

ONLINE GROCERY MANAGEMENT SYSTEM**V.SARALA ¹, B.RAM SAI²****¹ Assistant Professor MCA, DEPT, Dantuluri Narayana Raju College, Bhimavaram, Andhra Pradesh****Email id:- vedalasarala21@gmail.com****²PG Student of MSc Computer Science, Dantuluri Narayana Raju College, Bhimavaram,****Andhra Pradesh****Email id :- Ramalwaysram07@gmail.com****ABSTRACT**

The online Grocery Store documents a purchaser to submit online commands for items and facilities from a store that distributes both walk-in clients and online customers. The online Store system grants an online display of all the matters they want to wholesale from store. This web grounded application assists customers to select their products. Customers provide their all detail regarding address and contact and they get their chosen products in their home. Shopping days may be check at any time, and their substances can be modified or detached at the option of the customer. Once the customer adopts to submit a buying order, the purchaser may print the insides of the shopping carrier in order to gain a hard copy record of the deal. This Web application saves lots of time of customers and give the more advantages to customer. E-commerce has seen a tremendous growth in the past decade. An important feature of an online grocery system is to arise up with suitable recommendations, which can help the user make quick decisions, so that they dont have to spend additional time, browsing the website. Generating visual needs and reports acts as another plus point, for these websites. In order to implement this, almost all major online shopping sites use Recommendation systems. The main persistence of this broadside is to give an review of a smart cart application which is a predictive model application and which aims to provide germane item recommendations grounded on purchase olden times and user interests based on a dataset. This paper also describes the application that analyses the customers grocery purchasing habits and predicts which previously purchased products will be in a customers next order. The application will also have a reference scheme that predicts the items hence making the users purchasing experience more..

1 INTRODUCTION

The main goal for developing this project where customer can purchase an order on groceries. The structure is very convenient for customer. They can easily buy the grocery products from home through internet. The system decrease a much of work load for customer. The product is directly delivered customer address by system online grocery shopping. The system functionality of products an orders is stored on the admin side in web service. this project provides a lot of feature to manage the product in well manner. This project contains details advance module that can make the backend system very powerful. Online grocery market is a method of E-Commerce that allows customer to buy a product form a seller over internet. There had been a increasing demand for e commerce sites, in the past decades. Online grocers, especially have growing in popularity. Each of this sites are using recommendation system and algorithms. Internet of Everything or Network of Everything is additionally known as Internet of Things (IoT). When physical articles or things are embedded with physics, sensors and software then the network called IOT is formed. This network has property to change objects to exchange knowledge with the assembly, operator and/or different connected devices supported the infrastructure of International Telecommunication Union's international Standards Initiative. IOT allows the discernment of objects and controlling them remotely across existing network infrastructure. Thus a network makes a extent for a lot of direct integration between the physical world and computer based systems. This brings to betterment in accuracy, potency and economic profit. Every factor is clearly acknowledgeable through its embedded system however is in a position to interoperate among the present internet infrastructure. The intention of here tabloid is to create an online grocery management system. This system can come with suitable recommendation for the user and display interesting patterns for companies which can be also market research. Grocery shopping these days has become a job. The client needs to continuously monitor groceries at home and also has the

work of directing coupons, maintaining shopping lists, standing in restraint out queues, reading the fine print on food cans, and even needs to find out within which rack and row he or she may notice that object. A large amount of the grocery shoppers would thus have an interest in an additional appropriate, rapidly grocery shopping option. Presently life for everyone has become so confused and time consuming, at such time we require a smart system at our kitchen also. To put on records and observing all the grocery at home is hard. Many of the time we remain in incorrect belief that we have enough grocery in our kitchen but we have to face empty bottles at the time of difficulty when the requirement is must that gives us trouble. And to avoid this, some time we buy more than enough grocery & store it at our home for many days, which is also an inconvenience can cause damage to grocery. Both this situations are problems. System that can give continuous level measurement and can notify us about low level of content is required to avoid these problems While both Searching and Linking navigation styles can be found on the web and on websites generally, their utilization on online grocery stores is diverse because of the society with conventional grocery store aisles. Both of these techniques have benefits for the consumer and the store; however there is small research in this specific domain to advice which techniques has the greater usability and advantage to customers. Search capabilities are essential for helping users locate desired products. With, on average, 70% of a website's users employ a website's search engine, and 43% believe that the search engine is the most important feature on a site (Bannister, 2002). The provision of sorting or prioritizing search results allows users to better meet their own needs by allowing users to have more control over the online grocery store. In the case where a user chooses to browse the site (Linking) rather than employ the search facility, it is essential to provide meaningful labels and menu names to aid navigation (Freeman, 2009). Bannister (2002) suggests that strong and relevant cross selling serves as extra navigation for users who wish to browse rather than having a set list, as well as increasing product sales by 'suggesting' associated products.

