**Software Project Management (SE3080) : Assessment 1: 2021S1\_JUNE\_WD\_06**

**Brief description of the project and the responsible functions of each member:**

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| **Description**   |  | | --- | | The Factory Management System (FMS) is a computerized management and manufacturing system that automates task distribution from detailers to production managers and all the way down to the factory floor. It is a usable system for factories that need to manage production, order placements, store management, wholesale purchase and many more. The system basically features a set of common functions that any factory desires and implements a solution for working companies and factories to be able to manage their daily statistics. The system also gives the ability for wholesale buyers, employees and users to carry out their daily tasks via the system, without having to be present at the factory while the COVID-19 pandemic is still ahead.  Through our integrated web application system, it will initially provide four main functionalities, depending on the priority. Each functionality will play an important role to create, retrieve, analyse data and generate accurate results. Listed below are the four main functionalities:   * Store and Profile Management * Employee Management * Admin and financial management * Wholesale buyer and production management   The **Store and profile management** is the initial stage where the factory purchases the system, and is allowed access to all of the functions, hence creating a factory profile with relevant factory details. The factory owner is instantly appointed as the Super Administrator of the web application, where he will be able to manage and approve any related queries coming forward in the system. The admin is also allowed to create, edit, and delete stores that make contracts for supply with the factory, and be able to generate reports of the information.  The **Employee Management** deals with the profiles of the employees and workers for the factory, where they will possess an account with their user details and log into the system. The employee section will have a dashboard, where the employee is able to clock-in and clock-out, manage their profile, add and update daily reports of their workload and submit for approvals to the admin. The employee is also allowed to request for leaves, submit issues or complaints, be able to track their monthly salary record, and generate reports of their daily work and dispatched salary breakdown at the end of the month.  The **admin and financial management** will be fully functional to the admin himself, where he will have access to factory categories, product information, user access and reports. The admin has the ability to add, edit and remove employees from the system, generate reports of employee progress, approve supplier chains and manage product details via the system. The admin is also able to view the financial records of the factory, such as costs, profits and losses, and sales management, update accounts, delete financial records and generate monthly/yearly records of the information.  The **Wholesale buyer and production management** allows any company chains who are in contract with the factory, manage orders and returns, add/update and delete product listings, search products category vice, and manage their profile as well. The buyer is allowed to place an order via the system, and the production manager will approve of the order request and carry out the order process. If there are any returns, the wholesale buyer can make a request via the system, and the production manager will approve of it. Wholesale buyers can manage and edit their profile on the system as well. The admin will be able to look into wholesale order progress as well, and dispatch the order to the buyer, generating invoices and reports of the completed order.  The system is expected to organize the factory activities and help management in decision making tasks. It is also expected to cut down costs of the factory and increase the profitability of any company making a contract thus creating a much more reliable and convenient web application system. |   **Responsible function**   |  |  | | --- | --- | | **Student Reg. No** | **Responsible Function** | | **IT19156316** | **Store and profile management** | | **IT19189086** | **Employee Management** | | **IT19048338** | **Admin and financial management** | | **IT19129440** | **Wholesale buyer and production management** | |

**Product Backlog**

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| --- | --- | --- |
| **Product Backlog Item (PBI)** | **Priority** (1 -10, 1 is highest) | **Reason for selecting Priority (Business Value, ROI, Time, Dependencies)** |
| Adding Users to the system. | 1 | A user cannot access the system until the admin creates a profile to the specific user. Once the user is created, the user can log into the system and use its features. Priority 1 is therefore assigned, and the admin has the whole permission to update or delete a user from the system. |
| Log In | 1 | Every employee, supervisor and wholesale buyer must have an account to carry out the tasks. The admin’s role is to add users to the system with the responsibility that users are not duplicated, hence priority 1 is assigned. |
| User Profile management. | 2 | A user can add his details into the system, as well as fill in the optional information, which will be useful if the supervisor/manager requires any user information. Priority is assigned as 2 because user information is mandatory, however not all fields are classed as required. |
| Super Admin Approvals management. | 2 | Admin has the full authority to approve or decline users that enter the system. The admin also can view and update roles, approve information sent in by the supervisors or users. If the admin does not approve of a user, he has the authority to delete the user from the system and deny access to system information, hence classified as priority 1. |
| categories, product codes, Material codes to the system and manage it. | 2 | Admin can add, update and delete categories and code for each product to classify them. Without a product code, a product cannot be identified when a wholesale buyer places an order. The admin can also delete a product or class it as out of stock if a product is not available to purchase. Therefore, it is classed as priority 2. |
| Leave requests and management | 4 | Every employee has a chance to request for a leave if he intends to. Developing this function is essential as employees need to ask for a leave according to their permitted leaves for the year. Therefore, classed as priority 4. |
| Daily assignment workload | 2 | An employee has his daily workload assigned to him by the supervisor and it is mandatory that he must complete it before the day ends for his salary/wage calculation. A feature must be developed for the employee to update/upload his tasks carried out to the system and to be approved, hence priority 2. |
