

GUJARAT TECHNOLOGICAL UNIVERSITY

Chandkheda, Ahmedabad

Affiliated



(G.H. PATEL COLLEGE OF ENGINEERING AND TECHNOLOGY)

A Report On - CropYards

Under subject of

DESIGN ENGINEERING – IIB

B. E. III, Semester –VI (Information Technology Branch)

Submitted by: Group 13

Sr. No	Name of Student	Enrollment No.
1	MEET PATEL	150110116033
2	DEEP KAKADIA	150110116012
3	JAINISH PATEL	150110116041
4	VATSAL PATEL	150110116062
5	JAY GONDALIA	150110116019

PROF. RAJVI PARIKH
(Faculty Guide)

Dr. NIKHIL N. GONDALIYA
(Head of the Department)

Academic year (2017-2018)

Index

Chapter	Content	Page No.
	Certificate	II
	Acknowledgement	III
	Abstract	IV
	List of Figures	V
	List of Tables	VI
1	Introduction	1
2	Canvases	2
2.1	Empathy Mapping Canvas	2
2.2	Ideation Canvas	3
2.3	Product Development Canvas	4
2.4	Learning Need Matrix	5
3	Reverse Engineering	6
3.1	AEIOU Sheets	6
3.2	Literature Review / Prior Art Search	9
	Summary of Research Papers	10
4	Design	27
5	Diagrams and Data Dictionary	34
5.1	Diagrams	34
5.2	Data Dictionary	37
	Table 1: Registration	37
	Table 2: Users	37
	Table 3: Orders	38
	Table 4: Products	38
6	Implementation	39
	References	40

**G.H. PATEL COLLEGE OF ENGINEERING &
TECHNOLOGY, VALLABH VIDYANAGAR.**

DEPARTMENT OF INFORMATION TECHNOLOGY



This is to certify that the Design engineering canvases entitled “CropYards” has been carried out by

CERTIFICATE

**NAME: DEEP KAKADIA
150110116012**

Enrollment No.:

**NAME: JAY GONDALIA
150110116019**

Enrollment No.:

**NAME: MEET PATEL
150110116033**

Enrollment No.:

**NAME: JAINISH PATEL
150110116041**

Enrollment No.:

**NAME: VATSAL PATEL
150110116062**

Enrollment No.:

Under my guidance and supervision for the award of the degree of Bachelor of Engineering in Information Technology (Semester -VI) at G H Patel College of Engineering & Technology, Vallabh Vidyanagar during the academic year **2017-18**.

DATE:

Guide:

**Faculty Guide:
PROF. RAJVI PARIKH**

**Head of Department:
Dr. NIKHIL N. GONDALIYA**

IT Department,
GCET.

IT Department,
GCET

Acknowledgement

In performing our project, we had to take the help and guideline of some respected persons, who deserve our greatest gratitude. The completion of this assignment gives us much Pleasure. We would like to show our gratitude **PROF. RAJVI PARIKH**, G H PATEL COLLEGE OF ENGINEERING AND TECHNOLOGY for giving us a good guideline for assignment throughout numerous consultations.

We would also like to expand our deepest gratitude to all those who have directly and indirectly guided us in doing this project. In addition, a thank you to **PROF. BHARGESH PATEL** and **PROF. RAJVI PARIKH**, who introduced us to the Methodology of work, and whose passion for the “Design Engineering” had lasting effect. Also, a thank you to **DR. NIKHIL GONDALIYA** for giving this opportunity of pursuing our idea of this project through the medium of Design Engineering subject. Many people, especially our classmates and team members themselves, have made valuable comment suggestions on this proposal which gave us an inspiration to improve our project.

We thank all the people for their help directly and indirectly to complete our project. We would also like to thank our department of Information and Technology for kindly support us in performing and evaluating this project.

ABSTRACT

Cropyards is a combination of technology and services designed for buyers, sellers, and providers of produce industry solutions and services. [we're building a place where it's easier to connect and do business - not only with more, but with better quality, reliable, and trust-worthy professionals and companies.] CropYards includes a marketplace to buy and sell produce, as well as one for solutions and services like transportation, quality control services, equipment and machinery, and many other. CropYards is a B2B (Business to Business) platform for professionals in the produce industry to discover market opportunities, connect with verified partners, and grow.

List of Figures

Fig No.	Figure Name	Page No.
2.1.1	Empathy Canvas	2
2.2.1	Ideation Canvas	3
2.3.1	Product Development Canvas	4
2.4.1	Learning Need Matrix	5
3.1.1.1	Activities	6
3.1.1.2	Environment	7
3.1.1.3	Interactions	7
3.1.1.4	Objects	8
3.1.1.5	Users	8
4.1	Home Page	27
4.2	Login Page	27
4.3	Registration Page	28
4.3.1	My Profile	28
4.3.2	Change Password	28
4.3.3	Billing Address	29
4.4	Cart	29
4.5	Storage List	30
4.6	News Feed	30
4.7	Contact Us	31
4.8	Vendor Login	31
4.9	Vendor Dashboard	32
4.10	Admin Panel	32
4.11	Database	33
5.1.1	ER Diagram	34
5.1.2	Class Diagram	34
5.1.3	Activity Diagram	35
5.1.4	Sequence Diagram	36

List of Tables

Table No.	Table Name	Page No.
1	Registration	37
2	Users	37
3	Orders	38
4	Products	38

Chapter 1: Introduction

CropYards.Com is a new level of commercialization of the agro industry, seeing the world take the power of e-commerce to every small trade made, we decided to make a platform for the farmers of the modern era to sell the produce directly online to the others wholesalers and also being able to buy the seeds for the crops which they want grow.

This platform will enable farmers to reach over their geological boundaries by selling their crops to wholesalers from all over the country. This will facilitate the availability of a substantially bigger market to the farmers to sell their produce. The prices of crops will become fair in underdeveloped areas. The producers can also avail several facilities like storage, transport at relatively lower costs. They can rely on the storage facilities until they able to acquire their own units.

Farming is not a walk in the park, it needs a lot of grooming and care. Leading to factors of storage and transportation. Hence, CropYard.Com intends to create a user-friendly environment for the farmers so they could get an all in one pit stop for all of their farming needs.

solutions provided:

- 1) Online Ecommerce Portal
- 2) Transportation
- 3) Storage Contractors.

The platform tremendous potential for growth. It can make lives significantly better for all involved. The platform will introduce a much-needed transparency on the payment part of the process. There is also an abundance of features that can be developed further for the pro

Chapter 2: CANVASES

2.1: Empathy Mapping Canvas

The Empathy generated from the general observation is described here in Empathy Mapping Canvas and Stories are describes as per the situation to give the empathy behind making the particular product. The Empathy generated from the general observation is described here in Empathy Mapping Canvas and Stories are describes as per the situation to give the empathy behind making the particular product.

