16\_1018 Meeting with Dr. Asperin

**Participants:**

Dr. Asperin, NDSU

Gage Askegard

Ryan Nelson

**What was discussed:**

Dr. Asperin teaches a restaurant operations course. One part of that course involves determining the menu price of a meal. These are the steps it involves:

1. Students develop a recipe
   1. Choose Ingredients
   2. Determine amounts of ingredients
   3. Determine number of servings recipe makes
2. Students determine cost of raw ingredients
   1. Calculate number of servings needed
   2. Calculate amount of ingredients needed in purchasable units
   3. Choose supplier (grocery store)
   4. Choose brand of the ingredient to purchase
   5. Summation of cost of all ingredients
3. Student determines the menu price of the recipe / meal
   1. Determine cost per customer serving
   2. Determine percentage of profit / overhead
   3. Calculate menu price for the menu item
   4. Summation of all menu items selected to determine cost of full meal

Currently, Dr. Asperin uses an excel spreadsheet to manually enter all values. There are some common issues her students run into:

* Not using the correct units for ingredients for purchase. Some ingredients are sold by the pound, some by the fluid ounce. Getting this wrong means you don’t have enough for making the meal.
* Recipes often call for smaller ingredient amounts, such as teaspoon or tablespoon. Need to convert that into standard purchase units (tsp 🡪 fluid ounces)

Some other thoughts she had

* Way to switch out ingredients, such as if someone has a gluten allergy, what ingredients are removed and what are added
* How does that change the overall menu price for the meal (upcharge)

How it ties to our project

* This is a second part to a larger food database project. Our part of the project is developing an app for nutrition tracking, accessing the nutrition information of the databse. Part 2 would be creating a restaurant ingredient costing desktop application which performs the features listed above. It could use the same database, once costs were added to items. This project could be developed by next semester’s group of students to tie into our project.
* Our project won’t change scope, except for designing the database to be able to be extended by future classes.

Her ideas for our project

* She likes the dashboard icon and how it presents a snapshot of your current health
* She would like to see the circle be divided into categories of where those calories came from (fats, protein, carbohydrates, etc.)