| Manage Employee Calendar Events | 5 | An employee is able to add any event to his calendar, for reminders and be able to edit or delete a record from the calendar. This does not need any admin approval and the employee can choose to add as per his wish, hence priority 5. |
| Manage user profile details such as bio data, bank details for wage, and other related details. | 5 | Other profile details are optional to add such as contact details, family information, bio and profile picture unless deemed necessary by the admin or owner. |
| Employee Payment Management | 3 | An employee is able to add his payment and bank details for salary/wage deposits. This is mandatory for every user because the finance manager retrieves this data and adds it to the user accounts from the user profile for salary dispatch, thus classed as priority 3. |
| Employee clocks-in to start his daily work and clocks-out after work. | 1 | Highest priority and should be fully functional, as clock-in/clock out timings are dependent on daily wage, leave requests and assigned workload. |
| Employees generate reports of their daily work times and allocated wage. | 5 | Deemed priority level 5 as employees can generate reports of their work any time they prefer. Dependent on employee timings and wage calculation. |
| Employee lodges a complaint regarding work to the system. | 8 | Complaints and issues regarding assigned work, system failure is submitted whenever there is an error in the system, hence the priority. |
| **Material Stock Adding and searching for materials** | 5 | After receiving newly ordered material stock from the suppliers’ stock management team members add the material details like material name, quantity, and price before adding the materials to the material stock. Priority is 2 because to continue the production chain material is mandatory to have in the system. |
| **Delete items from the stock when item is expired and add it to waste material stock and manage it.** | 10 | Stock management team members check the expired dates of the available materials in the material stock. If the material stock is expired, stock management team members will add that stock to the waste material stock and update the material stock. |
| **Production stock adding and searching for a particular product.** | 5 | Stock management team members check available stocks in the system and if any miscalculation is found regarding the stocks, fix it, and manage the product details by updating the stocks. Priority is hence assigned to 5. |
| **Update Stock when buyers buy products and when they return products add them to the returned items category.** | 5 | When wholesale buyers purchase or return products, the system stock number will get updated, so that new buyers, admin, and users will be able to view available stock and use it for reports or any assigned activity. Priority is hence assigned to 5. |
| Add new production rounds and monitor previous production rounds. | 1 | The production manager can add a new production round to the system by checking and comparing the new orders placed by the wholesale buyers with the available stock count.If the stock amount is not enough to proceed the ordering process forward or the ordered products are new to the system , the production manager can add a new production round. And also the production manager can update the previous production rounds’ status time to time after checking the production process. The priority is assigned as 1 because these two functions depend on stock management and employee management functions. |
| Manage orders and returns. | 3 | The production manager can approve the orders placed by the wholesale buyers after checking the available stock count or reject the order. And also the production manager can approve the return goods requests or reject requests. The priority is 3,since the wholesale buyer can not proceed the ordering process forward until get the approval from the production manager and also to continue the goods returning process can not be completed until get the permission from the production manager. |
| Manage production manager profile. | 6 | The production manager can insert,update,delete, and retrieve the details to the production managers’ profile. Priority is 6 because the production manager is playing a leading role in the system, so that if any modifications happen to the profile it can affect the business value of the system, because if the production manager adds new qualifications regarding the role he plays in the system it will increase the business value of the system. The qualifications of the employees and admins can add value to the system. |
| Place an order and return orders if not satisfied with the order. | 1 | The wholesale buyer can place an order through the system and if they are not satisfied with the orders wholesale buyers can return the order within the given time period by having an approved return request from the production manager. Till the wholesale buyer places the order, the ordering process can not be started, hence the priority value 1 is assigned. |
| Manage wholesale buyers’ profiles. | 6 | The wholesale buyer can add their details and do the delete, update, and retrieve modifications to the profile. These details are useful to production managers when approving or rejecting an order and approving or rejecting a return goods request, hence priority 6 is assigned. |
| Need to track financial status daily, monthly and yearly. | 5 | Financial status can be checked by the factory owner/admin to view progress of gained profits/losses. Reports can be generated according to preferred type (daily, monthly, yearly), as to how the admin wishes for final evaluation, hence priority 5. |
| Want to add billing details like credit bills, cash bills. | 6 | Once the order is placed the financial team members can add the details like date, quantity, bill no, and the amount to the system. Priority is 6 because all the details required to be added to the system, received after finishing the order placement process complete. |
| Calculate and manage the metrical cost, employee salaries and get the final profit report for the month. | 2 | Admin is able to add the salary/wage, profits earned by each employee and generate a final report of the month, in order to maintain a status report for each employee. |
| Adding Users to the system. | 1 | A user cannot access the system until the admin creates a profile to the specific user. Once the user is created, the user can log into the system and use its features. Priority 1 is therefore assigned, and the admin has the whole permission to update or delete a user from the system. |
| Feedback management | 6 | Production manager is the person who is responsible for checking the feedback placed by the wholesale buyers, suppliers, and any other outside user of this system. Production manager analyse the feedback and if there is any needity to take advice from super admins production manager can ask from them. |