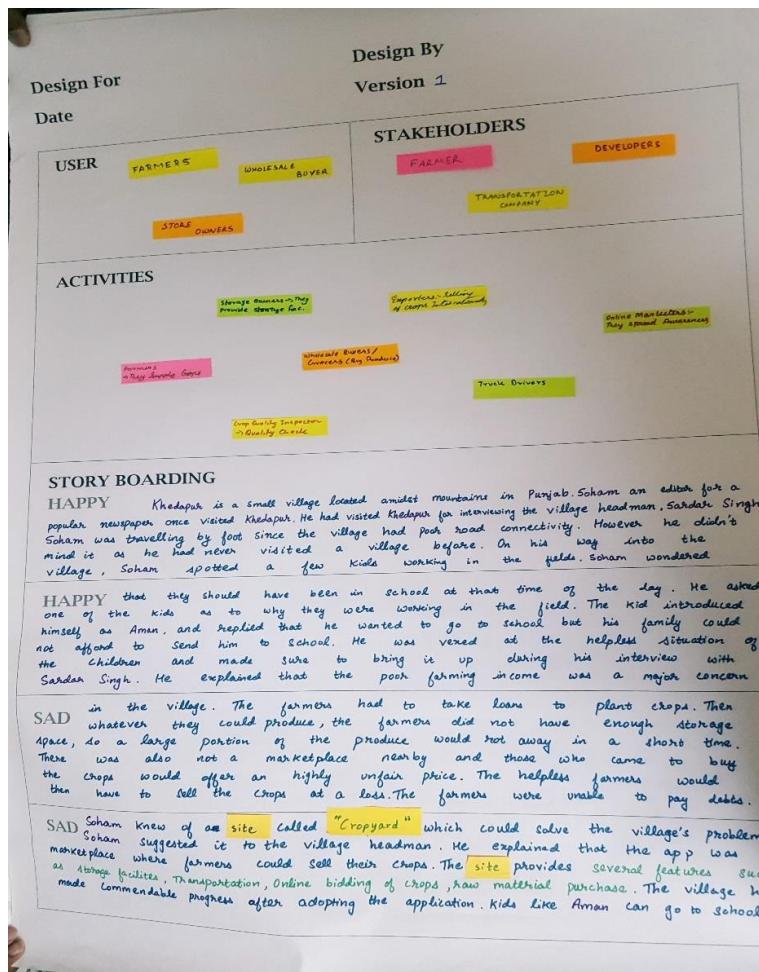


Fig 2.1.1 Empathy Mapping Canvas

2.2: Ideation Canvas

After doing the general observation, combining all the aspects of the situation the Ideation Canvas is prepared where the all over situation is described and the possible solutions are given. From this we can get that now how to work further for the development of the product. An ideation canvas is a rough whiteboard where ideas can be stretched into any limits or dimensions. Ideation session is not aimed at finding solutions to the defined problem. But to define the best possible problem and stretch out its possible scope.

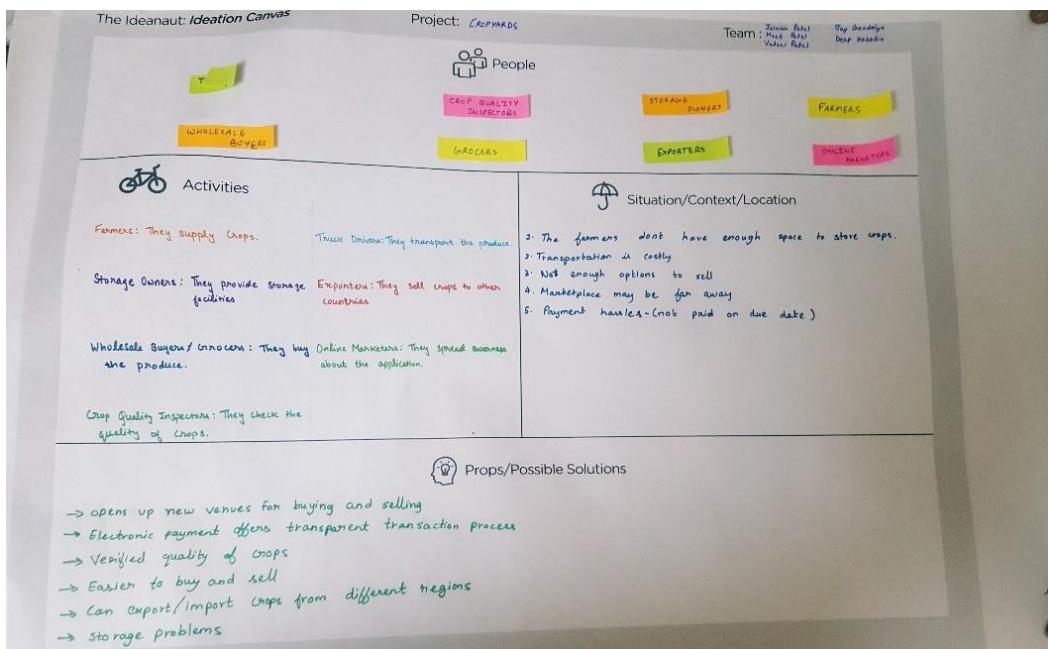


Fig 2.2.1 Ideation Canvas

2.3: Product Development Canvas

Product Development sheet is for the development of product according to the general observations, ideation and the Empathy generated behind the scene. Here the features, functions and its components are given with its customer revalidation and suggestions. The Product Canvas is a strategic product planning tool that allows you to quickly capture, describe, challenge, and pivot your product strategy on just a single page. It uses the customer feedback to categorize the review of the project and the functions or features which are to be redesigned or retained or rejected. It collects the list of components used for the project.

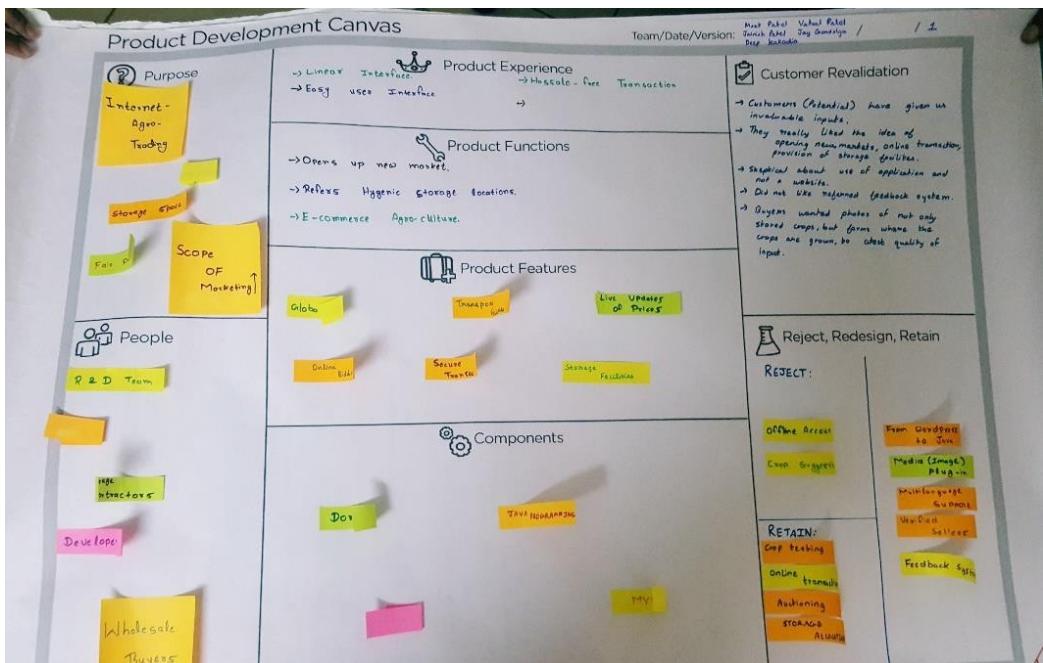


Fig 2.3.1 Product Development Canvas

2.4: Learning Need Matrix

After the analysis of the product to be developed and getting the ideation we will need some of the things that are to be learnt for the development of the software. The learning needs for our product are based on the programming languages and some algorithms.

The programming languages which are to be learnt are:

Python – Python will be for the algorithm study done for the programs and advanced implementation of software.

Visual Studio – It is the Software tool which is used to create the GUI and combine the software tools together.

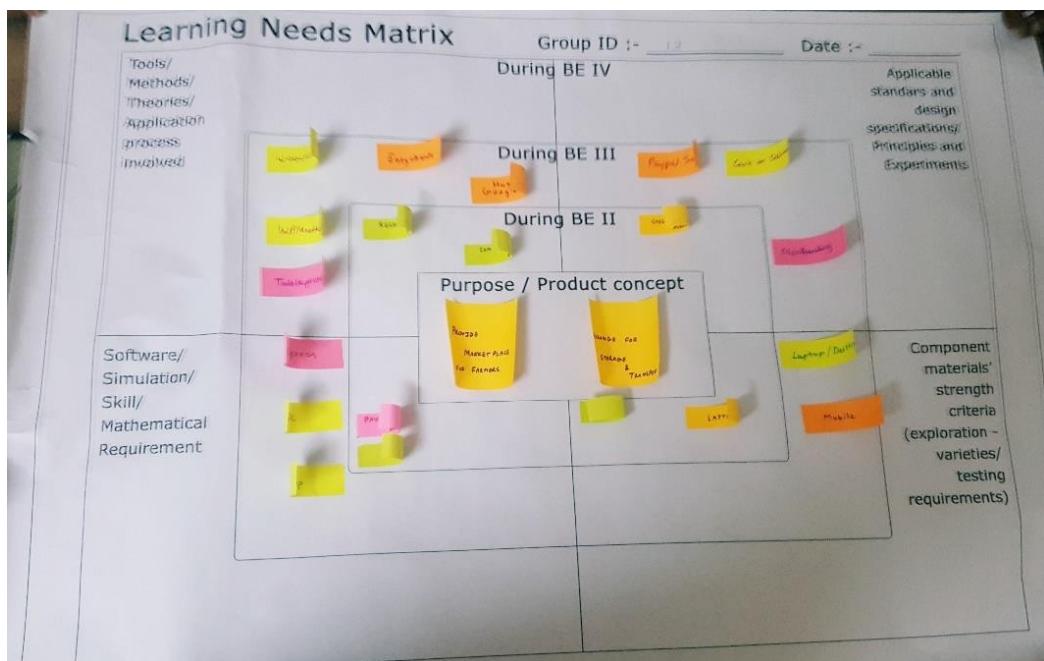


Fig 2.4.1 LN Matrix

Chapter 3: REVERSE ENGINEERING

3.1: AEIOU Sheets

The AEIOU is used to project your views or your idea and understand if their usage will be useful for the world or whether it is feasible to a certain limit. The observation method of AEIOU depends upon the feasibility of the project and the user feedback and objects that are going to be used in it.

