



Sri Lanka Institute of Information Technology

Information Technology Project (IT2080)

Year2, Semester 1 - 2020

Project Charter

Title of the Project :	Factory Management System for Niyandagala “Ambrosia” Tea Uva Co (Pvt) Ltd.
Batch :	ITP2020_S2_05_G2
Development Technology :	Python using Django Framework

Description of the Project:

Niyandagala “Ambrosia” Tea Uva Co (Pvt) Ltd is a tea factory situated in Welimada which provide hundreds of job opportunities for villagers. They daily collect large amount of tea leaves from small and large-scale suppliers all over the Uva province. Then the tea leaves are processed and stored in storerooms to be sold at the auction. All most all the tea they produce are sold at the tea auction while the rest are sold at the factory outlet to local customers. The main target of the client is the foreign market where he can sell his products to a higher rate.

There are about 400 employees working inside the factory and about 30 staff members who inspect and supervise the workers and manage the documentary work like marking attendance, calculating salary etc. The process of registering employee, marking attendance, calculating salary, calculating EPF/ETF etc. are done manually by adding records in books. They said that they have a trouble in managing these operations manually because a simple mistake can affect the whole process of calculation and takes a long time to complete the task. By automating the system, the client will be able to manage all the employee records and can view each record when they want. They could minimize the mistakes in calculating salary, EPF, ETF etc. and they could update if something went wrong and it save the time wasted for doing these calculations manually.

There are many suppliers who supply crops to the ambrosia factory. The suppliers of the factory have 2 types, large-scale and small-scale. The supplier type is based on the crops amount they are giving to the factory. Book-keeping was the only method of recording they used to keep the supplier details and their stock details. But with our system, every supplier is registered to the system. Every time a new stock is provided by supplier it is made through the system. Suppliers can view and manage their stocks throughout the system.

After receiving fresh tea leaves from suppliers, the tea leaves are stored in large trays to be dried at different temperatures. From a received crop stock, about a quarter of amount can be produced as tea. So, managing the material tea leaves plays an important part in the tea producing procedure. Currently managing the inventory is done by hand on paper. So, there can be miscalculations and mistakes. To prevent this, an automated inventory management system must be used.



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Niyandagala “Ambrosia” Tea Uva Co (Pvt) Ltd produce a large amount of tea. Depending on the quality of tea leaves and their condition the final products are categorized into different types. Currently this product records are managed manually. The factory mainly targets the international market. So, the factory can get a better opportunity in international market by managing all these manual work through an online system. The final production of tea is mainly sent to the auction and the rest is sold at the local tea shop of the factory.

In this physical shop, packing is done by manually. So that daily transactions are kept in record books. It is very difficult and time-consuming task and the process is not efficient. Packets are packing according to categories. So, they have to insert the number of packets of each category. Also have to update the amount of current number of packets. It will improve the efficiency.

When selling the products through the tea shop, it generates an income and reduce the selling storage in the tea shop. Management has to maintain the reports and checking bills to record the details of the shop. To manage this procedure, tea shop can run an application, it may help to process the below functions efficiently and effectively. Inserting the selling items, update the daily income of the tea shop and also displaying the (daily, weekly, monthly, yearly) income of the tea packets.

This final products’ inventory management function is used to add new stock details when a new stock released from factory, categorize the products by details and update product details according to the orders of tea auction. And also, it calculates the daily production of factory and remove stock when all the products are sent to the auction and tea shop. Then it generates reports according to the production details.

Another difficulty of this tea factory is that the employees have got to record the transport details manually. The employees record their travelled distance by taking meter readings from vehicles. The oil expenditure in a month is also calculated manually using the total distance travelled in a month. Not only that the total expenditure for the repairs of the vehicle are calculated manually. As a solution, the transport details will be automated through this system.

Therefore, by automating the factory management system, they can manage the factory operations more effectively and can increase the efficiency.



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

	Name with Initials	Registration Number	Contact Phone Number	Email
1.	Mudannayake I.G.M.J.	IT19000336	0767015245	malkajayalee1234@gmail.com
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6.	Wijethunga R.M	IT19210148	0772497546	ravijaloveshiphop@gmail.com
7.	Perera L.A.V.U.	IT19008110	0714249293	laumayangaperera@gmail.com
8.	Abeygunawardana S.L.	IT19362854	0762645863	sandunlakshitha06@gmail.com

List of Functions Developed by the Group Members:

	Name with Initials	Brief Description of the Function
1.	IT19000336 Mudannayake I.G.M.J.	Employee Details and Attendance Management (Registering and updating details of workers and staff, managing the daily attendance of workers)
2.	IT19039350 Siriwardana S.M.T.N.	Supplier Details and Operations Management (Registering suppliers and managing supplier operations)
3.	IT19046976 Amarawansa T.N.W.	Transport and Vehicle Repair Management (registering vehicles, updating vehicle details, and calculating the total expenditure)
4.	IT19041926 Onella Natalie P.A.D.	Sales Management in Physical Tea Shop Business (Insert and delete the selling items, update the daily income of the tea shop, display the reports of the sold items with the income.)
5.	IT19009728 Amaranayake W. N. S	Stock management in Physical Tea Shop Business. (Insert and delete number of packets, update the amount of the current stock, and display the report of the stock)
6.	IT19210148 Wijethunga R.M	Tea Material Inventory Management (Manage daily total crop stock and generate reports according to work chain.)
7.	IT19008110 Perera L.A.V.U.	Salary Management (calculating salary and other components based on employee attendance)
8.	IT19362854 Abeygunawardana S.L.	Managing Tea Stocks (Add product details, Update the product details, and generate reports according to the stock changes)