**Sprint Backlog : Sprint 1**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Backlog Item** | **Epic** | **User stories** | **Decided Story Points** | **Planning poker estimate of** | | | | **Reasons for estimate** | **Responsible member**  **of user story** |
| **Thiranya** | **Chathura** | **Rashmika** | **Sheikha** |
| Login | As a user, I want to login to the system so that I can work with the system. | As a user, I want to add my username and password so that I can login to the system | 13 | 13 | 5 | 8 | 8 | **Thiranya** - This system has several user roles, so developing login functions for each different user roles with different validations will take time is the reason to estimate the value as 13.  **Chathura -** This system has several user roles but when login we want to do one db call and authentication. | IT19048338 - Jayasingha H.M.C.P |
| 13 | 13 | 13 | 8 | **Thiranya -** still i'm in previous opinion  **Chathura** - agree with the this user story have long validation and authentication process  **Rashmika** - there are several user roles there for this will get some time to develop code to handle this user roles.  **Sheikha -** Since this system has several user roles, but we can develop it with one function and also we have previous experience in developing that |
| 13 | 13 | 13 | 13 |  |
| As a user, I want to reset my password so that I can create a new password when I forget it. | 8 | 13 | 5 | 8 | 13 | **Thiranya -** To develop the rest password function is not much complicated was the reason to select the value as 13.  **Sheikha -** Resetting password is mandatory because if the user forgets the password, he can easily reset it via email verification, and admin approval.  **Chathura** - I developed similar functions previously so I can develop that easily. | IT19048338 - Jayasingha H.M.C.P |
| 8 | 8 | 8 | 8 |  |
| Add initial details to the system. | As a super admin, I want to add my factory initial details like factory name, logo... so that I can customize my system and get positive ideas from the buyers. | As a super admin, I want to add initial details to the system at the first login so that I can customize the system to my factory. | 5 | 5 | 5 | 5 | 5 |  | IT19048338 - Jayasingha H.M.C.P |
| As a super admin, I want to edit some details so that I can manage my details. | 2 | 2 | 3 | 5 | 3 | **Thiranya -** Being familiar with developing Update details functions is the reason to estimate the value as 2 so that to develop this function will not need much effort and time.  **Chathura -** CRUD functions available, therefore it will be easy to develop. | IT19048338 - Jayasingha H.M.C.P |
| 2 | 2 | 2 | 2 |  |
| As a super admin, I want to delete details so that I can remove my factory details when I want. | 1 | 3 | 1 | 2 | 2 | **Thiranya -** Before deleting the factory details need to check again and confirm deletion is the reason to estimate value as 2 because checking and confirmation will take some time.  **Chathura -**there is a simple delete with confirmation that is a simple one db call process. | IT19048338 - Jayasingha H.M.C.P |
| 1 | 1 | 1 | 1 |  |
| Super Admin Approvals management. | As a super admin I want to approve the users that added from HR department so that users can login with the system | As a super admin I want to view all pending approval user lists so that I can approve them. | 3 | 3 | 13 | 5 | 8 | **Thiranya -** Since the super admin wants to view all the pending approvals and approve them, developing this function is not complicated and does not need much effort.  **Chathura** - user cannot login without super admin approval therefore that is must in this system this function have to develop very carefully. | IT19048338 - Jayasingha H.M.C.P |
| 8 | 5 | 5 | 5 | **Thiranya -** Since the super admins have to check and take the decisions to add the approval or reject approval, the decision taking will consume some time is the reason to estimate the value as 8.  **Sheikha -** Once the HR department/admin approves all the user requests, the users can use the system.  **Chathura** - There is an important function to the system but this is a simple function to coding this is easy.  **Rashmika -** Sincethere is a simple status change this is a normal function to develop. |
| 3 | 3 | 3 | 3 |  |
| As a super admin I want to view all the approved users so that I can get an idea about system users. | 8 | 2 | 3 | 5 | 1 | **Thiranya -** Super admins only wants to list the approved user details, developing this will not need much effort and time ,hence 2 is estimated.  **Sheikha** - Users must have an approved status, however it will not take much time to develop.  **Chathura -** User status is not entirely necessary therefore it will be easy to assign. | IT19048338 - Jayasingha H.M.C.P |
| 2 | 2 | 2 | 2 |  |
| As a super admin I want to view all user roles so that I can get an idea about the system user roles when I approve the users. | 2 | 2 | 3 | 1 | 2 | **Rashmika -** Sincethere is a view already stored initial data this is a common function.  **Chathura** -This is the place Super admin gets an overall idea about user roles in the system.so this is a very important function to the system. | IT19048338 - Jayasingha H.M.C.P |
| 2 | 2 | 2 | 2 |  |
| Categories, product codes, Material codes to the system and manage it. | As a super admin I want to add product categories, product codes, material codes, so that other users can work with those categories and codes. | As a super admin I want to add product categories/product codes/material codes so that I can manage my factory product categories/product codes/material codes. | 8 | 5 | 13 | 8 | 8 | **Thiranya -** Developing to add details to the system is not a hard part and having previous experience is the reason for the system.  **Chathura** - Since there are two add functions one for product codes and another one for material codes this is a little bit large user stories. | IT19048338 - Jayasingha H.M.C.P |
| 8 | 13 | 5 | 8 | **Thiranya -** Since the adding details have two procedures to add material details and product details, to develop these functions will take time is the reason to estimate the value as 8.  **Chathura** - There are two add functions and also some validations therefore it will take some time.  **Rashmika** - two crud functions are similar to each other so this is not hard.  **Sheikha -** Score of 8 as this is a simple CRUD function to be developed, yet highly important in the system. |
| 8 | 8 | 8 | 8 |  |
| As a super admin I want to edit product categories/product codes/material codes so that I can add any changes to the system. | 13 | 8 | 13 | 13 | 20 | **Thiranya -** The value is estimated as 8 because of having the previous experience in developing this function.  **Rashmika -** edit is a little bit long function because there is a retrieve data and update data functions both that's why i estimate the value as 20.  **Sheikha -** Editing codes and categories needs an edit function in case any item needs to be updated as soon as possible, so the feature is mandatory.  **Chathura -** Products have to have a feature to edit codes and categories, that’s why it is classified as top compulsory to develop. | IT19048338 - Jayasingha H.M.C.P |