The AEIOU is divided into 5 types:

1. A – Activity
2. E – Environment
3. I – Interactions
4. O – Objects
5. U – Users

3.1.1: ACTIVITES

Activities sheet is for the observation of the general activities going on in a particular situation. We observed that we could not provide a safe storage space for free, it was thus removed.

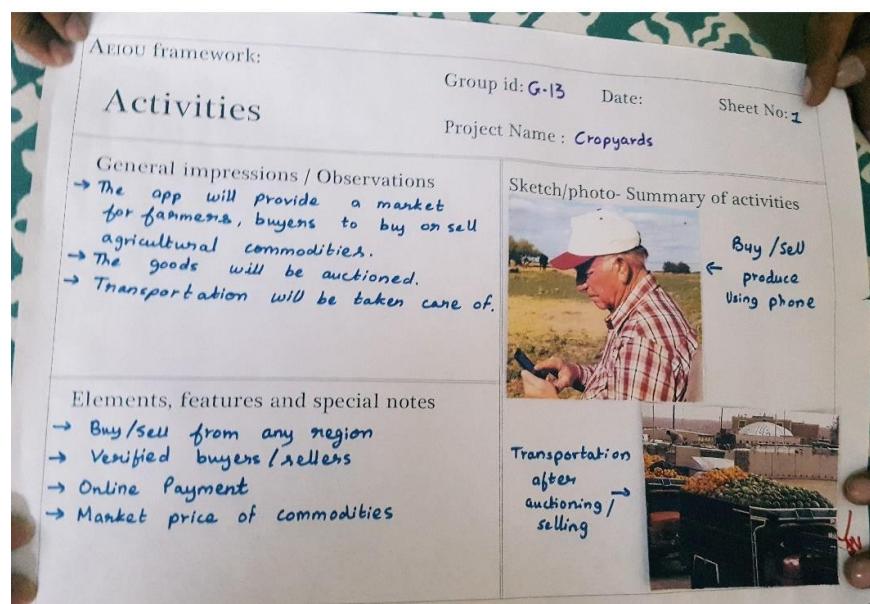


Fig. 3.1.1.1 Activities

3.1.2: ENVIRONMENT

Environment canvas is for describing the environment and the condition of the objects and people in a particular situation. Here the environment in which the activities are going on is described in sheets. The feature of soil testing and crop recommendation is on hold as it required excess of funds.

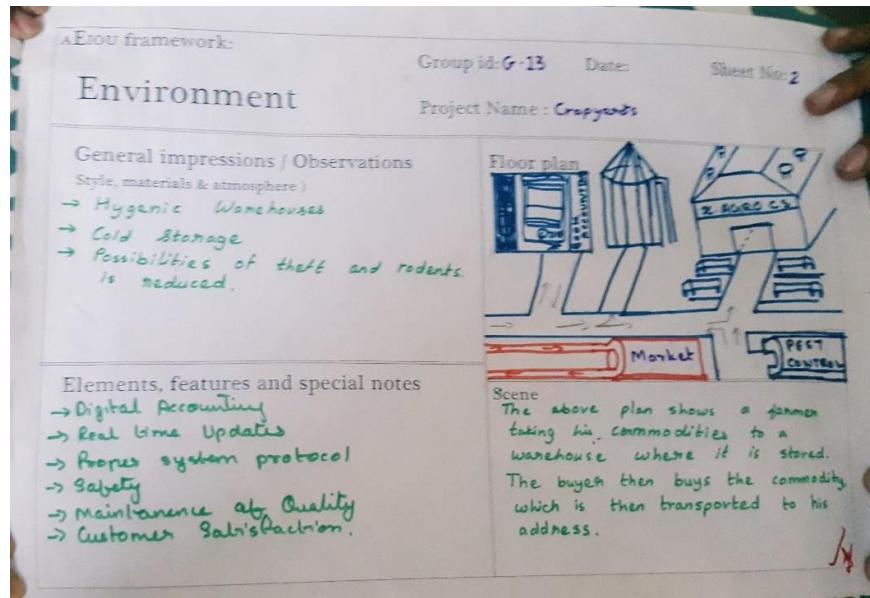


Fig 3.1.2.1 Environment

3.1.3: INTERACTIONS

Interactions taking place between the people and objects are described in this canvas. We realized that not all of the farmers would be able to use the platform by themselves, so we will send our agents to the villages to help them..

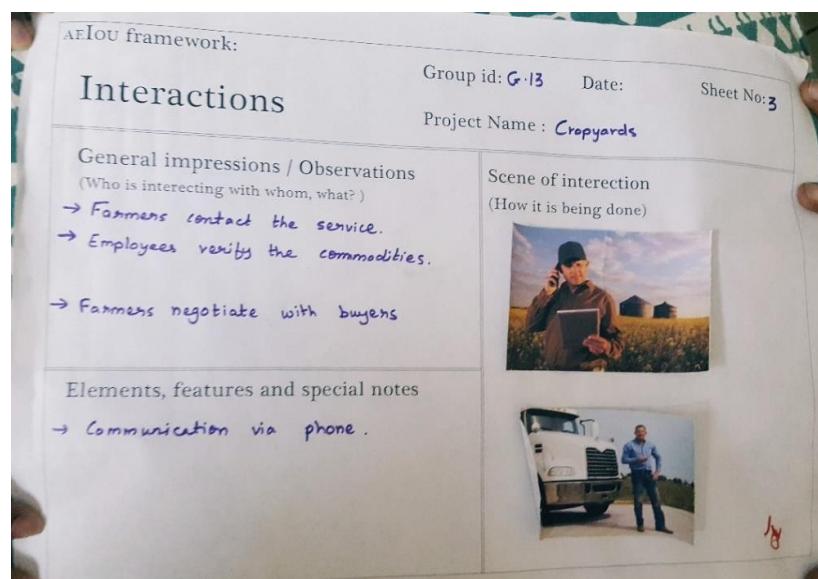


Fig 3.1.3.1 Interactions

3.1.4: OBJECTS

The Objects which are taking part in the interactions and which influences the situation directly or indirectly are included in this sheet.

AEIOU framework:	
Objects Group id: G-13 Date: Sheet No: 4 Project Name : Cropyards	
General impressions / Observations (What components are involved?) <ul style="list-style-type: none"> → Smartphone → Warehouse → Internet → Vehicles → Weighing scale 	Inventory of key objects <ul style="list-style-type: none"> → Storage space 
Elements, features and special notes (How objects are relating to the activities?) <ul style="list-style-type: none"> → Phone for communication. → Warehouse for storage → Vehicles for transport 	

Fig 3.1.4.1 Objects

3.1.5: USERS

The people including those who are indirect using a particular object or are directly interacting with that are the users in that particular situation.

AEIOU framework:	
Users Group id: G-13 Date: Sheet No: 5 Project Name : Cropyards	
General impressions / Observations (Who is present roles & responsibilities?) <ul style="list-style-type: none"> → Farmers (Sellers) → Buyers → Drivers → Commodity Verifiers 	Scene of users in context <ul style="list-style-type: none"> → Many farmers have problems finding a market to sell. They do not have access/afford storage. → Buyers are generally restricted to crops sold in their region only. → Payment delay can be solved by online payments.
Elements, features and special notes (List of identified people involved) <ul style="list-style-type: none"> → Farmers → Buyers → Commodity Verifiers 	

Fig 3.1.5.1 Users

3.2: LITERATURE REVIEW / PRIOR ART SEARCH

Based on the observation record sheets /AEIOU framework we started exploring the data related to our field on internet. We found many research works done on online bedding websites as well as payment & transportation related websites. We went through some already developed websites that were in existence and also some Research Papers published related to development of the existing technologies.

