



Sri Lanka Institute of Information Technology

Information Technology Project

Year2, Semester 2 - 2022

Project Charter

Title of the Project :	Management system for a food distribution company	
Batch :	Metro Weekday	Group No: WD_Met22_ITP_03
Development Technology :	MongoDB , Express.js , React.js , Node.js	
Client :	-	

Description of the Project:

The software that is to be developed is a complete system to manage all resources and finances of a food distribution company. The company has many distribution centers scattered throughout various locations, and goods are transported in between them. The company will get goods from suppliers and sell to retailers (wholesale).

The system will manage inventory, vehicles, employees, transactions, suppliers, buyers and distribution centers while providing additional functionality such as report generation and delivery tracking (through Google maps integration).

** Goods transportation between warehouses are named 'deliveries' and are handled by the company. The company does not deliver goods to/from suppliers.

Users (Actors):

1. Buyers
2. Supplier
3. Drivers
4. Manager
5. Labor Workers
6. Clerks
7. Quality Assurance Agent
8. Third party couriers



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Details of the Group Members: *(Provide the details of the group leader in the first row)*

	Surname with initials	Registration Number	Contact Phone Number	Email
1.	Shifan M.S.M.	IT21067556	0766176116	it21067556@my.sliit.lk
2.	Fernando M.R.R.	IT21067242	0767954030	it21067242@my.sliit.lk
3.	Fernandopulle J.M.	IT21104862	0760417241	it21104862@my.sliit.lk
4.	Kariyawasam K.P.W.D.V	IT21036620	0719036568	it21036620@my.sliit.lk
5.	Kumarasiri D.K.N.	IT21020094	0764957300	it21020094@my.sliit.lk
6.	Perera A.D.S	IT21053146	0742528767	it21053146@my.sliit.lk
7.	Shavindi H.D.M.	IT21015908	0775722625	it21015908@my.sliit.lk
8.	De Silva M.N.S.	IT21032592	0713936451	it21032592@my.sliit.lk

List of Functions Developed by the Group Members:

	Name with Initials	Brief Description of the Function
1.	Shifan M.S.M.	<p>Function: Delivery Management Actors: Clerks, Drivers</p> <p>Record, track and manage the delivery of goods and all associated resources within the delivery period. Deliveries only transport goods between distribution centers, not to/from any outside party. A delivery includes a vehicle, driver(s) and goods. Distribution center employees can schedule a delivery and assign a vehicle and a driver to it. The system keeps track of arrival/departure times as well as the geographical position of the truck. The driver can login through a mobile device to update the vehicle's position. The system may also provide estimated based on available data.</p>
2.	Fernando M.R.R.	<p>Function: Buyer functionalities Actors: Buyers</p>



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		<p>After the user(buyer) logs in to the account, the user can create an order, check the order history and can schedule an order. In addition to that the user can update his account too.</p> <p>Under creating an order</p> <p>The user can get access to the products available in the system. The user also can check on the products based on different categories. After that the user can select the items needed and specify the quantity and add them to the cart.</p> <p>once items are added to the cart, the user could remove items, add more items and update the order.</p> <p>After finalizing the items, the user can make the payment and place the order. Once the payment is made, the user will receive an e-bill. The user can get it downloaded too.</p> <p>Under the order history</p> <p>The user is able to view the order history and rate the quality of the order.</p> <p>Under scheduling an order</p> <p>The user can schedule an order to happen on monthly or on weekly basis. When an order is scheduled, it will be placed automatically at the scheduled time.t</p>
3.	Fernandopulle J.M.	<p>Function: Supplier Functionalities Actors: Suppliers</p> <p>The company needs suppliers as much as it can get to scale the system better. Any interested supplier can register as a supplier in the system via submitting relevant information (nature of the product, quantity, personal details etc) in supplier registration portal.</p> <p>A registered supplier can schedule their supplies, which will take place in regular intervals so that the company knows beforehand the place (warehouse), time and quantity it receives. In some occasions, a registered supplier can notify the company if they can supply some certain goods at a certain time so the company can consider and approve it. All notified and scheduled</p>



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		processes will be recorded.
4.	Kariyawasam K.P.W.D.V	<p>Function: Supplier & supply management Actors: Clerks, QA Agent</p> <p>In order to supply the products to the centers the supplier must have a membership. Prior to obtaining a membership, supplier must submit a membership request through the system with their information. Then an agent of the company will review the request and give the approval for the membership.</p> <p>After getting approved by the agent only the admin can add the supplier to the system. When adding the supplier to the system their information will be saved, and the information could be vary depending on the product they produce. (Vegetables, seafood, dairy products, fruits etc.)</p> <p>Each time suppliers provide their goods to the centers the product will be inspected by an agent if the product meets the quality standards it will be approved by the agent and add to the inventory, otherwise the product will be rejected.</p> <p>Each time the supplier request to provide the products the system will keep a record of that regardless the product is approved or rejected.</p>
5.	Kumarasiri D.K.N.	<p>Function: Employee Management Actors: Managers</p> <p>Employee management, including all admin parts like salary increment, available leaves, and work hours(OT).</p> <p>Salary will be calculated using the employee's basic salary. If someone gets leave more than once per week, will cutting %5 of the basic salary. If an employee does the OT, he or she will get extra money for that.</p> <p>Following all of that, the system determines Total Salary as (Basic Salary + OT) – Leaves(%).</p> <p>These all function under the control of managers. Because clerk and drivers can't update their own salaries by themselfest</p>
6.	Perera A.D.S.	<p>Function: Inventory management Actors: Clerks</p>



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		<p>Provides functionality to track the goods stored at various distribution centers, and document the goods that were brought in and taken out from a distribution center. Goods can be brought in from suppliers or through deliveries from other distribution centers. Goods can be taken out when sold to a buyer, when delivered to another distribution or for another reason such as passing their expiration date. Distribution center employee's oversee this process, and they can login to the system to update the inventory accordingly. Various details such as delivery dates, expiration dates, supplier and quality of the goods are stored within the system.</p>
7.	Shavindi H.D.M.	<p>Function: Third party courier management (shipping companies/other couriers) Actors: Third party couriers, Suppliers, Buyers, Manager</p> <p>This function arranges deliveries, transporting the goods into the company by means of the inventory management system, from a registered buyer else a registered seller about a specific order. Firstly, the system gets information about the new order, and this function helps arrange the specific goods for the transportation in necessary conditions. After the delivery is completed, a notification will be sent to the system that the delivery was successful. The actor is assigned to the company by means of a contract basis agreement. They are able to perform multiple deliveries in a day and they will get paid according to the time and distance they travel for a specific order.</p>
8.	De Silva M.N.S	<p>Function: Salaries and attendance management () Actors: All employees</p> <p>This function allows the employees to view their salaries and manage their attendance. This function primarily targets actors such as Clark and deliveryers, and it allows them to observe their current salary (the power to make changes to the salary belongs to the manager) and mark their attendance on the system. The attendance function allows users to request leaves and get updates about OT hours. This information helps the manager calculate the salary, and that information will be available to the employees via the system.</p>