| 13 | 13 | 13 | 13 |  |
| As a super admin I want to delete product categories/product codes/material codes so that I can remove product categories/product codes/material codes from the system. | 8 | 8 | 5 | 8 | 3 | **Thiranya -** When deleting product categories, product codes and material codes depend on other functions, to get the confirmation to delete the details will take time. The reason was to estimate the value as 8.  **Sheikha -** When deleting categories or codes, it depends on a lot of places therefore they have to be handled carefully.  **Rashmika** - There are simple 2 delete functions therefore it is very easy to develop.  **Chathura -** Category can be deleted however it needs admin approvals. | IT19048338 - Jayasingha H.M.C.P |
| 8 | 8 | 8 | 8 |  |
| Leave requests and management. | As an employee I want to manage my leave requests so that I can work according to my monthly work schedule. | As an employee I want to add a leave request to the system so that I can take a paid leave with approval | 13 | 13 | 8 | 13 | 13 | **Thiranya -** Before taking a leave, place a leaving request is mandatory is the reason to estimate the value as 13.  **Sheikha -** Taking a leave from the system should be an easy process, and the request must go straight to the manager, hence highly mandatory.  **Chathura -** Leave requests are important if an employee needs to submit a leave, therefore should be classed as top priority. | IT19189086 - Rahman S.H. |
| 13 | 8 | 13 | 8 | **Sheikha -** Leave requests must have all the sufficient details enough for the manager to look into it and approve.  **Thiranya -** Classed as high priority as leave details and reason must be sufficient enough for the leave to be approved.  **Chathura -** Developing this function will be easy as it is a CRUD function, and should be classed as important. |
| 13 | 13 | 13 | 13 |  |
| As an employee I want to be able to edit or delete a leave request from the system so that I can manage my schedules accordingly. | 20 | 20 | 20 | 20 | 20 | **Sheikha -** If not approved, then an employee can delete the request before the manager is able to see it.  **Chathura -** Before the supervisor gets the request the employee can delete which is a simple delete function and high importance. | IT19189086 - Rahman S.H. |
| Daily assignment workload | As an employee I want to be able to upload my daily assignments worksheet report for supervisor approval | As an employee I want to be able to add/update/delete my completed assignments work to the report. | 13 | 8 | 8 | 3 | 13 | **Sheikha -** Employees need to add their workload to a report and mark it as complete, which is mandatory for every employee.  **Thiranya -** Having previous experience with developing these CRUD functions is the reason to estimate the value as 8.  **Chathura -** Uploading of daily assignment workload will be important to develop as it depends on the financial department for salary/wage calculation. |  |
|  |
| 13 | 13 | 5 | 13 | **Thiranya -** Generating report part will consume time is the reason to estimate the value as 13.  **Sheikha -** Generation of reports is also mandatory as it will allow both supervisor and employee to have a document of their workload.  **Chathura -** Supervisor must approve before completing daily workload so function should be in the HR department as well. | IT19189086 - Rahman S.H. |
| 13 | 13 | 13 | 13 | Estimate was decided as 13 as the employee needs to have a completed proof of their work for future references. |  |
| As an employee I want to be able to generate a report of my wage calculation once the completed workload has been approved. | 8 | 5 | 8 | 5 | 8 | **Thiranya -** Wage calculation will take time is the reason to estimate the value as 5.  **Sheikha -** Wage calculation is handled by another department, so the two departments must be co-joined to calculate wage or salary.  **Chathura -** Generating reports with wage/salary calculations has a high level calculation (which will include overtime, bonus…) therefore it is important to develop. | IT19189086 - Rahman S.H. |
| 8 | 8 | 8 | 8 | Since the wage is dependent on the work done by the employee and the hourly rate, the workload is different from one user to another, wage calculation is complicated, therefore 8 was selected as the estimated value. |  |
| **online Material stock adding and searching facility** | As a store member I want to add purchased materials to the stock and check their details using an online way, so that I can save my time.  . | As a store member I want to add a material detail to its category when it is purchased so that I can add materials according to their specified category. | 5 | 8 | 8 | 10 | 8 | Rashmika-Since it is required to add materials to their category and need to be classified in and effective way. So, I gave 10  Thiranya-since it needs to be added, I thought it will take a low number, so I gave number 5 | IT19156316 - Rajapaksha R.M |
| 10 | 10 | 10 | 10 |  |
| As a store member I want to check material details using a flexible way, so that I can check material status easily | 5 | 8 | 8 | 5 | 10 | . Rashmika-since it has a searching process only, it has the number 5 low value.  Hannah-I thought the same thing, but I thought number is 8 | IT19156316 - Rajapaksha R.M |
| 5 | 5 | 5 | 5 |  |
|  |  | As a store member I want to check all the materials in the stock in one place and search them using that material’s name so that | 10 | 8 | 5 | 10 | 10 | Chathura-since it has a searching process only, I though it takes no 5-lower number  Rashmika-this need to be search by name and we must take a searching algorithm, I think it is 10  Hannah- this is a complex searching process also I thought it I number 10. | IT19156316 - Rajapaksha R.M |
|  |  | 10 | 10 | 10 | 10 |  |  |
| **online adding and checking product facility** | As a store member I want to Add newly produced products to store and search their details using a unique key | As a store member I want to Add products that are newly produced by the factory to the production store, so that I can arrange them easily. | 10 | 8 | 5 | 10 | 8 | Rashmika-before adding the products to production store manager need be informed by production manager, so I thought number is 10  Chathura-I thought store manager have to add products to store only.so I gave a number 5 | IT19156316 - Rajapaksha R.M |
| 10 | 10 | 10 | 10 |
|  |  | As a store member I want to check product details using a unique id, so that I can see product details easily | 5 | 5 | 5 | 5 | 5 |  | IT19156316 - Rajapaksha R.M |
|  |  | As a store member I want to see all the products in one place and search them by using their name | 10 | 10 | 10 | 10 | 10 |  | IT19156316 - Rajapaksha R.M |
