

### Sri Lanka Institute of Information Technology

### **Information Technology Project (IT2080) 2024**

BATCH ID: Y2S2 - GROUP 5.2

**GROUP ID: T067** 

# Studio & Digital Color Lab Management System for Kandyan Studio

## **Agile Activity Report**

NAME	REGISTRATION NUMBER
ABHAYAWARDHANE M.M.A.P.S.	IT22144126
DISSANAYAKA D.P.K.N.	IT22201164
DIAS K.M.G.D.S.S.	IT22200938
GUNARATNE N.V.D.P.	IT22282804
SENAVIRATHNA B.M.P.C.	IT22219084
RAJAPAKSHA R.P.D.T.	IT22212504
DEWNAYANA W.A.T.D.	IT22167514
VILOCHANA S.A.N.T	IT22203076



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### **Project Introduction**

Established in 2008 within the Gampaha District, The Kandyan Studio and Digital Color Lab has risen as a prominent figure in the realms of photography and digital printing. Renowned for their unwavering commitment to quality and innovation, they have become industry leaders.

Armed with cutting-edge technology and a team of skilled professionals, The Kandyan Studio combines traditional craftsmanship with modern sophistication. Specializing in capturing and preserving precious moments, the studio caters to diverse needs, from milestone events to corporate projects.

As a trusted partner, The Kandyan Studio takes pride in delivering top-notch solutions for individuals, businesses, and institutions. Their state-of-the-art facilities ensure the highest quality outcomes, transforming every image into a captivating story and every print into a masterpiece. Clients are invited to experience the seamless fusion of artistry and technology at The Kandyan Studio and Digital Color Lab.

Our client has identified numerous critical issues within their operational work, which include difficulties in handling online customer interactions, and issues with accuracy in billing, report generation, and stock management. Furthermore, the existing system presents challenges for employees due to its lack of user-friendliness, requiring significant time to adapt. The current standalone system frequently fails to synchronize tasks, which leads to confusion and dissatisfaction among customers. A significant concern is the inadequate management of the organization's online reputation. In an era where tech-savvy consumers prioritize brand reputation, our client struggles to uphold a positive online image. The absence of an organized reputation management system has resulted in a diminished brand image.

We have organized our studio and digital color lab management system into 8 distinct components: online order processing, inventory management, billing and finance management, customer support management, employee management, project management, event management, and supplier management. These components are connected to the front end of the system. The implementation of Web API which acts as an essential link between the front end and back end will be achieved using Rest API and Express JS.

The backend will be developed using Node JS and the server will be MongoDB, which helps in simplifying the application's capability to manage data. All the records and data will be stored within the Studio and Digital Color Lab database. The entire system is hosted on external storage to boost performance and accessibility.



### **User Stories**

#### IT22144126 - ABHAYAWARDHANE M.M.A.P.S.

### **Epic – Inventory Management**

Feature	User Story ID	User Story	Task
Manage Items (Manager Dashboard)	100	As a manager, I want to add, modify, or remove items, so that I can effectively maintain and update items in inventory, ensuring accurate stock levels.	<ol> <li>Implement function to allow managers to add new items to the inventory.</li> <li>Include validation checks for item details when entering.</li> <li>Develop features to enable managers to modify existing items in the inventory.</li> </ol>
Stock Availability (Manager Dashboard)	101	As a manager, I want to view stock availability in real-time and request Items from the suppliers so that I can fulfil the re-order level requirement.	<ol> <li>Implement features to display current stock availability for each item in the inventory.</li> <li>Develop functionality to enable managers to request items from suppliers when stock levels running low.</li> <li>Integrate with suppliers' functions to handle requests.</li> </ol>
Stock Reports (Manager Dashboard)	102	As a manager, I want to analyze inventory reports so that I can make decisions and improve the overall performance in managing stock and inventory resources.	<ol> <li>Create a functionality to generate various types of reports such as stock levels, requested items from suppliers.</li> <li>Develop features to visualize inventory data using charts.</li> </ol>



			1.	Create a section in the
Stock Availability (Cashier Dashboard)	103	As a cashier, I want to review the stock availability so that I can check whether a relevant product is available or not and notify the manager of the needed stock and notify the customer about the availability respectively.		cashier interface to display product availability. Develop functionality to add a request to the manager after checking stock levels. Implement a search feature to allow cashiers to quickly find products to ensure the efficiency and accuracy.



