**Project Plan**

**I. Introduction:**

This project is for farmers and customers, which helps farmers to sell their items and enable farmers to know about farming techniques. It helps customers to buy the products directly from farmers, get updates from farmers about their products, and get nearby markets, best deals.

**II. Project Goal and Objectives (revised)**

 Overall goal: The main objective of the project is to construct a platform which empowers day to day market environment. It helps farmers to get paid for what they deserve. Besides this, it gives customers an interactive approach to choose their products.

 Specific objectives (problem statement): The specific objectives of the project include providing farmers a better approach to the changing market environment. It gives farmers the flexibility to choose markets and get updates regarding farming. Besides this, the customers can have a rich experience of e-marketing with enabled features like searching for markets, door-delivery of their desired products and compare the ongoing market prices.

 Significance: The Project significance is to put an end to the injustice done to farmers by building an electronic market that enables the farmers and civilians have a richer and cost-effective marketing experience. It not only sets a good deal between farmers and customers but also helps in improving the marketing environment.

**III. Project Background and Related Work:**

The roots of this project comes from a number of online marketing systems like easymandi.com, bigbasket.com etc. The main emphasis of this project is to foresee the hardships faced by farmers in the ongoing market environment. This project even helps the market’s entrepreneur to know the farmers and their products.

The similarities of the proposed project include displaying vegetables that enables customer to view, store and buy them.

The dissimilarities of the proposed project include providing farmers an interactive system that enables them to post their farmed products and also get some valuable tips and suggestions regarding their farming techniques. Besides this, the customers can find nearby markets with directions and distance to travel to the market.

**IV. Proposed System**

**1) Requirement Specification**

**Functional Requirements:**

1. Farmers can register, login and update their products into the system. They can also be eligible to view suggestions and tips of farming techniques from the Admin.
2. Farmer can post the updates to social networking sites about his items and his presence in the market.
3. Farmer can see his sales graph for his products.
4. Customers can register to have a complete view of the market including the pricing of vegetables.
5. Admin should be able to see all the records from any customers.
6. The records shown for selling will be available in the format of Farmer name, Quantity-name, Quantity-available and price.
7. Customers can also check the weather conditions of the market he/she is going to.
8. Customer can add items to cart and check out the items.
9. Customer can see nearby markets, and directions to market.
10. Customer can see the deals provided by admin.
11. Customer can see the items sold by a famer.
12. Customer can see the best price for item.
13. Customer can see the expenses graph.

**Non Functional Requirements:**

1. **Performance:** Systems real time response for all the activities performed by customer and farmers.
2. Validation of the inputs provided by user, if it does not satisfy the conditions.

**3) System Specification:**

**Architecture Diagram:**



**Class Diagram for Overview of Project:**



Class Diagram

**Activity Diagram:**



Activity diagram

**Existing Service`s:**

1. Name: Google Maps API.

Description: Used to show distance and directions to the markets.

URL: <https://developers.google.com/maps/documentation/javascript/tutorial>

1. Name: Farmers’ Market API

Description: Used to find the nearby markets, items sold in market and available timings of market.

URL: <http://search.ams.usda.gov/FarmersMarkets/v1/data.svc?wsdl>

1. Name: Wikipedia API

Description: Used to get information about farming techniques.

URL: <http://en.wikipedia.org/w/api.php>

1. Name: Weather API

Description: To get weather updates.

URL: <http://openweathermap.org/api>

1. Name: Google chart API

Description: To draw the charts.

URL: <https://developers.google.com/chart/>

1. Name: Facebook

Description: To post updates on facebook

URL: <https://developers.facebook.com/docs/>

**New Services to be built:**

**1. Get Items Information:** This service provides the details of item like quantity available, price of item, sold by which farmer.

**Input:** Enter Item

**Output:** Quantity available, price and farmer name.

**Exception:** If entered item is not available in database, it provides information that there is no information about this item.

**Class Diagram:**



Class diagram for product search

**Sequence Diagram:**



Sequence diagram for Service Product information

**2. Get Best Price of Item:** This service provides the best price for item and the farmer who is selling this item.

**Input:** Enter Item

**Output:** Best price for an item and the farmer name who is selling the item.

**Exception:** If entered item is not available in database, it provides information that there is no information about this item.

**Class Diagram:**



Class Diagram for Service Best Price

Sequence Diagram:



Sequence Diagram for Best Price

**Design of Mobile Client:**

Technologies used to develop this application are:

**For Frontend design:**

JQuery, Twitter Bootstrap, HTML5, CSS

**For Server side Coding and developing Web Services:**

C# ASP.Net

**Database:**

**Microsoft SQL Server 2008.**

**Scrum do Link:**

<http://www.scrumdo.com/organization/umkc_ase/dashboard>

**Team Members:**

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**References:**

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