First of all, we searched some of the similar websites related to our project. One of the software known as quibids.com was having the basic and primitive intro about how it works. Another website, trucksuvidha.com can be used as our main transportation all over India. Seeing the flaws and features of this website we will try to improvise our product. After that we also searched some research papers related to our product and the summary of that is given in the following pages.

3.2.1 Summary of Research Papers

1. System for recommending and attachments to farm tractors

Publication number	US20020133505 A1
Publication type	Application
Application number	US 10/081,151
Publication date	Sep 19, 2002
Filing date	Feb 25, 2002
Priority date	Mar 14, 2001
Also published as	CA2435995A1 , CN1493050A , EP1389326A1 , WO2002073484A2
Inventors	Hideki Kuji
Original Assignee	Hideki Kuji
Export Citation	BiBTeX , EndNote , RefMan
Patent Citations (5), Referenced by (18), Classifications (5), Legal Events (1)	
External Links: USPTO , USPTO Assignment , Espacenet	

ABSTRACT

A system is provided that comprises a crop database for storing information on the crops that are appropriate for cultivation in terms of cultivation areas and cultivation seasons and a server for providing over the Internet a web site that is associated with the crop database. In response to a user's access the web site, the server transmits an input form to the user so as to allow the user to input the user's crop cultivation area and the cultivation season in the input form. The server retrieves crop information from the crop database based on the information in the filled-in input form transmitted back from the user, and to transmit retrieved crop information to the user. The system may comprise a farm tractor database for storing information on farm tractors that are appropriate for crops to be cultivated as well as information on attachments to be mounted on these farm tractors. The system includes a server for providing over the Internet a web site that is associated with the farm tractor database. In response to a user's access the web site, the server transmits to the user a page including farm tractor information retrieved from the farm tractor database and a linked button. When the user moves a cursor onto the button and clicks it, that event is transmitted to the server. The server retrieves information on the attachments from the farm tractor database and transmits retrieved information to the user.

CONCLUSION

A virtual store system, comprising: a user terminal having an Internet telephone capability; a business entity operator terminal having the Internet telephone capability a server providing over the Internet a virtual store web site including a button for establishing a communication between the user and the business entity operator by means of using the Internet telephone capability; and a storage device containing a first database for storing information on the user and a second database for storing information on the telephone number of the business entity operator terminal. A system for supporting cultivation of crops, comprising: a market database for storing information on historical prices and shipment volumes regarding crops.

2. E-commerce repricing system

Publication number	US20040078315 A1
Publication type	Application
Application number	US 10/206,831
Publication date	22 Apr 2004
Filing date	29 Jul 2002
Priority date	29 Jul 2002
Also published as	US8271374
Inventors	Jorge Montepeque
Original Assignee	Montepeque Jorge Eduardo
Export Citation	BiBTeX , EndNote , RefMan
Patent Citations (21), Referenced by (4), Classifications (7), Legal Events (5)	
External Links: USPTO , USPTO Assignment , Espacenet	

ABSTRACT

A repricing system calculates new prices for goods based on pricing data received from a plurality of sources and updates the prices of the good. In an embodiment, a pricing engine determines a market price based on the pricing data and calculates a new price for the good based on the market price and seller repricing instructions. In another embodiment, the pricing data comprises prices of used versions of the good and/or the distribution of prices of the good. In another embodiment, repricing is triggered by the elapsing of a predetermined interval of time. Using an embodiment of the invention, a seller can automatically recalibrate her prices on a regular basis.

CONCLUSION

A computer program product for repricing a good for sale in an online transaction, the product comprising: a computer readable medium; and computer program instructions encoded on the medium for: receiving pricing data for the good from a plurality of sources; responsive to the pricing data, calculating a market price for the good; and responsive to the market price and a repricing instruction from a seller, determining a new price for the good.

3. Systems and Methods for Locating the Best Cash Market for a Commodity

Publication number	US20120246050 A1
Publication type	Application
Application number	US 13/053,381
Publication date	27 Sep 2012
Filing date	22 Mar 2011
Priority date	22 Mar 2011
Inventors	Kevin Patrick McNew
Original Assignee	Mcnew Kevin Patrick
Export Citation	BiBTeX, EndNote , RefMan
Patent Citations (10), Non-Patent Citations (3), Classifications (4)	
External Links: USPTO , USPTO Assignment , Espacenet	

ABSTRACT

Systems and methods create a display of commodity purchasers offering the highest net commodity price for a commodity, the net price taking into account the actual transportation and storage costs of the commodity seller for a transaction. In one implementation, the method includes receiving a type of commodity, a storage cost per bushel for the type of commodity, and a transportation cost per bushel for the type of commodity and identifying commodity purchasers for the type of commodity. The method further includes retrieving basis data for the type of commodity for each of the commodity purchasers, the basis data including at least a basis for multiple transaction periods. The method further includes determining distance data between the seller and each of the purchasers, calculating a commodity price for each of the transaction periods for each of the identified commodity purchasers based on the basis data, the distance data, the storage cost, and the transportation cost, and determining which of the purchasers offers the highest commodity price.

CONCLUSION

This disclosure is generally directed to systems and methods for locating the best market for selling a commodity and, more particularly, to a system and method for determining the commodity purchaser offering the best price for a commodity accounting for storage and transportation costs for the seller. To maximize profit, farmers desire to sell their crops to the purchasers providing the highest price per bushel for their crops. Commodity purchasers, such as grain elevators or ethanol plants, determine the price they are willing to pay for a bushel of a crop based on a market-set price of the crop.

4. Sale of agricultural products with deferred pricing and delivery

Publication number	US20020138397 A1
Publication type	Application
Application number	US 09/814,470
Publication date	Sep 26, 2002
Filing date	Mar 21, 2001
Priority date	Mar 21, 2001
Inventors	Jeffery Seeley, Dennis Inman
Original Assignee	Jeffery Seeley, Dennis Inman
Export Citation	BiBTeX , EndNote , RefMan
Referenced by	(9), Classifications (8), Legal Events (1)
External Links:	USPTO , USPTO Assignment , Espacenet

ABSTRACT

In accordance with the invention, an agricultural producer agrees to sell, price and deliver a quantity of an agricultural product to a buyer at a future date. The agricultural producer further agrees to price the quantity at an agreed-upon maximum price in the event the market price is equal to or above the maximum price on a target date. In the event the market price is below the maximum price on the target date, however, the agricultural producer may elect to defer pricing and/or delivery of the quantity beyond the target date, to try to take advantage of market conditions after the target date. In any event, the agricultural producer must price the quantity of agricultural product before a fixed final pricing date and must deliver the quantity of agricultural product before a fixed final delivery date.

CONCLUSION

The invention relates to the agriculture business and, more particularly, to transactions involving the exchange of agricultural products as market commodities. Agricultural producers face substantial risks in producing an agricultural product, bringing it to market, and earning a profit. In exchange for this right to buy at a fixed maximum price, the buyer provides the agricultural producer with consideration such as an up-front cash payment.

5. Market data alert and news-driven alert system

Publication number	US8781945 B2
Publication type	Grant
Application number	US 12/019,863
Publication date	Jul 15, 2014
Filing date	Jan 25, 2008
Priority date	Jan 25, 2008
Also published as	US20090189760 , US20140330752 , WO2009094174A1
Inventors	Marc Preston, Lawrence Frisch
Original Assignee	News Patent Llc
Export Citation	BiBTeX , EndNote , RefMan

[Patent Citations](#) (4), [Non-Patent Citations](#) (23), [Referenced by](#) (1), [Classifications](#) (9), [Legal Events](#) (1)

External Links: [USPTO](#), [USPTO Assignment](#), [Espacenet](#)

ABSTRACT

A system for providing a real-time user notice or alert for traders and day traders based on stock market events or other market data is disclosed. The system provides for receiving a user selection of a first market event setting, and receiving user input specifying a maximum period of time, and providing the alert only if within the maximum period of time specified a first market signal corresponding to the first market event occurs and a second market signal corresponding to the first market event occurs, the first and second market event both corresponding to the same market event selection but being at different values. Also, customizable business or market news-based alerting is disclosed to allow signals and/or filters to be set for news-driven alerts.