After this outbreak, Indian government categorized to make the food delivery and restaurants as critical for the population. As per the statistics, more than 20% of population in India relies on online services on daily basis which include students, young working population, and paying visitors these services had to start again. COVID pandemic has created many challenges for food industry in large that would have long-term effects in future.

It is also important to highlight that customers have been cautious of placing orders during the pandemic. This has been the case irrespective of the fact that several online food delivery services sellers have equipped the delivery personnel with necessary protective gear & tools and also encouraged the customers to pay online so as to ensure contactless delivery. People do not fully trust the online food and services delivery platforms because of some issues such as how clean are the conditions of the restaurants/shops and also the sanitary conditions of the deliver personnel making the delivery of food and services. As a result of these problems, customers of today have been reconsidering their potential buying decisions.

2. LITERATURE SURVEY AND RELATED WORK

Various research papers, articles and patents have been studied before embarking on methodology. In one technical paper the slope unique and min confusion algo have been proposed for item-item collaborative filtering in the grocery recommendation system. In another one paper, the prediction of a recommendation system by means of suggestion regulation withdrawal and analyzing past orders of customer and mapping the selected item with similar item is achieved. Likewise, in random walk algorithm the vigorous of a page or an item is chosen by the probability that the item will be decided. Also, in the patents and the recommendation systems are produced by taking into account users interests and past history of item viewing while recommending items. In this systems, the item to item mapping occurs and by using set of tables the item to item mapping is achieved. Thus, in the literature survey various algorithms and methods related to recommendation systems were studied and based on that methodology is prepared. This section presents an indication of the traineeships and commercial intelligences related to shoppers' grocery shopping conclusion making development, in together off and operational selling channels. The resolved was to get a universal review of grocery shop, in what relates to this thesis and subsequent questions, and as such the focus relies mostly on the decisional phase and influencing pre-decisional of the grocery shopper decision making process. On the origin of outcome of the literature review performed, a conceptual framework that guided the design and performance of the empirical studies, aiming at providing answers to the proposed research questions, is also presented

in the recent study of Chen, Ching and Tsou (2007), the authors cited from Azjen (1988); Azjen and Fishbein (1980), that the theory of reasoned action (TRA) states that behavioral intentions formed through the attitude toward a behavior and subjective norms lead to actual behavior given the availability of resources and opportunities. A person's interest in performing a particular behavior is reflected by the attitude toward a behavior and it is determined through behavioral beliefs; these beliefs are obtained through a cognitive evaluation of outcomes associated with performing the behavior and the strength of the association between outcomes and behavior; while the evaluation produces either a favorable or unfavorable response to the object, person, thing or event (Chen, Ching and Tsou, 2007).

2.1 Time saving

Time is also perceived as one of a factor that relates with intention to purchase in a shopping context. It is believed that consumers have their own perception of time, whether or not to shop from the internet. According to Hansen and Jensen (2009), accomplishing the shopping trip as soon as possible refers to the time-saving oriented consumers and they prefer store choices favoring quick shopping; people who dislike shopping and approaching for time saving retail stores refers to the economic shoppers or known as "problem-solvers".

In online shopping, it requires less effort and better decision making for consumers who opt to purchase at the e-store (Jiang and Rosenbloom, 2005). Shoppers may save their time in e-shopping because they do not have to go through any effort on travelling to a mall or saving their time in other psychology factors such as traffic jam etc. Online shopping increases search efficiency by eliminating travelling costs and psychological costs brings convenience in e-shopping (Jayawardhena et. al., 2009). Comparing online and traditional shopping, Alreck and Settle (2002) found that internet shopping was viewed as saving more time.