| User profile management | As a user, I want to manage my account when I want so that I can manage my account quickly. | As a user, I want to add my details to my account when I am a user of the system so that I can customize my account easily. | 8 | 5 | 5 | 3 | 10 | **Rashmika -** Adding extra details to account is a simple crud function so I gave the number as 5  **Sheikha -** I thought customizing an account is get a high process so I gave the number as 10 | IT19156316 - Rajapaksha R.M |
| 3 | 3 | 3 | 3 |  |
| As a user, I want to update my account so that I can change my previous details to new details easily. | 5 | 1 | 3 | 5 | 1 | **Chathura -** It is the user’s choice to update the account, hence time will not be used much for development.so I gave the number 1  **Sheikha -** Updating account is a simple function so I gave 1  **Rashmika** – updating the user account is not mandatory but it is necessary to add that function when user getting old, he or she must update his or her profile photo, so I gave the number 5 | IT19156316 - Rajapaksha R.M |
| 5 | 5 | 5 | 5 |  |
| As a user, I want to view my account so that I can check my details when I want. | 2 | 2 | 1 | 2 | 2 | **Chathura -** User profile viewing is not mandatory as users can add whenever they like.  **Sheikha –** often Users must check their use details, so it need it is mandatory to be developed carefully. But it is a simple crud operation, so I gave number as 3  **Rashmika**- it is a simple crud operation, so I gave number 1  **Thirannya**- user profile function development take less time and it is simple function. Therefor I gave 1 | IT19156316 - Rajapaksha R.M |
| 2 | 2 | 2 | 2 |  |
|  |  |  |  |  |
| As a user, I want to remove my account from the system so that I can delete my account when I have no connection with the system. | 1 | 5 | 2 | 8 | 5 | Rashmika - Deleting the account can be done but permission is required from the admin. The HR department must approve the account deletion of the user.  Chathura- I though deleting account is a simple function and it doesn’t need hr department permission, so I gave 2 | IT19156316 - Rajapaksha R.M |
| 8 | 8 | 8 | 8 |  |
| Manage Employee Calendar Events | As an employee, I want to be able to manage my daily events so that I will be able to keep records and reminders. | As an employee, I want to be able to add an event to my calendar, so that I will be able to keep a track. |  | 3 | 5 | 5 | 8 | **Sheikha -** A user must be able to add a calendar event as per his wish to his calendar profile, so it is a simple crud function.  **Thiranya -** Adding a calendar event is important if the employee has an event to attend to. | IT19189086 - Rahman S.H. |
| 8 | 8 | 8 | 8 | All members agreed to class function as 8 as events are important for the functioning of the employees. | IT19189086 - Rahman S.H. |
| As an employee I want to be able to edit my calendar events, so that I can make changes to the event log. | 8 | 5 | 8 | 5 | 5 | **Chathura -** Editing details is part of the CRUD function which has to be developed.  **Sheikha -** It is the employee’s choice to edit his account and update his details whenever necessary.  **Thiranya -** Editing basic profile details is mandatory.  **Rashmika -** Having an update/edit function is important, and the employee must be given the choice. | IT19189086 - Rahman S.H. |
| 8 | 8 | 8 | 8 | Everyone agreed to class function as 8 as the employee has the choice to update his/her account. | IT19189086 - Rahman S.H. |
| As an employee, I want to be able to delete an event off my calendar so that I will be able to manage my events. | 3 | 5 | 8 | 3 | 1 | **Chathura -** Deleting an event is necessary to be developed if the employee has left the factory company.  **Sheikha -** If an employee leaves the factory, he will delete the user account (While the super admin checks). | IT19189086 - Rahman S.H. |
| 3 | 3 | 3 | 3 | Everyone agreed to class function as 3 because unless an employee resigns from the company, he won't be able to delete the account. | IT19189086 - Rahman S.H. |
| Manage orders and returns | As a production manager, I want to have the facility accept and reject order requests and return goods requests placed by wholesale buyers, so that I can inform the stock management team and to the wholesale buyer regarding the order or reject order request. | As a production manager, I want to have the facility to view the order details and return goods request details that the wholesale buyer has provided, so that I can decide whether to accept it or reject it. | 8 | 8 | 10 | 3 | 8 | **Rashmika -** Having previous experience on developing this kind of function was the reason to estimate the value as 3.  **Chathura -** Retrieving the products in category wise with the available stock count will take some time to develop was the reason to select the value as 10. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 | Since the stock count is stored category wise in the system, developing the retrieve function will not need much effort was the reason to agree all the members with number 8. |
|  |  |  |  |  |
| As a production manager, I want to have the facility to insert the details to inform the wholesale buyer about the reasons to reject the return goods request and inform about the necessary actions to be taken after rejecting the request, so that I can complete the returning goods process and update the stocks. | 13 | 8 | 10 | 5 | 8 | **Chathura -** Before rejecting the orders it is mandatory to inform them the reason was the reason to estimate the value as 10.  **Rashmika -** Since this function must insert details, to develop this function will not consume much time and effort was the reason to select the value as 5 | IT19129440 - Thiranya M.A.R |
| 13 | 13 | 10 | 13 | **Rashmika -** Taking decisions will consume some time was the reason to estimate the value as 10.  **Thiranya -** Checking the details sent by wholesale buyers with the reasons to reject the goods will take time to come up with a decision as to the reason to select the value as 13.  **Chathura -** Till the details about approving or rejecting the requests sent to wholesale buyers the returning goods process can not be completed, so giving more priority to build this function was the reason to estimate the value as 13.  **Sheikha -** Since the reason checking and decision taking will consume time was the reason to select the value as 13. |
| 13 | 13 | 13 | 13 |  |
|  |  |  |  |  |
| As a production manager, I want to have the facility to inform the wholesale buyers about whether the order is accepted or rejected by updating the status of the order, so that I can proceed the order management process forward. | 8 | 8 | 10 | 8 | 8 | **Chathura -** Checking production stocks will consume time was the reason to select the value as 10. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |
| As a production manager, I want to be able to generate a report about order details and reject order details, so that I can clearly identify the reasons to reject orders and to fix the faults happened from the company side and have a clear idea about the placed orders. | 5 | 5 | 5 | 5 | 5 | Since all the details about order details and rejected order details, generating the report part will not take a lot of time and effort to develop was the reason all the members agreed with the value 5. | IT19129440 - Thiranya M.A.R |
| Add new production rounds and monitor previous production rounds. | As a production manager, I want to add a new production round to the system and monitor the previous production round and update the status, so that I can inform employee management to assign new workloads to the employees and inform stock management to update the product stocks. | As a production manager, I want to have the facility to view the available stocks count, so that I can decide what are the stock categories needed to start a new production round. | 8 | 10 | 8 | 8 | 8 | **Thiranya -** View details in category wise will take time to develop was the reason to estimate the value as 10. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |
|  |  |  |  |  |
| As a production manager, I want to have the facility to view the previous production round details, so that I can update the status of the production rounds after checking the details and inform the stock management to update the stocks. | 8 | 10 | 5 | 8 | 10 | **Chathura -** Having previous experience was the reason to estimate the value as 5.  **Thiranya -** Since this function have two CRUD functions update and retrieve, to develop this function will take some effort and time was the reason to estimate the value as 10  **Sheikha -** Before updating the previous production round status , checking the previous round and updating the status will come time was the reason to estimate the value as 10. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |
| As a production manager, I want to have the facility to view the orders placed by the wholesale buyers, so that I can decide what are the new categories should start a new production round. | 5 |  |  |  |  |  | IT19129440 - Thiranya M.A.R |
| 3 | 5 | 8 | 2 | **Rashmika -** View details in category wise will take time to develop this function was the reason to estimate the value as 8.  **Sheikha -** Having previous experience of developing this kind of function was the reason to select the value as 2 |
| 5 | 5 | 5 | 5 |  |
| As a production manager, I want to have the facility to insert the necessary details regarding the production rounds, so that I can proceed the production round forward. | 8 | 8 | 8 | 5 | 8 | **Rashmika -** Since this function has to develop only the insert CRUD operation was the reason to estimate the value as 5. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |
| As a production manager, I want to have the facility to view the details I have inserted about the production rounds, so that I can decide if any changes should happen regarding the details I have inserted. | 8 | 5 | 8 | 8 | 10 | **Thiranya -** Having previous experience by developing this kind of function and only having retrieved CRUD function was the reason to select the value as 5.  **Sheikha -** To take the decisions of updating details if there are any needy ,to do that retrieving details is mandatory was the reason to estimate the value as 10. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |
|  |  |  |  |  |
|  |  | As a production manager, I want to have the facility to update the details I have inserted regarding the production rounds, so that I can inform about the changes to the employee management and stock management to do the necessary changes. | 5 | 5 | 8 | 3 | 5 | **Chathura -** Checking the fields to be updated takes time was the reason to estimate the value as 8.  **Rashmika -** Since this function only has an update CRUD function was the reason to estimate the value as 3. | IT19129440 - Thiranya M.A.R |
| 5 | 5 | 5 | 5 |  |  |
| As a production manager, I want to have the facility to delete the details I have inserted regarding the production rounds, so that I can inform about the changes to the employee management and stock management to do the necessary changes. | 8 | 10 | 5 | 8 | 8 | **Thiranya -** Before deleting the details inserted to the production round ,production manager should confirm about the deletion ,so that checking for confirmation and development will take time and effort was the reason to estimate the value as 10.  **Chathura -** Having previous experience of this kind of similar function was the reason to estimate the value as 5. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |  |

**Sprint Backlog : Sprint 2**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Backlog Item** | **Epic** | **User stories** | **Decided Story Points** | **Planning poker estimate of** | | | | **Reasons for estimate** | **Responsible member**  **of user story** |
| **Thiranya** | **Chathura** | **Rashmika** | **Sheikha** |
| Want to add billing details like credit bills, cash bills. | As a financial team member, I want to be able to manage bill details so that I can get profit and other details related to finance. | As a financial team member, I want to add bill,edit, and delete bill types so that I can manage bill types and select bill type when I adding bills to the system | 5 | 5 | 3 | 5 | 8 | **Sheikha** - There is a full CRUD function so it will take time to develop that.  **Chathura -** There is a full crud function but this is very simple because there are 2 or 3 fields to handle. | IT19048338 - Jayasingha H.M.C.P |
| 5 | 5 | 5 | 5 |  |
| As a financial team member, I want to add bills like credit bills and cash bills so that I can get help to generate reports on bills | 8 | 8 | 5 | 8 | 13 | **Rashmika** - one thing is there are two adding functions for credit bills and debit bills. Added bills are used for report generation therefore we have to use so many validations here.  **Chathura** - Science there is a simple one add function because we can add these two types of bills from one form then can develop this with medium weight. | IT19048338 - Jayasingha H.M.C.P |
| 8 | 8 | 8 | 8 |  |
| As a financial team member, I want to edit bills so that I can correct my mistakes. | 13 | 5 | 13 | 8 | 3 | **Chathura** - when users edit the bills we want to authenticate users. because these details are very important to the system.  **Sheikha -** Since there is a simple edit function therefore I have estimated a value of 3. | IT19048338 - Jayasingha H.M.C.P |
| 13 | 13 | 13 | 13 |  |
| As a financial team member, I want to delete bills so that I can remove unwanted bills from the system | 2 | 5 | 13 | 8 | 8 | **Chathura** - there also have to re authenticate the user because then we can increase security of the data of the system.  **Thiranya** - since there is a simple delete function with confirmation therefore i estimate a value of 5. | IT19048338 - Jayasingha H.M.C.P |
| 13 | 13 | 13 | 13 |  |
