

# Cooking Special

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Eating is a basic requirement for everyone and everyone likes to save money. A convenient way to satisfy both requirements is to buy basic food components through the weekly savings at a local store and then cook them at home. From a CS point of view, making a recipe or weekly special finding software application is useful. However, when combined they offer a previously non-existent functionality.

Cooking Special is a way of simplifying food shopping and cooking while taking into account cost, availability and time. An online database of recipes would be parsed according to user preference using available ingredients in their cupboard and local grocery store specials. The items from the recipes can be used for tracking diet, providing simple meals that the user likes and has time and ingredients for, and of course saving them some money.

The real world implication for this project essentially boils down to automation and speed. It is possible to potentially achieve the same goals by searching through recipe websites for things that are of interest, checking that the ingredients are available, and reading the weekly specials in the mail to see if anything good could come of them. However, this is all very time consuming and requires extensive user interaction.

This project is scalable to 6-8 people over the course of a quarter. Though there are seemingly minimal initial requirements to make a usable product, there are a number of embellishments and features that could be added as time permits. Easy examples are adding more stores to search for specials in, a chat component to talk with friends about what they made or collaborate with, healthiness (or unhealthiness) competitions between friends based on nutrition information, etc.

This project will require an intuitive and easy to use user interface. Moreover, the project will be doing cross-referential searches across databases if not parsing independent websites for data. The different interactions/components involved are illustrated in Figure 1. The skills learned would be applicable to a number of similar applications (e.g. cheapest car in the area according to current vehicles and preferences, where to buy gas depending on how much one has driven and cheap gas prices in your area, etc.)

The main risk involved in this project is the parsing software falling out of date with the websites without any indication other than abruptly not working anymore. This could be somewhat alleviated if we created a dedicated parsing language that could be changed without modifying code. Another important risk involved is with the right design guidelines for the user interface. A hard to use or an overcrowded user interface for this project will distract the users and make the project significantly less appealing. Finally more research to find similar projects will be needed. Otherwise, being a new idea, pitfalls and non-pitfalls would not be known until extensive user interaction has been done on the project (which can be quite destructive).

The tools that we use to complete this project are dependent largely on the type of interface that we choose to implement. We have considered a Flash interface on a webpage to be the most logical and easily deliverable, most likely with a professional look and feel. This would require a Flash development program and a web editor. Another option would be a game similar to Cooking Mama where the user could make recipes, but instead making actual food and simulating real stores with in-game stores etc. This approach could be done using a cross-platform Java or C++ engine coupled with their respective compilers.

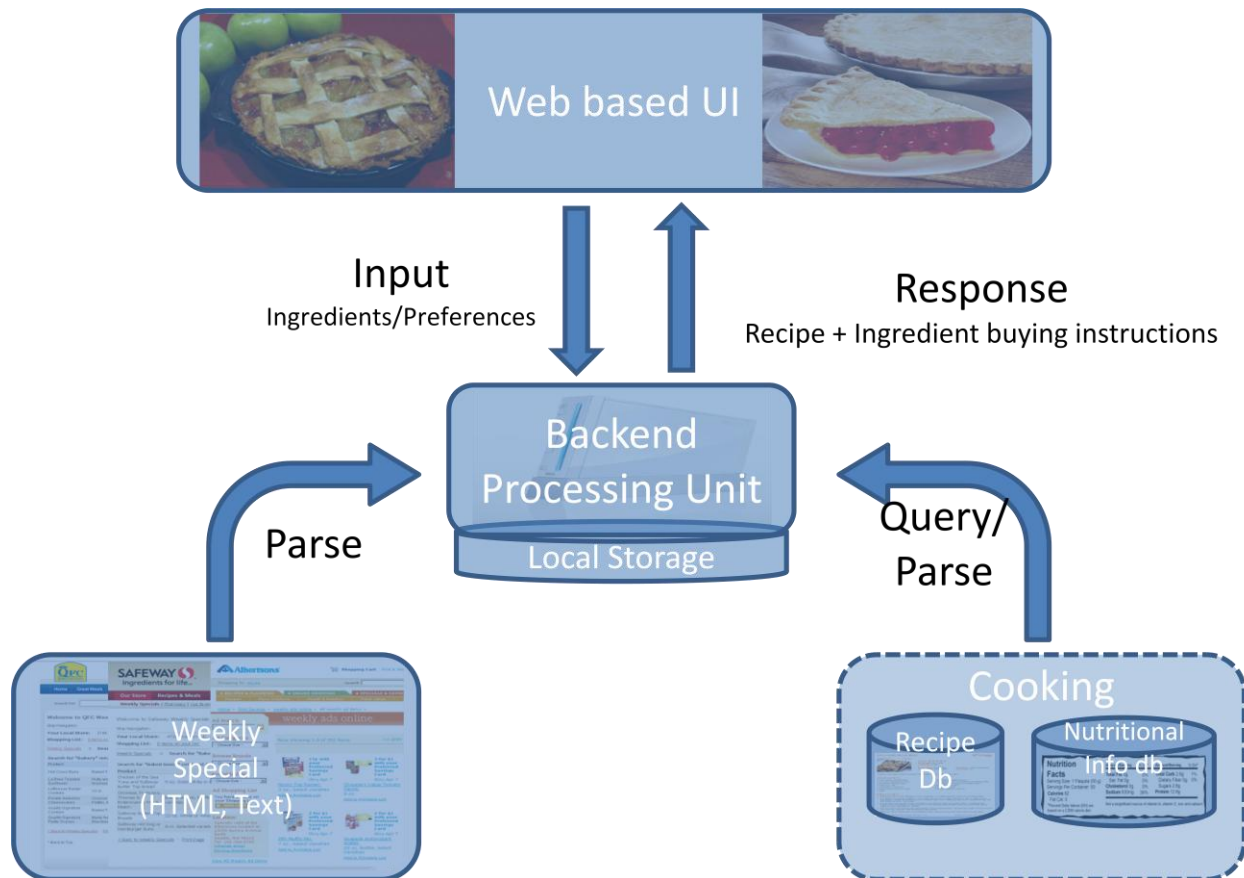


Figure 1 Illustration of different components and their interaction. The user selects some ingredients and/or sets some preferences which are sent to the backend server for processing and if all goes well, a response with recipe and ingredient buying instructions from the local stores are sent back. The backend processing server itself parses through weekly specials and recipes or nutritional databases to generate the required response.