Discussion of changes made to the original concept and why these were made (ie. response to feedback, further research or implementation difficulties).

At first, we have found that there are two design directions of our inspiration – food trucks, including designing for customers and designing for food merchants. Both of those are good ideas, but we have considered that there are too many apps or programs designed for customers, and we have wanted to design a program specially, so we have intended to design a web for food merchants in order to provide some suggestions about where is suitable to put a food truck. After we have made sure that our web is designed for food merchants, our concept of web has had little changing until now. However, there are some functions changed during developing our program.

First of all, we have gotten significant feedback about how to show the food trucks after displaying our concept in the contact of week 6. Before that, we had intended to show the locations of all food trucks on the map with the same icons. However, we have realized that some other food trucks which are marked by the types of food should be appearing around the selected location during the presentation of our concept. It's convenient for the food merchants to compare locations with each other or think about if this location is suitable for them. Especially, the food merchants can consider if there is some same food or matched food near the selected location. For example, if one merchant wants to place a food truck of fried chicken in a particular place. It's better if there is a food truck that sells cokes and beer nearby. However, this merchant should avoid a pizza truck nearby, because both pizza and fried chicken almost belong to staple food. Thus, we use some icons which can represent separately different types of food to show the distribution of food trucks on the map.

What's more, we had intended to put all filters on the map like google map, before the contact in week 8. And also, there is a sharing function of our web on the low-fidelity prototyping. But after displaying our low-fidelity, one of our audiences has considered that all filters on the map are too messy and the share function may not be used. Based on these two suggestions, the function of sharing has been deleted on the final web and we have changed the locations of filters which is like a side menu and can be hidden at the left of the web, instead of locating on the map.

According to the feedback from the contact of week 9, the attribute "safety permit" in the filter feature causes some confusion for the audience. The potential user might not know what this term means and how it will affect their decisions. In response to this question, we have decided to change the name of this attribute to "food safety rating". Besides that, the displaying methods of datasets is simple, we have been told. In fact, all food trucks, but stops and

ferry terminals display on the map at that time. Because of this feedback, we have added a list of all food trucks on another webpage. Also, all enrolled trucks are displayed separately as a block.

Also, the distribution of bus stops has changed a lot, after receiving the feedback of the 2D work-in-Progress report. There are more than 6000 records in the datasets of bus stops. Originally, we had displayed 500 locations of bus stops. However, there are too many bus stops' icons covered and accumulated on the map. For this reason, we have added some code to filter simply records. Now, the distribution of bus stops looks better than before.

Finally, we have two significant problems after implementing the dataset of food trucks, including the number of food trucks and the recommendation mode. On the one hand, the number of food trucks which have latitudes and longitudes are fewer than our expectation. For this reason, the data analysis comprehensively is hard to implement. We had expected to analyze the data of food trucks in both statistics and a radar map. A radar map can show the deep data analysis, like the flow of people and the sales. But now, the statistics are only implemented based on the number of food trucks which are displayed on the map, because of fewer food trucks.

On the other hand, we had intended to design two modes, including explore mode and recommendation mode. Because we have added another web page which includes a list of all food trucks, the number of food trucks showing on the map is too few in the explore mode and the recommendation mode also needs a map, we have moved the recommendation mode to the explore mode. Also, there are two modes on the map now, including "explore/ recommendation mode" and "food trucks".

Areas you were unable to implement, why and how would these value-add to the final product.

In fact, most of our expectations are achieved in our program, but there is a function which cannot be implemented fully - calculating the recommended index of a location on the map by writing back-end code. We have expected that there will be a recommendation index of this location for merchants in order to consider whether this point is suitable to put a food truck, when the users click a place on the map in the recommendation mode. Also, we have intended to code a complex algorithm.

The algorithm includes the following parameters:

a. How many trucks are already in this suburb indicates how fierce the competition is. The more trucks, the lower the recommended rating will be.

b. The average food safety rating of all trucks in this region indicates the cost of running a food truck in this suburb and the competition level—the higher the average food safety rating, the lower the recommended rating.
c. The number of bus stops and ferry terminals in this suburb indicates the probability of passenger flow volume for the food truck. The higher the number of bus stops and ferry terminals, the higher the recommended rating.

For the parameters of the algorithm above, the users can get comprehensive recommendation indexes in order to make a decision about where is better to put a food truck. However, we have realized that this complex algorithm is difficult for us, after trying several times. Thus, we have written a simple algorithm in our final project based on five selected points on the map. We may implement this function fully in the future.