| As a financial team member, I want to get reports on credit bills and cash bills so that I can get all credits to be collected and get cash count for the related period. | 21 | 21 | 21 | 21 | 21 |  | IT19048338 - Jayasingha H.M.C.P |
| Calculate and manage the metrical cost, employee salaries and get the final profit report for the month. | As a financial team member, I want to be able to get and manage details of material cost and employee salary details so that I can get reports related to costing and use it to calculate profit. | As a financial team member, I want to add all material costs and manage it for the month and view employee salaries for the month so that I can manage total cost for the month. | 13 | 5 | 8 | 2 | 13 | **Sheikha -** Since there are two functionalities embedded, development might take some time.  **Rashmika** - One is a retrieve function and another one is adding one then it will be easy. | IT19048338 - Jayasingha H.M.C.P |
| 3 | 8 | 8 | 13 | **Sheikha -** Since there is one full crud and viewing part, this is a large user story.    **Thiranya** - Since we have so many experience in cruds like this in sprint 1 also so this is easy for us |
| 8 | 8 | 8 | 8 |  |
| As a financial team member, I want to calculate total profit so that I can send it to the owner. | 8 | 8 | 13 | 8 | 5 | **Chathura** - There is a calculation on two areas (debit and credit) and profit/losses should be calculated, development can take some time.  **Sheikha -** There is some calculation but that calculation can be done easily. | IT19048338 - Jayasingha H.M.C.P |
| 13 | 13 | 13 | 13 |  |
| Need to track financial status daily, monthly and yearly. | As a financial team member, I want to be able to generate reports for the financial status daily, monthly and yearly so that higher management can get decisions easily. | As a financial team member, I want to generate reports for cash balancing so that higher management can get ideas about cash debit and credit of the business. | 21 | 21 | 21 | 21 | 21 |  | IT19048338 - Jayasingha H.M.C.P |
| Manage user profile details such as bio data, bank details for wage, and other related details. | As an employee, I want to be able to add and update my details for references by the admin/finance manager. | As an employee, I want to be able to add and update my bio data for reference purposes to my supervisor/finance manager. | 5 | 3 | 5 | 5 | 3 | **Chathura -** there is an update function so we have to retrieve data and update it then it will take some time.  Every employee will possess a profile with details to fill, thus optional profile details are not mandatory unless requested by any higher authority. | IT19189086 - Rahman S.H. |
| 3 | 3 | 3 | 3 | An estimate of 3 was decided as most of the profile details are not mandatory for a user. |
| As an employee, I want to be able to add my bank details so that the finance department will be able to deposit my salary/wage. | 1 | 20 | 13 | 20 | 40 | **Chathura -** Since there is an add function with some validation but with previous experience this will be a little bit easy.  **Sheikha -** Bank Details are deemed as a very high priority, because without bank details, the employee will not be able to receive his wage. | IT19189086 - Rahman S.H. |
| 40 | 40 | 40 | 40 | Bank details are needed for the finance department; therefore, the user story is classed with an estimate of 40. |
| **online production stock management according to the buyer’s reaction** | As a store member I want to update the production stock when buyers buy product and when buyers returning products add them to returned products category, so that I can manage products in store easily | As a store member I want to update the number of products when buyers buy products, so that I can inform production environment when product number is decreasing in the stock | 20 | 5 | 10 | 20 | 10 | Rashmika – have to develop email sending process also so I gave number 20  Thirannya-since it is a update function I gave number as 5 | IT19156316 - Rajapaksha R.M |
| 20 | 20 | 20 | 20 |  |
|  |  |  |  |  |
|  |  | As a store member I want to add goods which are returned from buyers to returned Item’s category, so that I can manage returned Items easily | 10 | 10 | 10 | 8 | 5 | Thirannya- since it need to be category that item to its category I gave the number as 5  Chathura- we need to stay connected with buyers so I gave the number as 10  Thirannya- also I thought what chathura thought | IT19156316 - Rajapaksha R.M |
| 10 | 10 | 10 | 10 |  |
|  |  |  |  |  |
| **Remove materials and products when they are unnecessary** | As a store member I want to remove materials and products from the stocks when those Items are expired or damaged, so that I can give my best as a store member | As a store member I want to remove materials and products from the stocks when those materials are expired and damaged so that I can manage expired and damaged items easily | 8 | 5 | 2 | 8 | 1 | Hannah-When it is wanted to remove that item we can remove it using one click so I gave number as 1  Rashmika-it is necessary to be confirmed it that item or product is expired or damaged so I gave number as 8. | IT19156316 - Rajapaksha R.M |
| 8 | 8 | 8 | 8 |  |
|  |  | As a store member I want to add waste materials and products to the waste Item category, so that I can put wasted items to different location | 8 | 8 | 2 | 5 | 5 | Hannah- since it is need to be develop using sub category management I thought number as 8  Chathura- since it is a add operation I thought number as 2 | IT19156316 - Rajapaksha R.M |
|  | 8 | 8 | 8 | 8 |  |
| Employee Payment Management | As an employee, I want to manage my payment schemes so that I will be able to know of my correct salary and overtime payments | As an employee I want to be able to view a payment invoice so that I will be able to view my salary for the month. |  | 13 | 21 | 8 | 13 | **Chathura** - There is a data retrieving function but here I want to retrieve data from several places to print the pay slip and also this should be generated month by month.  **Rashmika -** The employee can view an invoice of his salary breakdown only if he wishes to. | IT19189086 - Rahman S.H. |
| 21 | 21 | 21 | 21 |  | IT19189086 - Rahman S.H. |
| As an employee I want to be able to download my payment invoice so that I will be able to manage my records. |  | 3 | 5 | 5 | 8 | **Chathura** - This can develop easy because all the wanted data retrieved in previous user story | IT19189086 - Rahman S.H. |
|  |  |  |  |  | IT19189086 - Rahman S.H. |
| Place an order and return orders if not satisfied with the order. | As a wholesale buyer, I want to have the facility to place an order and reject an order if I am not satisfied with the received order, so that I can decrease my loss and successfully complete the ordering process. | As a wholesale buyer, I want to have the facility to view all the product categories available in the system, so that I can decide to place an order easily. | 13 | 13 | 10 | 10 | 10 | **Thiranya** - Place an order is mandatory to take the approval or reject it was the reason to estimate the value as 13. | IT19129440 - Thiranya M.A.R |