CONCLUSION

A system, method, apparatus, means, and processor readable medium incorporating a program of instructions for providing a user alert based on market data are disclosed. The program includes: instructions for receiving a first user selection of a first market event setting

designating a market event, the market event comprising a market item of at least one of a predefined value, predefined ratio, predefined range, predefined average, aggregate value, aggregate ratio or aggregate range; instructions for receiving user input specifying a maximum period of time; instructions for receiving a first market signal corresponding to the first market event occurring at a first moment in time at a first value and to receive a second market signal corresponding to the first market event occurring at a second moment in time at a second value, the first moment in time being before the second moment in time, the second value being different from the first value; and instructions for generating and to provide the user alert only when the second moment in time occurs within the maximum period of time after the first moment in time.

6. Online food ordering system and method

Publication number	US20090204492 A1
Publication type	Application
Application number	US 12/069,895
Publication date	13 Aug 2009
Filing date	13 Feb 2008
Priority date	13 Feb 2008
Inventors	Danilo Scifo, Marianne Scifo, Daniel Scifo, Lisa Valente, Robert Valente
Original Assignee	Danilo Scifo, Marianne Scifo, Daniel Scifo, Lisa Valente, Robert Valente
Export Citation	BiBTeX, EndNote, RefMan
Patent Citations (21), Referenced by (29), Classifications (10)	
External Links: USPTO , USPTO Assignment , Espacenet	

ABSTRACT

Restaurants register for an online food ordering system and method to have their menus presented on the online system. Registration is accomplished by payment of a fixed registration fee. A merchant account is created for each restaurant. The merchant account is associated with a unique account key that includes a local delivery indicator and direct payment receivable account information facilitating direct payment to the restaurant's account. A first server is appointed for receiving orders from customers. The first server includes a data storage device having menu items and information from each of the restaurants and each of the unique account keys associated with each restaurant. In communication with the first server are second and third servers for processing payments and transmitting orders to the restaurant for processing and fulfilment. An order confirmation means is further provided for notifying the customer upon submission of the order to the restaurant along with estimated pick-up or delivery times.

CONCLUSION

The present invention provides an online food ordering system and method that creates a merchant account for each restaurant that is registered with the system. Registration onto the online system is achieved by the restaurant paying a fixed registration fee with the online service provider. In this manner, there are no other extraneous fees or commissions to be paid by the restaurant based on orders received or other financial structures. A unique account key is assigned with each merchant account for each restaurant which includes a local delivery indicator and direct payment means for each restaurant.

7. Market research method and system for collecting retail store and shopper market research data

Publication number	CN203996385 U
Publication type	Grant
Application number	CN 201420388349
Publication date	Dec 10, 2014
Filing date	Jul 14, 2014
Priority date	Jul 14, 2014
Inventors	韩生银(Han shengyin)
Applicant	韩生银(Han shengyin)
Export Citation	BiBTeX , EndNote , RefMan
Classifications (1), Legal Events (1)	
External Links:	Sipo , Espacenet

ABSTRACT

A market research system and method are provided. A plurality of cooperating establishments is included in a market research test area. Each cooperating establishment is adapted for collecting and storing market research data. A computer system remotely located from the plurality of cooperating establishments stores market research data collected from the cooperating establishments. The collected market research data includes monitored retail sales transactions and captured video images of retail customers.

CONCLUSION:

It is an object of the present invention to provide a substantially automated system and method for collecting market research data that includes retail customer data together with retail sales transactional data. It is another object of the present invention to provide a market research system and method that overcomes many of the disadvantages of prior art arrangements.

8. Transport booking management

Publication number	US20130231965 A1
Publication type	Application
Application number	US 13/785,891
Publication date	Sep 5, 2013
Filing date	Mar 5, 2013
Priority date	Mar 5, 2012
Inventors	Oren TOKATLY
Original Assignee	Oren TOKATLY
Export Citation	BiBTeX, EndNote , RefMan

[Patent Citations](#) (9), [Referenced by](#) (4), [Classifications](#) (3)

External Links: [USPTO](#), [USPTO Assignment](#), [Espacenet](#)

ABSTRACT

The subject matter disclosed herein includes a system and method of ticket booking management of a passenger transport vehicle that enables online tickets purchasing regardless of the passenger's location or time of ordering the tickets, or the station they wish to board the vehicle, including intermediate stations. The passenger transport vehicle comprises a plurality of places for accommodating passengers; the places can comprise at a given time a combination of booked seats, which are previously booked by respective passengers, and non-booked seats, which are available for passengers who board the vehicle, in the traditional way, without a previously booked seat.

CONCLUSION:

A system of ticket booking management of a passenger transport vehicle, the passenger transport vehicle comprising a plurality of places for accommodating passengers, the places can comprise at a given time a combination of booked places, which are previously booked by respective passengers, and non-booked places, which are available for passengers who board the vehicle without a pre-booked place.

9. Mini-sized rack transport car

Publication number	US20020183867 A1
Publication type	Application
Application number	US 10/000,805
Publication date	5 Dec 2002
Filing date	4 Dec 2001
Priority date	4 Apr 2000
Also published as	WO2001075706A1
Inventors	Pinaki Gupta, Krishna Mohan
Original Assignee	Nagarjuna Holdings Private Limited
Export Citation	BiBTeX, EndNote , RefMan
Patent Citations (5), Referenced by (29), Classifications (10), Legal Events (1)	

ABSTRACT

The utility model relates to a mini-sized rack transport car. The mini-sized rack transport car comprises a main beam frame, on which a car hopper is arranged. A main shaft is arranged between the car hopper and the main beam frame and provided with car wheels at two ends. The bottom of the car hopper is provided with an engine used for driving a speed reducer connected with main shaft. The engine is further connected with a start control device. A brake device is arranged on the main shaft. The mini-sized rack transport car has following beneficial effects: the mini-sized rack transport car, in place of a conventional rack truck, is a transport tool used for farming and harvesting autumn crops by farmers in a mountainous area in narrow roads and places at steep slopes and a tool, which is not stuck due to soft earth, capable of transporting even in the field without rod sections and also a mini-sized transport tool for a person incapable of driving; a transport tool replaces the manual rack truck and helps to save strength of the person during walking on a flat ground and on an upslope under the drive of the engine; by means of a brake apparatus, speed for walking downhill is easily controlled and synchronizes with walking speed of the person at the

maximum level and the mini-sized rack transport car, used safely, and is an ideal mini-sized transport tool.

CONCLUSION:

The utility model is relatively conventional terms, instead of the traditional shelf car, the mountain farmers farming, Shootie, narrow roads, steep slope areas, but also in fields where there is no road, not too soft stuck in the soil cannot transport the tool and not driving tricycle elderly peasant man a miniature vehicle. The utility model vehicles to replace human shelf car, and people standing on the ground to go, using the engine driven, flat and uphill walking save energy; the use of brakes, downhill speed is easy to control, the fastest human-step synchronization, safe, it is ideal for mini vehicles.

10. Agricultural management system for providing agricultural solutions and enabling commerce

Publication number	US20020183867 A1
Publication type	Application
Application number	US 10/000,805
Publication date	5 Dec 2002
Filing date	4 Dec 2001
Priority date	4 Apr 2000
Also published as	WO2001075706A1
Inventors	Pinaki Gupta, Krishna Mohan
Original Assignee	Nagarjuna Holdings Private Limited
Export Citation	BiBTeX , EndNote , RefMan
Patent Citations	(5), Referenced by (29), Classifications (10), Legal Events (1)

External Links: [USPTO](#), [USPTO Assignment](#), [Espacenet](#)

ABSTRACT

The present invention relates generally to a networked integrated computer system and more particularly to using web based distributed enterprise computer systems for providing agricultural solutions both technical and commercial for conducting e-commerce, wherein the transactions are between the farmer, who is the central figure in the entire system and the producer and dealer of farm input and the consumer and trader of farm output, and the invention provides methods of creating a virtual marketplace.

CONCLUSION:

An integrated system that provides agricultural solutions, enables on-line electronic business transactions, said system comprising: I) A Farm Management System that comprises modules selected from the group of decision support tools consisting of Crop Information System, Budgetary Control, Funds Management, Inventory Management and Sales Management; ii) Electronic commerce enabling system linked to the Farm Management System, and iii) User interface enabling access to both, the Farm Management System and the electronic commerce enabling system.