Shoppers who value convenience can obtain the benefits of product and services with less effort and this would have a positive relationship with shoppers' excitement (Jayawardhena et. al., 2009). Ordered products are directly delivered to the door is the greatest interest to many consumers because online shopping does not requires us to leave the hours or office (Chen and Chang, 2003). According to Monsuwe, Delleart and Ruyter (2004), the main drive of online shopping is that the internet is time saving and accessible 24 hours a day. Shopping in the internet saves time and effort because consumers are able to shop any time in the comfort of their home; especially for consumers who have little amount of free time because of extended working hours (Wolfenbarger and Gilly, 2001).

2.2 Perceived risk

Perceived risk is defined as consumer experiencing consequences or the amount of uncertainty in contemplating as particular purchase decision. (Cox and Rich, 1964). Similarly, Gronhaug, (1976); Newall, (1977); Upah, (1980) defined perceived risk as the potential of unfavorable consequences and the level of uncertainty in a purchasing situation. Stone and Gronhaug (1993) defined perceived risk increases psychological costs when feelings of discomfort occur in an individual. According to Walker and Johnson (2006), they stated that perceived risk has two main concerns. First is concerning the service delivery system's technical performance or functional reliability; and second is concern on privacy and security. Functional or performance goals, psychological goals, or the means of money, time and effort invested to attain those goals may be regarded as the consequences (Park and Stoel, 2005).

There is certain risk that consumers will face when making online purchase. Shopping on the internet which is a new medium for consumers will be a challenge for them because shopping on the internet is relatively new and consumers have less experience with it (Monsuwe, Delleart and Ruyter, 2004). According to Sorce, Perotti and Widrick (2005), perception of convenience in the internet and its informative sources will positively affect good decision making for online shopping but the decision will be negatively influenced when there is high perceived risk. From the research of So, Wong and Sculli (2005), excessively worries of security from the perceived risk will lead a consumer to decide not to conduct web-shopping. When consumer's perceived risk is lower, then their purchasing intention will be higher (Park and Stoel, 2005)

3 EXISTING SYSTEM

In the existing system Farmers, as well as agriculture, are the foundation of life. Numerous work has been done

towards the enhancement of agriculture by developing technologies that support directly and indirectly to agriculture. A range of research shows that with the various enhancements in the field of ICT (Information and Communication Technologies), the farmers are unable to take its advantage and fail to get the proper sale value for their crops. An interface that benefited the farmers by providing the information related to the advancement of agriculture techniques. Various technical approaches made in agriculture, mostly in the field of food and supply chain management. The incorporation of Online Grocery technology in agriculture has improved the efficiency of the agriculture supply chain by reducing the need for verification of data. However, the technology proposed benefited only the producers in terms of maintaining the accuracy of data for supply.

4 PROPOSED WORK AND ALGORITHM

The Proposed Farmer's portal is a single gateway through which the e-commerce activity of crops can be performed. The users' experience of the portal can be tailored according to the individual need. It is a single access point i.e., everything is in a single place, the only thing needed is single login to approved users.

User: A user can be a buyer or a seller. The seller may be a farmer or a representative of him. Device: The user can interact through the portal using a computer or a laptop. Interface: To access the portal, the user needs to register using a sign-up. The registered user logins using the correct credentials. Once the user signs in successfully. The user will have access to the portal/ interface. A user can view available items that are crops and seeds with their price..

5 METHODOLOGIES

MODULES

The module of the Grocery management system is made of a combination of modules that work in collaboration with each other and make it beneficial to accomplish the main aim of the scheme.

Item Selection:

The user chooses the item from the interface he gets on the basis of different choice of filters like price, color, category, and much more he can add as many items he wants he may specify it as he wants and get the selected items done in the interface.

Order:

The things which choose by the user then move to the order interface to get ordered by the user as he will see here the details of the final result to order the total and timings. He can remove any item if he wants.

Payment:

They may make payment online through their debit card they use this module to pay as the ticket shows the amount in the account of the owner of the bus. As he makes the payment the card becomes confirmed and ready to be used.

Staff assignment:

Admin assigns the team on the particular rack to pick the items as fast as they can their task is to pack the item fast and collect it to the central area where packing can be done properly and give the order to customers.

Registration:

Users' information has to be compelled to be registered within the system thus on establish every one of them unambiguously and do the required group action as real potential. like on the name of the bill are issued. On the far side, this plenty of things require measure there wherever we will reference him.