#### IT22201164 - DISSANAYAKA D.P.K.N.

### **Epic – Billing & Finance Management**

Feature	User Story ID	User Story	Task
Add New Orders	200	As a cashier, I want to add new order invoices for each specific order so that I can provide an error-free bill to the customers.	<ol> <li>Navigate to Add new Order</li> <li>Add Items to the Order</li> <li>Create Total bill</li> <li>Print and save customer</li> </ol>
Add Studio Orders	201	As a cashier, I want to Add Studio Orders which have been submitted by the Studio Operator, so that I can generate the total bill and issue it to the relevant customer.	<ol> <li>Create new studio Order</li> <li>Add Order Details</li> <li>Check Studio Status</li> <li>Deliver the Bill to the Customer</li> </ol>
Review Studio and Creator Orders	203	As a cashier, I want to review studio and creator orders so that I can generate the bill for the relevant service asked by the customer.	1.Go to Cashier's Main Dashboard  2. Review Studio Orders by Clicking View in each order in studio orders section.  3.Review Creator Orders by Clicking view in each order in the creator's order section
Supplier Payments	204	As a cashier, I want to settle supplier payments, so that all the payment are handled effectively.	<ol> <li>Navigate to the Supplier Payments Section in Cashier's Dashboard.</li> <li>Add and Settle payment to the supplier.</li> </ol>



#### IT22200938 - DIAS K.M.G.D.S.S.

### **Epic – Project & Studio Management**

Feature	User Story ID	User Story	Task
Add Projects	300	As a creator, I want to see the list of online orders and physical orders in my dashboard, so that I can add them as my projects.	<ol> <li>Create an interface for creator to see the orders</li> <li>Display the list of approved online orders.</li> <li>Display the list of paid physical orders</li> <li>Add orders as projects</li> </ol>
Approve Payments	301	As a creator, I want to approve payments made by online customers, so that I can make sure financial transactions are processed accurately and efficiently.	<ol> <li>Create interface ti see         the orders for which         the customer has         submitted the deposit         slip         <ol> <li>Display the deposit slip              document.</li> </ol> </li> <li>After approval give         notification to the         customer.</li> </ol>
Update Project Details	302	As a creator, I want to update project details and status so that I can be on track.	<ol> <li>Provide interface for creators to view the ongoing projects.</li> <li>Give the option to update the project name and project status of the project</li> <li>When the status reach to completed, remove from ongoingprojects and display in completed projects</li> </ol>



			1.	Provide interface for
Update Studio Status	304	As a studio operator, I want to update the status of my studio (Baby onboard, Vacant, Occupied) so that the cashier can notify customers before they enter my studio		the studio operator to update satus Display the three status options When the status is updated, notify the cashier's dashboard.



#### **IT22282804 - GUNARATNE N.V.D.P.**

### **Epic – Event Management**

Feature	User Story ID	User Story	Task
Booking Events under several categories	400	As a customer, I want to explore event packages and book events upon selection	<ol> <li>Create a button         "Explore packages" on home page to navigate to event packages.</li> <li>Create three pages for wedding, birthday party and social events.</li> <li>Provide a button for packages to view details.</li> <li>Create an input field to search events and sort</li> <li>Create a form to input all the details for the booking.</li> </ol>
View, edit or cancel booked events	401	As a customer, I want to view booked events, edit the details of an already booked events and cancel an event if necessary	<ol> <li>Create a page which includes all the booked events of the customer with details.</li> <li>Include edit button to make changes.</li> <li>Include cancel button to delete the event booking.</li> </ol>
Add, view, edit and delete event packages	402	As a manager, I want to manage event packages so that the system is up to date for the customers to have a satisfactory service.	<ol> <li>Implement function for the manager to add new packages.</li> <li>Create a button for a detailed view of the package.</li> <li>Include edit and delete buttons to do the changes and delete if there are outdated packages.</li> </ol>



Approve or decline event bookings based on the payments.
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#### IT22219084- SENAVIRATHNA B.M.P.C.

### **Epic – Online Order Processing**

Feature	User Story ID	User Story	Task
Home Page Exploration	500	As a customer, I want to place online orders for photography services or prints so that I can specify details such as date, time, and package required.	<ol> <li>Select specific sections.</li> <li>Access more detailed information within those sections.</li> </ol>
Items Exploration and Cart Management	501	As a customer, I want to view my order history report to track past transactions so that I can view all my past activities.	<ol> <li>Utilize the search bar to locate specific items.</li> <li>Select on each identified item to access more detailed information.</li> <li>Add the desired items to the shopping cart.</li> </ol>
Viewing and Checking Out from Cart	502	As a user, accessing 'cart' allows me to view all items in the customer's cart.	<ol> <li>Select Items in the cart.</li> <li>View the total amount of selected items.</li> <li>Proceed to checkout.</li> <li>Select the "Checkout" option to finalize the transaction.</li> </ol>
Order History	503	As a user, accessing the My Order List menu is facilitated by selecting 'My Orders' from the navigation bar.	<ol> <li>View options for pending orders.</li> <li>Access options for processing orders.</li> <li>Review options for complete orders.</li> <li>Generate order history reports.</li> </ol>



Pending Orders, Processing Orders and Completed Orders	504	As a user, when navigating the "Orders" menu, I can view details of paid items with pending transactions, Processing orders and items in complete and click 'Details' for more information on both.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>6.</li> </ol>	to remove pending orders.
Generate Order History Report	505	As a user, choosing 'Generate Order History Report' I can view successful items and generate reports for a specific time period.	<ol> <li>2.</li> <li>3.</li> <li>4.</li> </ol>	report.