Chapter 4: Design

4.1: Home Page

The screenshot shows the homepage of a website called "CROPYARDS". At the top, there is a navigation bar with links: My Account, Wishlist, Checkout, Find storage, News Feed, price watch, contact US, vendor login, and Login. There is also a "Track Order" button. Below the navigation bar, the word "CROPYARDS" is displayed in a green header. A search bar with the placeholder "Search here..." and a magnifying glass icon is located next to it. On the right side of the header, there is a "CART - RS. 00.00" button with a shopping cart icon and a small yellow circle containing the number "1". The main content area has a green header bar with tabs: HOME, FRUIT, VEGETABLES, FIELD CROPS, and CASH CROPS. To the left, there is a sidebar titled "CATEGORIES" with sub-titles: FRUIT, VEGETABLES, FIELD CROPS, and CASH CROPS. The main content area features a large image of a shopping cart filled with various fruits and vegetables (apple, banana, radishes, etc.) sitting on a grassy field with white flowers. Below this image, there is a section titled "ALL PRODUCT" with four smaller thumbnail images showing different types of produce: corn, bananas, rice, and leafy greens.

4.2: Login / Registration Page

The screenshot shows the login and registration page. At the top, there is a navigation bar with tabs: HOME, FRUIT, VEGETABLES, FIELD CROPS, and CASH CROPS. Below the navigation bar, there is a breadcrumb trail: Home / Authentication. The page is divided into two main sections: "SIGN IN" on the left and "CREATE A NEW ACCOUNT" on the right. The "SIGN IN" section contains fields for "Email Address *" and "Password *". Below these fields is a "LOGIN" button. The "CREATE A NEW ACCOUNT" section contains fields for "Full Name *", "Email Address *", "Contact No. *", "Password *", and "Confirm Password *". Below these fields is a "SIGN UP" button. There is also a link "Forgot your Password?" located between the two sections.

4.3: ACCOUNT DASHBOARD

The screenshot shows a web browser window with the URL `localhost/127.0.0.1/crc/localhost/Copyards/my-account.php`. The page is titled "My Account". On the left, there are two tabs: "1 MY PROFILE" and "2 CHANGE PASSWORD". The "1 MY PROFILE" tab is active, displaying "Personal info" fields: Name* (jack), Email Address* (jack@gmail.com), and Contact No.* (8347524950). Below these fields is a "UPDATE" button. To the right, a sidebar titled "YOUR CHECKOUT PROGRESS" lists: My Account, Shipping / Billing Address, Order History, and Payment Pending Order.

Fig: 4.3.1

The screenshot shows the same web browser window as Fig: 4.3.1. The "2 CHANGE PASSWORD" tab is now active. It contains three password input fields: "Current Password*", "New Password*", and "Confirm Password*". A tooltip "Please fill out this field." appears over the "Confirm Password" field. Below the fields is a "CHANGE" button. The sidebar on the right remains the same as in Fig: 4.3.1.

Fig: 4.3.2

My Account localhost / 127.0.0.1 / cro

localhost/Cropyards/bill-ship-addresses.php

Apps My account – Cropy Soundiz Deezer Save to Drive Seedr c-ppt DE Login Boruto - Naruto Next Imported From Fire Web 01 - Building a Other bookmarks

1 BILLING ADDRESS

Billing Address*
F104 Anand

Billing State*
GUJARAT

Billing City*
ANAND

Billing Pincode*
388120

UPDATE

YOUR CHECKOUT PROGRESS

My Account
Shipping / Billing Address
Order History
Payment Pending Order

Fig:4.3.3

4.4: CART

Order History localhost / 127.0.0.1 / cro

localhost/Cropyards/order-history.php

Apps My account – Cropy Soundiz Deezer Save to Drive Seedr c-ppt DE Login Boruto - Naruto Next Imported From Fire Web 01 - Building a Other bookmarks

CROPYARDS

Search here...

CART - RS. 00.00

HOME FRUIT VEGETABLES FIELD CROPS CASH CROPS

Home / Shopping Cart

#	Image	Product Name	Quantity	Price Per unit	Shipping Charge	Grandtotal	Payment Method	Order Date	Action
1		RICE	1	250	40	290	Internet Banking	2018-04-05 10:32:09	Track
2		MANGO	1	98	50	148	COD	2018-04-05 11:09:23	Track

4.5: STORAGE LIST

The screenshot shows a web browser window for 'cropyards' at 'localhost'. The title bar says 'localhost / 127.0.0.1 / cropyards'. The page header includes a logo, a search bar, and a cart icon. Below the header is a green navigation bar with 'HOME' selected. The main content area is titled 'STORAGE LIST' and contains a table with 10 rows of data. The columns are: NO, STATE, CITY, ADDRESS, CAPACITY, SECTOR, and USE FOR. The data is as follows:

NO	STATE	CITY	ADDRESS	CAPACITY	SECTOR	USE FOR
1	GUJARAT	AHMEDABAD	HAPA COLD STORAGE,Plot No. 10, GIDC,Naroda.	6876	Private	Multipurpose
2	GUJARAT	AHMEDABAD	SHREE SHIV SHAKTI ICE PLANT AND COLD STORAGE,Vatva.	787	Private	Multipurpose
3	GUJARAT	AHMEDABAD	JAIRAM & CO. PVT. LTD.,Near Ekta Hotel, Bavla Road,Sarkhej, Ahmedabad.	5000	Private	Multipurpose
4	GUJARAT	AHMEDABAD	ABAD DAIRY (A GDDC Ltd. Undertaking)Kankaria Road, Ahmedabad ? 380022.	811	Public	Dairy Products
5	GUJARAT	AHMEDABAD	ALKA COLD STORAGE & ICE FACTORY,11 ? A, Indl. Estate,Naroda, Ahmedabad ? 382330.	2000	Private	Potatoes
6	GUJARAT	AHMEDABAD	CREATA FOODS (P) LTD.,296, GIDC Estate Odhav,Ahmedabad ? 382415,	89	Private	Dairy Products
7	GUJARAT	AHMEDABAD	CREATA STORAGE & ICE FACTORY,13 ? GIDC, Odhav Indl. Estate,Ahmedabad ? 382415.	3000	Private	Potatoes
8	GUJARAT	AHMEDABAD	GAMDIWALA DAIRY,Opp. Old Pilot Dairy,Kankaria, Ahmedabad ? 380022.	87	Private	Dairy Products
9	GUJARAT	AHMEDABAD	GUJARAT COLD STORAGE,296 ? GIDC, Indl. Estate,Odhav Road, Ahmedabad ? 382415.	2084	Private	Multipurpose
10	GUJARAT	AHMEDABAD	GURU COLD STORAGE (P) LTD., Sabarmati, Ahmedabad ? 380005.	3530	Private	Multipurpose

4.6: NEWS FEED

The screenshot shows a web browser window for 'cropyards' at 'localhost'. The title bar says 'localhost / 127.0.0.1 / cropyards'. The page header includes a logo, a search bar, and a cart icon. Below the header is a green navigation bar with 'HOME' selected. The main content area is titled 'Latest News' and contains a news card. To the right is a search form. The news card has a title, an image of rain, and a snippet of text. A 'Read More' button is at the bottom of the card.

Latest News

India's monsoon rains seen at average levels in 2018: Skymet



NEW DELHI: The country is likely to witness a "normal" southwest monsoon, private weather forecasting agency Skymet said in its forecast today. However, the southern peninsula and major portions of northeast India are likely to witness "below normal" rainfall this season, it said in a statement. "India is most likely to witness normal annual Monsoon rains at 100 per cent of the Long Period Average (LPA)," it said. The monsoon is considered 'normal' if the average rain...

[Read More](#)

Search the News

Keyword:

[Search](#)

4.7: CONTACT US

The screenshot shows a web browser window with the title bar "My Account" and "localhost/Cropyards/contact/contact.html". The main content is a form titled "CROPYARDS CONTACT FORM" with four input fields: "Your Name", "Your Phone", "Your Email", and a large "Message" area. Below the message area are two buttons: "Cancel" and "Submit".

