup too.

Son - hates beans of any kind, but has a crush on a girl at school named Libby. Because of this, he will make the single exception of Libby’s brand green beans. He’ll eat celery when part of a dish, but not alone. He really likes peas, onions, and potatoes.

**Design** – …*To a degree, the design document could be seen a part of your plan on what you will do, but I tend to look at the design document as providing more of a technical overview...* *the picture that describes the end result…*

Our vegetable soup will include some form of each of the following: carrots, broccoli, corn, green beans, tomatoes, peas, green pepper, onion, garlic, and shrimp. Caviar may be included too, if the cost is reasonable.

The green beans will be Libby’s brand.

Q: If Libby’s brand cannot be located, should they be omitted?

Q: If Libby’s brand cannot be located, should they be substituted with another brand?

The soup base will be low sodium tomato sauce. All items will be low sodium where possible.

The cooking process will require: a stove, can opener, large kettle, and a wooden spoon. The soup will cook until the vegetables are softened and thoroughly hot.

**Plan** – *… includes assumptions, justifications, and the like necessary for meeting the customer's requirements… a milestone-level view of how that design will get accomplished…*

1) find a store that carries Libby’s brand vegetables. ConAgra has a search for some Libby’s products at <http://www.conagrafoods.com/consumer/storelocator/search.jsp>. Seneca has a web page for Consumer Affairs at <http://consumer.senecafoods.com/mail/mailcons.cfm>. They may also be of assistance with the search.

2) purchase all the food items from that store for convenience.

Since fresh vegetables aren’t available during winter here, we will use canned carrots, broccoli, corn, green beans, tomatoes, and peas. Tomato sauce will be used for the soup base. Each item will be low sodium if possible. The onion and green pepper will be bought fresh and cut. The garlic will be added in the form of garlic powder. No salt will be added due to Dad’s high blood pressure.

We will buy precooked, shelled shrimp to save time and effort. The inclusion of shrimp meets Dad’s desire for meat, while fitting Daughter’s pescetarian diet and being more cost efficient than the caviar.

3) We will take the items to the cooking location.

4) Each container will be opened and the contents poured into the kettle. The kettle will be placed on the stove eye.

5) The stove eye will be turned on to high initially, then later reduced to medium, then low.

6) Vegetables will be tested for consistency and temperature until done.

**Implementation** – *step-by-step list of what to do which could be used to reproduce the work, possibly by someone who isn’t familiar with the design or plan.*

We went to White’s Grocery, 1735 State of Franklin, to purchase the items. They did not stock the Libby’s brand green beans, so a web search led us to purchase a 15 oz can from AULSuperStore.com. The cooking process was delayed three days while we waited for delivery.

At White’s, we purchased 15 oz cans of: low sodium carrots, corn, peas, and tomato sauce; regular broccoli and diced tomatoes. We purchased one large onion and one medium green pepper. A one pound bag of medium sized frozen, cooked, peeled shrimp was also purchased. We had been told that garlic powder was already available at the cooking location, so none was purchased.

Once all of the items were obtained, we traveled to 1060 West Addison Street, Chicago, ILto cook the soup. At the cooking location we had the person who answered the door take us to the kitchen. In the kitchen, we got the kettle out of the cabinet on the left, directly beside the stove. The kettle was dusty, so we washed it with hot water and detergent before starting to cook.

Once the kettle was clean, we opened the vegetable cans in this order: carrots, broccoli, corn, green beans, diced tomatoes, tomato sauce and peas. They were poured in to the kettle in the same order. A cutting board was found in the right side cabinet. The onion and green pepper were diced on the cutting board in to .25 sq. in. portions. These were then added to the kettle. The shrimp had to be defrosted by placing in the sink under cool running water. Once they were defrosted, they too were added to the kettle. Finally, the garlic powder was added.

The soup was kept on high heat until it came to a boil, then the heat was reduced to medium. After 20 minutes on medium, the heat was reduced to low. The soup was allowed to simmer on low. Every five minutes the vegetables were tested for consistency. After an additional 30 minutes, the soup was done. The complete cooking time was just under one hour.

***Weaknesses in the design - Assumptions? Conflicts? Omissions?***

***Weaknesses in the plan - Assumptions? Conflicts? Omissions?***

***Weaknesses in the implementation - Assumptions? Conflicts? Omissions?***