**Project 10**

**Altun Fine Foods Supermarket Online Grocery Management System**

**About the Company**

Altun Fine Foods Supermarket began off the back of an unwavering passion for food. Freshly established in 2021, brings a focused, energetic and passionate approach on behalf of our brands, right across Victoria. Representing some of Australia’s most innovative and delicious premium retail brands, The Fine Food Merchant specialises in distribution of the finer things to independent supermarkets, premium grocers, fruit & veg retailers and delis. We see ourselves as more than your traditional distributor. We are industry professionals who genuinely buy into our brands' values and stories. With significant experience across all retail channels, a great understanding of the independent network and fantastic relationships across the state, our strengths lie in our ability to get our brands in the locations they need to be.

**System Specifications**

The system should be very active and covers all the necessary options which are needed by the admin and customer even if there is some error that occurs in the system then it should send an alert mail to the admin or the concerning department. The following are the concerning points of this system which will be considered:

* The system should be proactive and performs the task which is necessary sometimes even for the troubleshoots.
* The clause of this system should handle many customers at the same time and provide smooth functioning with a better and enhanced user interface.
* The admin could be able to perform tasks to handle the customer as well as the staff of the store.
* The authorized person should be able to edit, delete, and modify the sustaining database as and when required.
* It should monitor the actions of the customers and suggest them better products from the system interface.

**Obsolete System:**

People need to buy the grocery at a fine-tuned interval of time, there are some items which can be purchased for utilizing it more than a week but withal there are many items which need to be utilized on the same day or within 2-3 days like dairy products, etc. if the customer is a working person then he has to first schedule his timing to go for grocery shopping then after making the list of sundry items, he goes to the market where he visits many shops to buy items because all items are not available in the same street shop.

This process requires physical effort and time to buy the grocery, it’s a very tiring and hectic method plus a person needs to reiterate it every week or month as per the requisite. Sometimes due to lack of time people buy victuals items from nearby street shops of the roadside areas then after consuming they get sick and many diseases follow it.

The owner keeps the record of the transaction on papers and then he forefends the papers punctiliously but there are many chances of error to occur while maintaining the records additionally if someone wants to find any record then he has to check all the papers. If there is any kind of error occurs afore then it is very arduous to track the error on the papers.

Apart from maintaining the record, there is so much other information which the owner needs to take care and indicted it down somewhere consequently a systematic management system is needed to clear out all the possible quandaries as well as managing the day to day transaction and data. The sundry points which are weakening the current system are:

* The information or the data recorded in the papers are less trustable because there may be so many problems occur while managing the record papers.
* This system contains many errors and there is no method through which we can track the error if any occurs.
* The owner cannot keep an eye on every transaction that happens in a day with the customer.
* This system has also required the efforts of the customer as he has to come to the store and then select items and buy them himself.
* To keep the information of the store staff, it requires great efforts and time to write down each staffs data.

**Required System:**

A centralized system is needed to store the data and information of every customer and staff in an automated manner so that we can retrieve the data whenever required. This system should be created by keeping in mind the difficulties and problems of the owner and the customer as well. This system should be error-free, reliable, and efficient enough to control the flow of data and store it in a systematic manner.

The system should bifurcate the data in product type, size, variety, quantity, brand manner also there are many types of items available in the groceries like wheat, rice, pulses, sugar, and other household edible items.

 It could easily run all the work simultaneously without error and technical glitches. The admin customer and the staff should work after logging into their respective accounts. The interface of all three is given according to the need and requirement of the entity it has separated options as well.

The admin should control the data of the customers and also the staff member’s data along with their salary structure, the designation of every staff. It provides full control of the system to the admin.

Here the customer should be able select the items and save them in the online cart in the system and pays the estimated amount through online options after receiving the request the admin gathers the staff of particular racks and instruct them to pack those items, thereafter the delivery boy deliver the items at the customer’s residence as per his given time and date. The following are the key points of this system:

* All the data should be in an automated form where we can track any information if required.
* The employees could see the data of the respective customer if there’s any error occurs and reported by the customer.
* It should be a unified system that can work simultaneously and save data according to the department and account in the database.
* There should be separate sections through which the customer can find any item or product by entering the title of it.
* The admin could track the delivery person and guide him towards the customer’s residence.

**Module Description:**

The model itself clears the relation among the entities of the system which are internal link and provide data if we access one data, the relevant files can be open through the link. So this model is the hard wire which transfuses the hierarchy and flow of data internally. It should help the admin to manage the sundry accounts and provide a list of solutions if any error occurs in the system. It should also help in tracking the error from which entity it has occurred.

**Admin:**

The whole system of grocery management should be controlled and sustained by this entity. It should hold the authority to terminate any account and change any information within the system if required. This entity should gain momentum while keeping intact the system to run smoothly and error-free. The following attributes help this entity to behold the superiority:

* **Name:**The admin entity is accessible by more than one person so the name of every admin is registered in this attribute.
* **Contact No.:**In case of emergency the system responds to the admin so his contact number is saved in this attribute.
* **Login\_ID:**The system has provided unique login IDs that can be used while opening the system.
* **Email Address:**The email address of every admin is written in this attribute to send the information and query as per the need.