4.8 VENDOR LOGIN

The screenshot shows a web browser window with the title bar "localhost/127.0.0.1/cropyards" and "localhost/Cropyards/v". The main content is a "Sign In" form with fields for "Username" and "Password", and a "Login" button. Above the form, there is a header with the text "cropyards" and "Back to Portal". At the bottom of the page, there is a copyright notice: "© 2017 cropyards All rights reserved."

4.9: VENDOR DASHBOARD

The screenshot shows a web browser window titled "localhost / 127.0.0.1 / cro...". The main content area is titled "Manage Products" and displays a table of product data. The table has columns: #, Product Name, Category, Subcategory, Company Name, Product Creation Date, and Action. There are 6 entries listed:

#	Product Name	Category	Subcategory	Company Name	Product Creation Date	Action
1	Mango	Fruit	seasonal fruit	om	2018-02-24 17:31:42	
2	Potato	Vegetables	Potato	abc	2018-04-05 09:32:17	
3	Rice	Field Crops	Rice	qwe	2018-04-05 10:17:01	
4	Cotton	Cash Crops	Cotton	asd	2018-04-05 10:20:15	
5	Cotton	Cash Crops	Cotton	asd	2018-04-05 11:11:04	
6	Cotton	Cash Crops	Cotton	asd	2018-04-05 11:11:23	

At the bottom left, it says "Showing 1 to 6 of 6 entries".

4.10 ADMIN PANEL

The screenshot shows a web browser window titled "localhost / 127.0.0.1 / cro...". The main content area is titled "Manage Users" and displays a table of user login logs. The table has columns: #, User Email, User IP, Login Time, Logout Time, and Status. There are 7 entries listed:

#	User Email	User IP	Login Time	Logout Time	Status
1	jack@gmail.com	::1	2018-04-04 17:14:57		Successfull
2	jack@gmail.com	::1	2018-04-04 17:18:13	04-04-2018 05:49:01 PM	Successfull
3	jack@gmail.com	::1	2018-04-05 10:27:21		Successfull
4	jalish@gmail.com	::1	2018-05-09 18:23:42		Failed
5	jack@gmail.com	::1	2018-05-09 18:23:58		Failed
6	jack@gmail.com	::1	2018-05-09 18:24:09		Failed
7	jack@gmail.com	::1	2018-05-09 18:24:21		Successfull

At the bottom left, it says "Showing 1 to 7 of 7 entries".

4.11 DATABASE

The screenshot shows the phpMyAdmin interface for the 'cropyards' database. The left sidebar lists various tables: admin, category, contact_us, orders, ordertrackhistory, productreviews, products, storage, subcategory, userlog, users, vendors, and wishlist. The main area displays a table of 13 tables with their details:

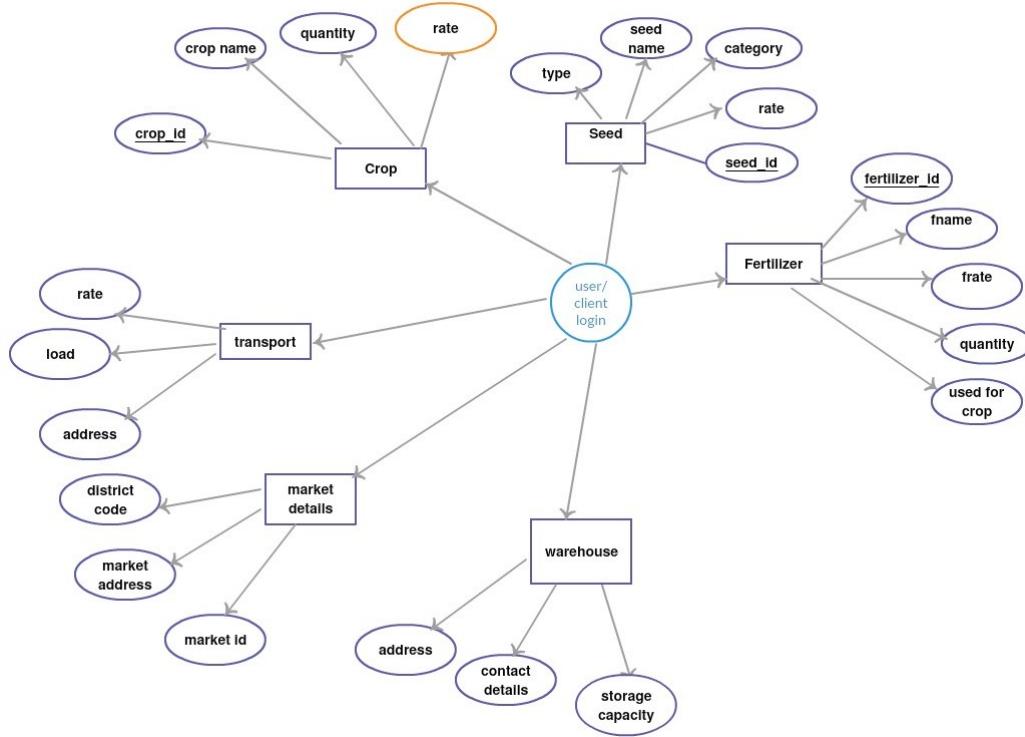
Table	Action	Rows	Type	Collation	Size	Overhead
admin	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 K18	-
category	Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	16 K18	-
contact_us	Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	16 K18	-
orders	Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	16 K18	-
ordertrackhistory	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 K18	-
productreviews	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 K18	-
products	Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	16 K18	-
storage	Browse Structure Search Insert Empty Drop	342	InnoDB	latin1_swedish_ci	88 K18	-
subcategory	Browse Structure Search Insert Empty Drop	21	InnoDB	latin1_swedish_ci	16 K18	-
userlog	Browse Structure Search Insert Empty Drop	7	InnoDB	latin1_swedish_ci	16 K18	-
users	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 K18	-
vendors	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 K18	-
wishlist	Browse Structure Search Insert Empty Drop	8	InnoDB	latin1_swedish_ci	16 K18	-
13 tables	Sum				393 InnoDB latin1_swedish_ci	272 K18
						0 B

At the bottom, there are buttons for 'Create table' and 'Console'.

