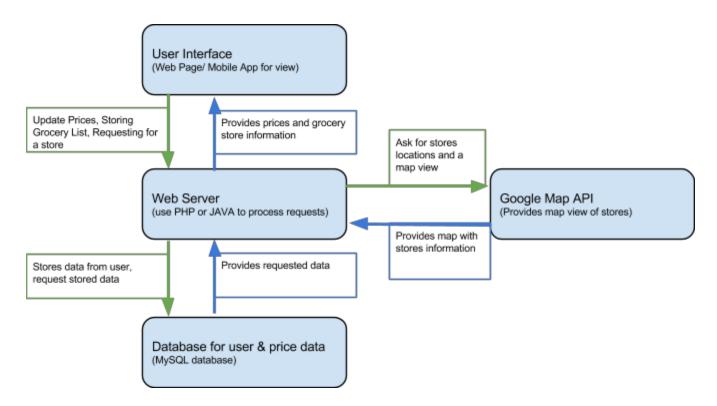
Auto Grocer - Shop grocery with low price that fits your item needs

Vision

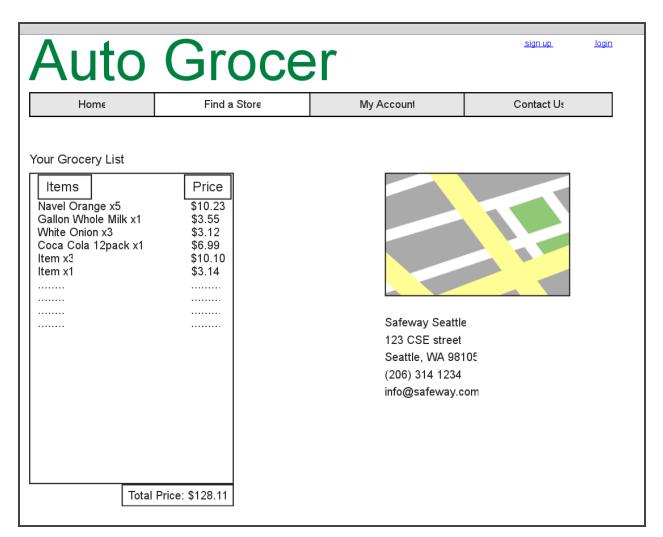
On a high level, Auto Grocer is a grocery list with a price comparator that reduces grocery cost by comparing prices among local grocery stores. There are many alternatives that aims to save money more aggressively with coupons and deals for grocery shopping such as "www.thecouponclippers.com", and alternatives that serves as a simple grocery list such as "ZipList". However, people often don't want to spend much time on coupons, or go to multiple stores just to get a low price. Auto Grocer target users that prioritise quick and convenient grocery shopping experience but still care somewhat about lower prices. Without having to go through tedious coupons and deals searching, our users can simply go shop at a single recommended store with the lowest price for their items combined price. This project is worth developing because although there are similar products, few address the convenience issue that many people care the most, and personalize for the users.

Software Architecture

This project contain 2 parts, the UI and the back end. The UI would be a web app with and a possible smartphone app, while the back end would manage the user accounts, user data, and product data. We propose that the web app would be created using HTML, CSS, JS, and many existing libraries such as JQuery, while the back end would consist of MySQL as the DBMS and the application that manages all the data, which leverages the Google Maps API for store data, is intended to be written in Java or PHP.



From a technical point of view the most interesting part of this project is the data processing system that have to created that can combine wanted items by the users, store location data from Google, and product price data which we intend to be inputted by the users then returns the most convenient location for the user. Another interesting part is the management of user inputted price data because of the need to be able to determine the actual current price in stores from multiple sources.



Challenges and Risks

One main challenge of developing this product is the collection of price data. We need determine a way to make sure that the user submitted prices are correct and up to date, which can possibly be handled with a smart enough algorithm. An overarching problem of the product though is the difficulty of testing because it is hard to simulate day to day usage from different users; without having real users, it is difficult to determine whether or not our product is solving their grocery problem. Other technical challenges that we face would be our lack of experience in using the new technologies we intend to use in the project and combining all of those parts into a single coherent product.