

Crowd Sourced Grocery Shopping

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Introduction:

Grocery shopping has always been a matter of store preference or distance to a store. Finding the best price any day among all the nearby stores has proved to be a difficult task. In the United States, grocery prices are not the same every day. Since there is no concept of a Maximum Retail Price (MRP) set by the manufacturer, it is the stores' discretion to choose what price they offer on any product. The price offered by any store on a particular day can be known in advance only if the store wishes to advertise.

We propose a system that will enable users to see the price and availability of items in advance, without visiting the store. The system gives a list of stores in the vicinity requested by the user, and the price they offer for the product searched. The system is driven mainly by the data published by the users. Users can enter information about items either by uploading a photo of the product label at the store or by manually entering the product details. From the input given, text extraction (from image) will be done followed by product classification. The data is then stored in a distributed database (Hadoop, Spark). Search queries given by the users are again classified for suggesting related products. Additionally, an option for submitting the usefulness of the result can be given to the users.

Timeline:

- Week 3 Project Proposal
- Week 4 Research on best frameworks (Spark, Hadoop, etc.)
- Week 5 Text extraction from image
- Week 6 Text Classification for categories of product
- Week 7 Populating the test database with location tags
- Week 8 Mobile application
- Week 9 Mobile application
- Week 10 Testing, review, experiments, results and report