Without registration, there are a few options and pages one user can see which are landing on the home page and taking the features to read but he won't be allowed to use those. For use, he will have to register. One person needs to put all the details correctly and precisely as it will be helpful in identifying them and believing that he is the real person who has booked for the same.

It also includes driver license for them who is driving and parameter too.

Login:

After registration one will register within the system because of the operator of the system either on behalf of the user. When this he has the different helpful interfaces accessible for any actions. Here either bride or groom both have to log in with their unique identity and passwords. After this, they will be directed to the primary user interface from where they have further options.

Forgot password:

This is quite often that people tend to forget the password they keep for the login. So, this could be very tedious and hectic to recover the password manually in case if one needs to login in an emergency. So, to overcome this problem we have this module named as forgot the password, and using this module users can recover their password in seconds.

So here we need only to put our registered email Id and hit the enter. Then one confirmation email will go to the email where he may reset the password. In seconds one can use this module and get rid of the forgetting password problem.

Admin:

Admin has the official powers to control the flow of the data from one part of the system to the other. He can manipulate the access of the users to the data. The primary purpose of this account is to make the user data relevant and then giving the inputs to the other interface module and make it work optimistically and get the timetable according to the wish we want to create for a particular type of inputs.

Hence all the data will be reflected in clean and well data in the interfaces.