| 13 | 13 | 13 | 13 |  |
|  |  |  |  |  |
| As a wholesale buyer, I want to have the facility to view the products in the system by searching them without going through all the product lists, so that I can decide and place my order easily and quickly. | 13 | 10 | 10 | 8 | 13 | **Sheikha -** Since this function has a retrieve function and searching function ,developing this function consumes time and effort was the reason to estimate the value as 13.  **Rashmika -** To develop retrieve and search functions will not consume a lot of time and effort was the reason to estimate the value as 8. | IT19129440 - Thiranya M.A.R |
| 13 | 13 | 13 | 13 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| As a wholesale buyer, I want to be able to ask more information about the products I am going to purchase, so that I can purchase the goods with the minimum possibility to return. | 5 | 3 | 5 | 8 | 2 | **Sheikha -** Since this function only has an insert CRUD operation, developing this function will not need much effort.  **Rashmika -** Since this function is increasing the values of the services given to the wholesale buyers from the system the value 8 was estimated. | IT19129440 - Thiranya M.A.R |
| 5 | 5 | 5 | 5 |  |
| As a wholesale buyer, I want to be able to insert the details about the goods I am going to purchase and have a document with the order details I have placed, so that I can use it as proof to confirm the placement of the order. | 8 | 8 | 8 | 8 | 8 | Since this function is a mandatory function in this system the value is estimated as 8. | IT19129440 - Thiranya M.A.R |
|  |  | As a wholesale buyer, I want to be able to update the details about the order I have placed if the order is in pending state before approved by the production manager, so that I can have the changes in product quantities according to my requirement. | 13 | 13 | 8 | 5 | 10 | **Rashmika -** Being familiar with developing this function was the reason to estimate the value as 5.  **Thiranya -** Since this function has updated CRUD function and checking whether the order is approved or not before updating, will consume time and effort to develop was the reason to estimate the value as 13. | IT19129440 - Thiranya M.A.R |
| 13 | 13 | 13 | 13 |  |  |
| As a wholesale buyer, I want to have the facility to delete an order and return money or proceed forward with the order cancelation process, so that I can reorder another project or fulfill my order deletion requirement as I wish. | 13 | 13 | 13 | 10 | 8 | **Thiranya -** Since this function has delete CRUD operation and the process of order cancellation will take time to develop, this function was the reason to estimate the value as 13.  **Chathura -** To develop this function needs some effort is the reason to select the value as 13.  **Sheikha-** Having previous experience of developing this function is the reason to estimate the value as 8 | IT19129440 - Thiranya M.A.R |
| 13 | 13 | 13 | 13 |  |  |
| Manage wholesale buyers’ profiles. | As a wholesale buyer, I want to have the facility to manage my profile details, so that I can customize and manage profile data easily. | As a wholesale buyer, I want to have the facility to view all my profile details, so that I can easily find and manage the details. | 8 | 8 | 8 | 8 | 8 | Since this function has only retrieved CRUD operation all the members agreed with the estimation of 8. | IT19129440 - Thiranya M.A.R |
|  |  |  |  |  |
|  |  |  |  |  |
| As a wholesale buyer, I want to have the facility insert data to my profile, so that I can customize the profile easily**.** | 8 | 8 | 5 | 10 | 8 | **Rashmika -** AS a wholesale buyer inserting profile data is mandatory to take the decisions for the admins of the system was the reason to estimate the value as 10.  **Chathura -** Since this function only has to insert the details was the reason to estimate the value as 5 because of having the previous experience of developing this function. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |
| As a wholesale buyer, I want to be able to update my profile details, so that I can easily change the details according to my requirements from time to time and when changing my personal information like a mobile phone. |  |  |  |  |  |  |  |
| 8 | 8 | 8 | 8 | Since this function only has to update the details, to develop this function will not take much effort and time was the reason to select the value as 8. |
|  |  |  |  |  |
|  |  |  |  |  | IT19129440 - Thiranya M.A.R |
|  |  |  |  |  |
|  |  |  |  |  |
| As a wholesale buyer, I want to be able to delete my personal profile if I want, so that I can protect my personal details when I am not using the system anymore. | 8 | 5 | 5 | 3 | 8 | **Rashmika -** Since this function only has the delete CRUD function, hence the value estimated as 3.  **Sheikha** - Before deleting details the confirmation part is also should be developed will consume time to develop this function was the reason to estimate the value as 8. | IT19129440 - Thiranya M.A.R |
| 8 | 8 | 8 | 8 |  |
| As a wholesale buyer, I want to be able to provide feedback to the system, so that I can raise my ideas about the system and inform what are the areas of the system to be improved to give a better service to wholesale buyers. | 5 | 5 | 5 | 3 | 5 | **Rashmika -** Having previous experience on developing this function was the reason to estimate the value as 5. | IT19129440 - Thiranya M.A.R |
| 5 | 5 | 5 | 5 |  |
|  |  |  |  |  |
| Feedback management | As a production manager, I want to have the facility to manage the feedback provided by wholesale buyers, suppliers, and outside users of the system, so that I can have a clear idea about the quality of the service provided by the system. | As a production manager, I want to have the facility view the feedback provided by the suppliers, wholesale buyers and any other outside users of the system, so that I can analyze the quality of the services provided by the system to the outside users. |  | 8 | 8 | 8 | 8 | Since this function only has to view the feedback and analyze them all the members were agreed with the value of 8. | IT19129440 - Thiranya M.A.R |
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**Contribution to the assessment**

|  |  |  |
| --- | --- | --- |
| **Student Reg. No** | **Student Name** | **Contribution** |
| **IT19156316** | **Rajapaksha R.M** | **All the requirements of store and profile management, product backlog, CRUD operations and report generation - 25%** |
| **IT19189086** | **Rahman S.H.** | **All the requirements of employee management, product backlog, CRUD operations and report generation - 25%** |
| **IT19048338** | **Jayasingha H.M.C.P** | **All the requirements of the administrator and the financial department, product backlog, CRUD operations and report generation - 25%** |
| **IT19129440** | **Thiranya M.A.R** | **All the functions of wholesale buyer and production management, product backlog, CRUD operations and report generation - 25%** |