The admin checks the available stock in the store and informs the supplier to provide the items in bulk quantity directly from the manufacturing units to sustain the quality and freshness of the products.

**Supplier:**

The stock in the store should be optimum and if the stock decreases then the admin contact the supplier. Now there may be more than one supplier so this entity holds the data of every supplier along with their other details which are included in this entity within sundry attributes:

* **Supplier ID:**Every supplier has a unique identification number which is system generated, it helps at the time of login and make the account secure from threats.
* **Name:**There is more than one supplier attached to the system therefore the name of every supplier should be maintained in the system.
* **Contact No.:**To contact the supplier for any mishap or information, the connection information is collected in this attribute.
* **Items Supplied:**the supplier provides the items which are less in the stock that information is sustained as a record in this attribute.
* **Registration No.:**The supplier is registered within the supplier union so the registration number is mandatory to be in the system to sustain the authenticity.
* **Address:**This attribute holds the proper location address of the supplier’s place to reach them if needed.

**Products (Stock):**

There needs to be data scenery which holds the overall details of the existing stock in the store as well as to provide the information of the stock which needs to purchase from the supplier in case of shortage of stock. This entity provides full-fledged data of the stock, sundry attributes help these entities which are:

* **Type:**There are a variety of food items needed daily in a house, that’s why there should be acute information that is separated by the type of items available in the store.
* **Description:**Every product’s extra information like how to carry or use for example dairy products need to be in the refrigerator, is saved in this attribute.
* **Mfg / Exp:**The products are manufactured by processing units they stamp the expiry date of each product which is available in this attribute also.

The information of stock available in the store is first collected by the employees or staff after that they prepare a report weekly or monthly and forward it to the admin, he approves that data and contacts the supplier for the necessary supply which is maintained by the staff.

**Staff:**

In every company or business unit, the main backbone is the staff who manages all the routine work and delegates the task given by the admin or head of the system. This entity holds the information of every staff to initialize the procurement and salary structure. The following attributes are attached to this entity:

* **Login\_ID:**Every staff record the work he does in a day into the system through their account which is login by the unique login ID.
* **Contact No.:**To contact any staff member for sudden issues, this attribute holds the contact information of the staff members.
* **Email\_ID:**The information or task delegate by the admin is given on the email of every staff, this attribute attaches the email ID of staff.
* **Qualification:**The staff members are diverse and contain different qualifications on the basis of this there post is decided.

The customer is the main entity that holds the details of an existing and new customer who login into the system and give the order of food items. The system saves the data of every customer which helps the customer while logging in to the system next time.

**Customer:**

The customer entity sustains the accounts of every customer in which he provided the information through which the admin can track the location of the customer and made the delivery. The following attributes are included in this entity:

* **User ID:**This is a system-generated unique ID that is given to every customer.
* **Contact No.:**To connect which every customer, their contact number is mentioned in this attribute.
* **Address:**The delivery person deliver the stock to the address of the customer, this data saved in this attribute.
* **Email ID:**The customer can ask for the query from the admin through the system by its authentic email address.
* **Type:**This attribute includes the profession of customers like whether he is a student, teacher, or any other professional.
* **Payment:**The customer pays the amount prior to the time of booking through online mode.

The last entity which is separated in this system is the order entity, in which the track record of every order made by the customer is added in this entity.

**Order:**

This entity holds the order details done by every customer to be referred for future use. And also to maintain a report of transactions made in a day by the customer. The attributes of this entity are:

* **No. of Items:**This entity saves the number of items that are included in the order given by the customer.
* **Quantity:**The customer can book more than one quantity of any item, which is saving in this attribute.
* **Price:**  The items which are purchased by the customer contain the price which is added in this attribute.
* **Discount:**There may be or may not be the owner who provides a discount on the food items.

**Use Case Diagram:**

**Login:**

The preliminary page of login opens as an initial page for all the three actors viz. **Staff, User, and Admin**. The slight changes are given on the initial page which includes the registration tab for new customers in customers interface.

**Dashboard:**

When an actor enters the login credentials he will reach a common page of the dashboard which includes further options as per the actor.

**Food Items (Stock):**

This option is edited in the interface of the customer as well as the staff to manage the stock account properly. The customer selects the food item in the cart, and the staff manages the stock available in the store.

**Purchase:**

This tab is only available for the customer because the purchase tab provides the option to select the items to be purchased and save them in the cart.

**Charges:**

The monetary option is available in the interface of both the admin and the customer because the customer pays the estimated amount online which is supervised by the admin entity.

**Feedback:**

The customer can write about the service he got from the system generated and automated initials to the admin therefore this option is included in the customer’s screen only.

Functional requirements are product features or functions that developers must implement to enable users to accomplish their tasks. So, it’s important to make them clear for the stakeholders. Generally, functional requirements describe system behavior under specific conditions. The developers of this system must enhance the performance and efficiency of the system by adding 15 to 20 more functional requirements. Students need to do their own research to find how they can improve the system and which FRs need to added. The group must need a prior approval from the stakeholders/project supervisor before finalizing these Functional Requirements. These enhanced FRs must be reflected separately in Final SRS Report after the approval.

**Hardware Requirement: Should be recommended by the developers.**

**Software Requirement: Should be recommended by the developers.**