6 Results and Discussions



Fig 1: Login Page

Fig 2

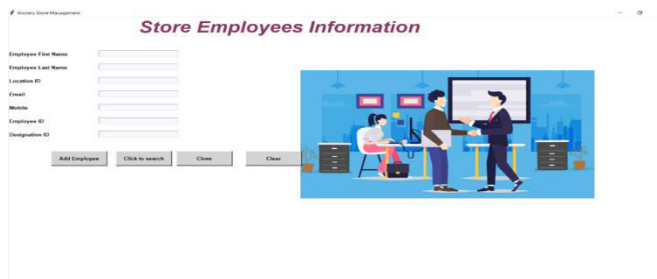


Fig 2: Employe store information

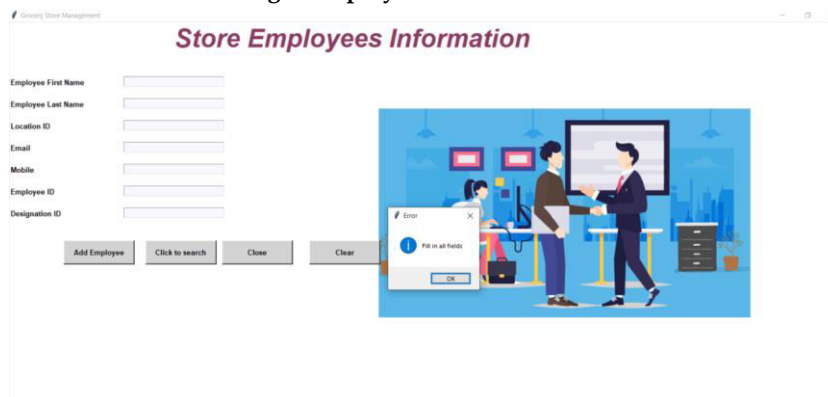


Fig3 : Error when user didn't fill in all fields

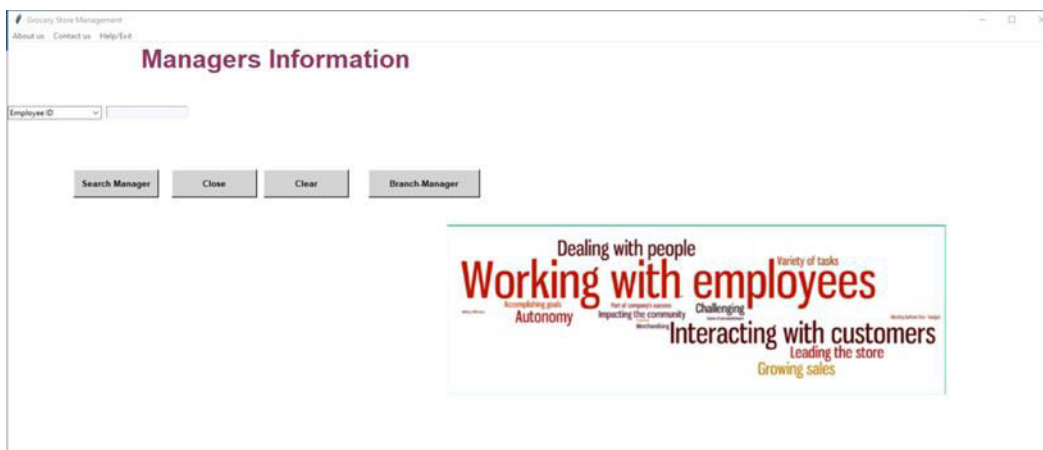


Fig 4: Gui Information

7 .CONCLUSION AND FUTURE SCOPE

CONCLUSION

The project entitled ' Online Grocery Management System ' is very convenient for the Computer Companies. This system is very convenient for customer or users to buy online computer products. It can be observe that the information can be obtained easily and accurately. The online grocery shopping Software is made more user friendly to the users, so that anyone

can run the software. Then this software provides permission to enter to the system via the login password credentials to the user who uses this system. This project manages all the details about Computer Products

FUTURE WORK

In the future, users can buy their identical products using mobile phones. This organization is very beneficial for both users and companies. This product has a great future scope. Online grocery projects established using web-based technology and for Windows too future versions of environments. This project also delivers security by using security credentials like user ID as well as password, so that any illegal users cannot practice your account. The only lawful person that will consume proper admittance authority can use the online grocery shopping software.

In this paper, we have done the analyze of the solutions available for the implementation of smart grocery system using IoTs. Smart grocery system using IoT is cost-effective and user-friendly system for customers. It not only helps to induce organized for grocery shopping, it additionally saves our time and money. With smart grocery system, one can be relaxed and stop worrying of continuously being in follow, and checking the grocery containers in our house.

We will get alerting about the low level of grocery and we can place order for particular object. This helps in simplicity of society and one step forward of making our city smart. Upcoming work or related work for smart grocery system is we can directly place order by android application in our smart phones, so developing an application to automatically placing order to grocery shops is further execution in this system.

7 REFERENCES

1. ^ "Grocer". Oxford English Dictionary (2nd ed.). 1989.
2. ^ [1][dead link]
3. ^ "Tennessee History for Kids". Tnhistoryforkids.org. Documentation from the original happening 2015-02-23. Retrieved 2015-03-06.
4. ^ "Piggly Wiggly Man". Time. 1929-02-25. Retrieved 2010-05-04.
5. ^ Jump up to: a b c d e f g h Fassler, Joe (2019-04-23). "The Man Who's Going to Save Your Neighborhood Grocery Store". Longreads. Retrieved 2019-05-01.
6. ^ Understanding Nourishment: Values and Groundwork, Amy Chocolate, ISBN 978-0538734981, 2013
7. ^ "Definition of delicatessen - Merriam-Webster's Student Dictionary". Wordcentral.com. 2012-09-20. Retrieved 2015-03-06.
8. ^ Driscoll, Michael; Meredith Hamilton; Marie Coons (May 2003). A Child's Introduction to Poetry. 151 West 19th Street New York, NY 10011: Black Dog & Leventhal Publishers. p. 12. ISBN 1-57912-282-5.
9. ^ Jenkins, Nancy (1984-04-04). "Health Food And The Change In Eating Habits". The New York Times. Retrieved 2015-03-06.
10. ^ Xie, Kang (2004). A Strategic Analysis of Online Grocery and Its Future Outlook. Massachusetts Institute of Technology, Engineering Systems Division.
11. ^ Tam, Donna. "Shell who? Online grocer shows Amazon, Walmart how it's done". CNET. Retrieved 28 April 2014.
12. ^ "Online Grocery Shopping With Free Shipping". EFoodDepot.com. Retrieved 2015-03-06.
13. ^ "Online grocery growth tests U.S. retail agility". The City Wire. Archived from the original on 2014-06-27. Retrieved 28 April 2014.
14. ^ Cassel, Ian. "The Food Tech Revolution". Seeking Alpha. Retrieved 28 April 2014.
15. ^ Thomasson, Emma. "Online grocery sales to double in key European markets by 2016: IGD". Reuters. Retrieved 28 April 2014.