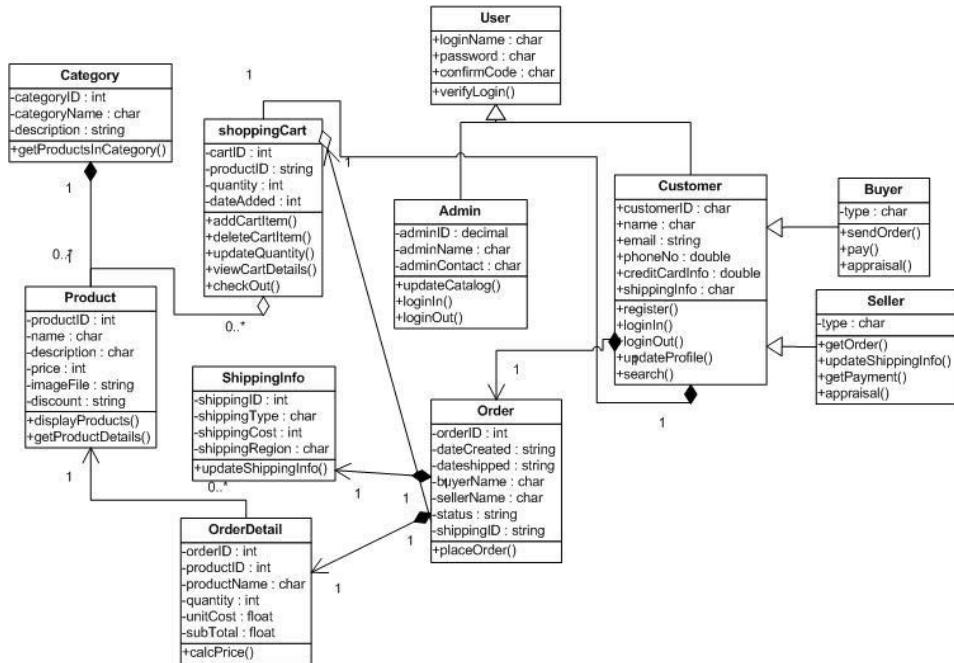
Chapter 5: Diagrams and Data Dictionary

5.1: Diagrams

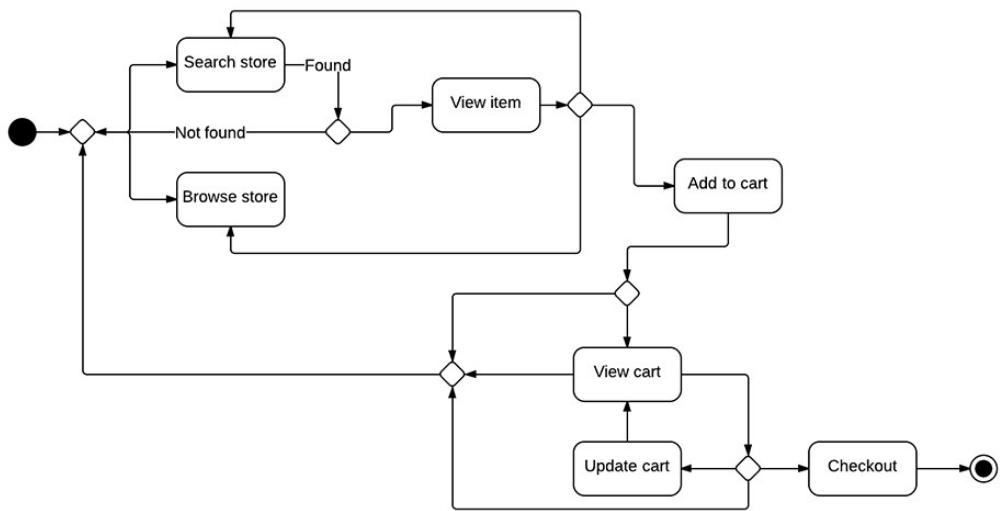
5.1.1 ER Diagram



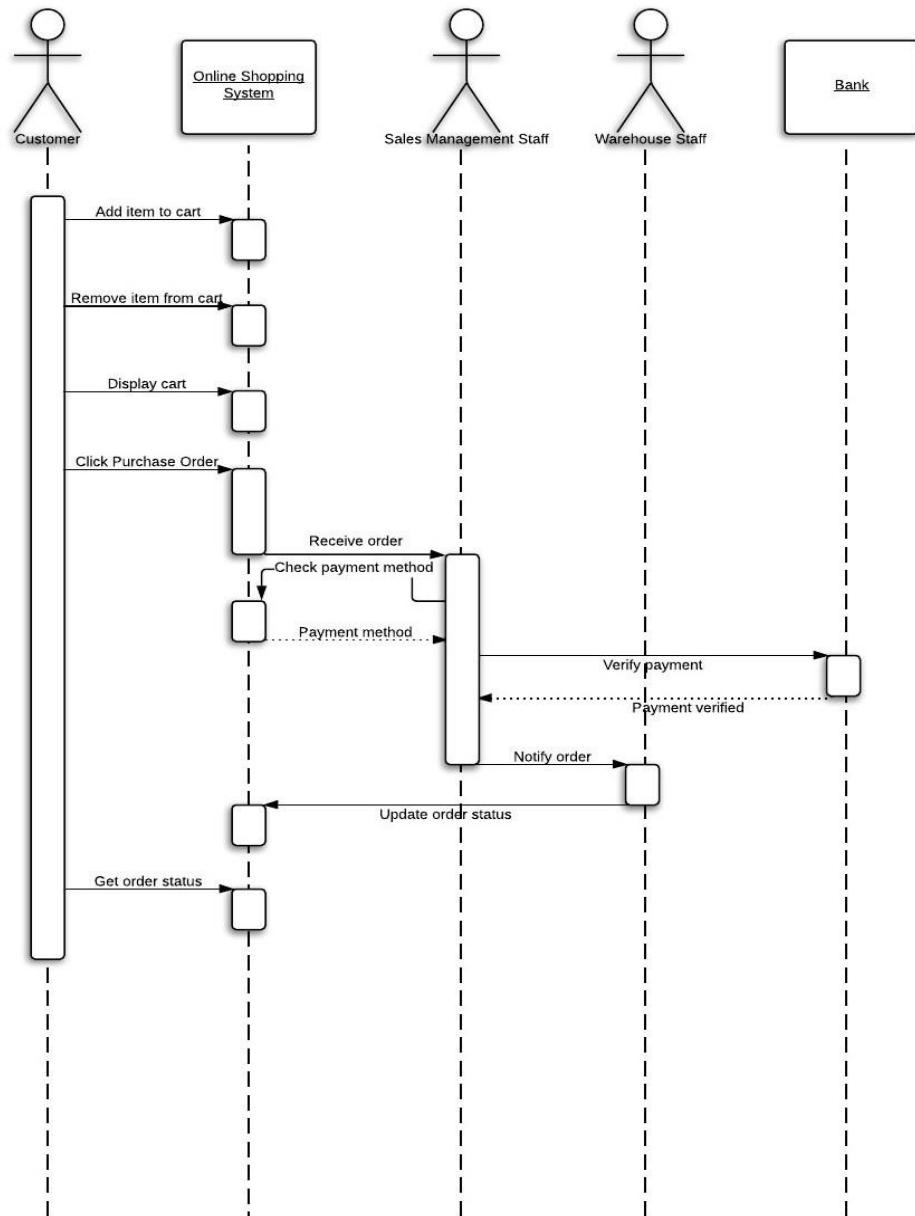
5.1.2: Class Diagram



5.1.3: Activity Diagram



5.1.4: Sequence Diagram



5.2: Data Dictionary

1. Registration

Data Field	Data Type	Nullable	Description
ID	Int(11)	NOT NULL	Primary Key
Name	Varchar(45)	NOT NULL	Name of the user
Date of Birth	varchar(45)	NOT NULL	dd/mm/yyyy
Email	varchar(45)	NOT NULL	emailid@xyz.com
Phone_No	varchar(45)	NOT NULL	0123456789
Gender	varchar(45)	NOT NULL	Male/female
Username	varchar(45)	NOT NULL	User specified
Password	varchar(45)	NOT NULL	Alphanumeric
Conn_password	varchar(45)	NOT NULL	Alphanumeric

2. Users

Column	Type	Null	Default
<i>id</i>	int(11)	No	
name	varchar(255)	No	
email	varchar(255)	No	
contactno	bigint(11)	No	
password	varchar(255)	No	
shippingAddress	longtext	No	
shippingState	varchar(255)	No	
shippingCity	varchar(255)	No	
shippingPincode	int(11)	No	
billingAddress	longtext	No	
billingState	varchar(255)	No	
billingCity	varchar(255)	No	
billingPincode	int(11)	No	
regDate	timestamp	No	CURRENT_TIMESTAMP
updationDate	varchar(255)	No	

3. Orders

Column	Type	Null	Default
<i>id</i>	int(11)	No	
userId	int(11)	No	
productId	varchar(255)	No	
quantity	int(11)	No	
orderDate	timestamp	No	CURRENT_TIMESTAMP
paymentMethod	varchar(50)	Yes	NULL
orderStatus	varchar(55)	Yes	NULL

Table 3

4. Products

Column	Type	Null	Default
<i>id</i>	int(11)	No	
category	int(11)	No	
subCategory	int(11)	No	
productName	varchar(255)	No	
productCompany	varchar(255)	No	

productPrice	int(11)	No	
productPriceBeforeDiscount	int(11)	No	
productDescription	longtext	No	
productImage1	varchar(255)	No	
productImage2	varchar(255)	No	
productImage3	varchar(255)	No	
shippingCharge	int(11)	No	
productAvailability	varchar(255)	No	
postingDate	timestamp	No	CURRENT_TIMESTAMP
updationDate	varchar(255)	No	

Table 4

Chapter 6: Implementation

After the analysis of the product to be developed and getting the ideation we will need some of the things that are to be learnt for the development of the software. The learning needs for our product are based on the programming languages and some algorithms.

The basic extension skills which are to be learnt are:

MYSQL – It will be for the database study done for the analysis of enterprise performance.

MS EXCEL – It is the Software tool which is used to provide a basic visualization of data analyst's results.

Reference

1. www.google.ch/patents/US20020133505
2. www.google.co.in/patents/US20120246050
3. www.google.com/patents/US20020138397
4. www.google.com/patents/US8781945
5. www.google.co.in/patents/US20090204492
6. www.google.co.in/patents/US5331544
7. www.google.com/patents/US20130231965
8. www.google.com/patents/CN203996385U?cl=en
9. www.google.co.in/patents/US20020183867
10. www.google.com/patents/US20050071249