#### IT22212504 - RAJAPAKSHA R.P.D.T.

### **Epic – Employee Management**

Feature	User Story ID	User Story	Task
Managing Employee Details.	600	As a manager, I want to manage employee details and can add or remove employees so that I can streamline workforce management and maintain accurate records of the team composition.	<ol> <li>Create a form to enter employee details.</li> <li>Create a method to view, edit and delete employee details if required.</li> <li>Maintain a data table of past employees.</li> </ol>
Payroll Management.	601	As a manager, I want to calculate the salary of each employee so that I can ensure fair compensation for my employees and maintain payroll integrity.	<ol> <li>Create a form to enter employee details which are useful for monthly salary calculation.</li> <li>Figure out the formulas for calculating OT earnings, no pay deductions and net salary.</li> <li>Implement a function to calculate employee salaries.</li> </ol>
Tracking Employee Performance.	602	As a manager, I want to analyse salary reports and employee performance so that I can improve overall business performance.	<ol> <li>Maintain a table to track employee attendance, leaves and OT hours.</li> <li>Calculating OT earnings and no pay deductions.</li> </ol>
Review Salary Details.	603	As an employee, I want to view pay slip so I can access details regarding my salary.	<ol> <li>Create a function to retrieve salary slip details to the employee dashboard.</li> <li>Create a form to make inquiries regarding the problems of payroll.</li> </ol>



#### IT22167514 - DEWNAYANA W.A.T.D.

### **Epic – Customer Management**

Feature	User Story ID	User Story	Task
Loyalty Department (Manager Dashboard)	700	As a manager, I want to manage customer reviews and loyalty programs, so that I can ensure customer satisfaction.	<ol> <li>Assign loyalty statuses         based on customer         engagement.</li> <li>Deactivate or activate         customer loyalty statuses.</li> <li>Generate reports on         customer loyalty statuses.</li> </ol>
Review List (Customer Dashboard)	701	As a customer, I want to view loyalty details and request loyalty so that I can experience all the loyalty privileges.	<ol> <li>Design loyalty details section.</li> <li>Implement loyalty status and privilege's view.</li> <li>Implement notification system for loyalty status changes.</li> </ol>
Add Review (Customer Dashboard)	702	As a customer, I want to add reviews about the services so that I can share the genuine experience I get.	<ol> <li>Creating a review list for display.</li> <li>Implementing review editing and submission functionality.</li> <li>Enabling review editing and updating.</li> </ol>
Edit profile (Customer Dashboard)	703	As a customer, I want to view and edit my profile to make sure my information is current.	<ol> <li>Create customer profile section.</li> <li>View Customer profile section</li> <li>Enable profile editing for information updates</li> </ol>



#### **IT22203076 - VILOCHANA S.A.N.T**

### **Epic – Supplier Management**

Feature	User Story ID	User Story	Task
Supply Requests (Supplier Dashboard)	800	As a supplier, I want to view the supply requests sent by the manager and manage them, so that I can effectively manage them.	<ol> <li>Create supplier page.</li> <li>Develop the dedicated dashboard section for supply requests</li> <li>Create manage supply request page.</li> <li>Implement the real time updates to ensure suppliers have the latest information of supply request.</li> <li>Design a detailed view for each supply request, displaying necessary informations like items, quantity and dilivary date.</li> <li>Implement the functionality for supplier to accept or reject request.</li> <li>If accept, the request will go to Accepted requests section.</li> </ol>
Supply items (Supplier Dashboard)	801	As a supplier, I want to add, modify or remove supply items which I am willing to supply, so that I can ensure they are managed well.	<ol> <li>Create another function called supply items.</li> <li>Implement the real time updates to ensure suppliers have the available inventory items of studio</li> <li>Create add supply items button.</li> <li>Implement the item info feature.</li> </ol>



			<ul><li>6.</li><li>7.</li></ul>	Create a form with Item, Supply cost and Discount in add supply items page.
Generate Reports (Supplier Dashboard)	802	As a supplier, I want to generate reports on items supplied to the studio.		Create generate reports section. Create generate button. After that the report will be generate from database



# **Product Backlog**

### **Priority Scale**

- 1 Highest Priority
- 2 Normal Priority
- 3 Lower Priority

User Story ID	User Story	Estimated Hours	Priority	Status
100	As a manager, I want to add, modify, or remove items, so that I can effectively maintain and update items in inventory, ensuring accurate stock levels.	24	1	To be Started
101	As a manager, I want to view stock availability in real-time and request Items from the suppliers so that I can fulfil the re-order level requirement.	20	1	To be Started
102	As a manager, I want to analyze inventory reports so that I can make decisions and improve the overall performance in managing stock and inventory resources.	16	3	To be Started
103	As a cashier, I want to review the stock availability so that I can check whether a relevant product is available or not and notify the manager of the needed stock and notify the customer about the availability respectively.	10	2	To be Started
200	As a cashier, I want to add new order invoices for each specific order so that I can provide an error-free bill to the customers.	24	1	To be Started
201	As a cashier, I want to Add Studio Orders which have been submitted by the Studio Operator, so that I can generate the total bill and issue it to the relevant customer.	10	1	To be Started



202	As a cashier, I want to review studio and creator orders so that I can generate the bill for the relevant service asked by the customer.	08	2	To be Started
203	As a cashier, I want to settle supplier payments, so that all the payment are handled effectively.	27	1	To be Started
300	As a creator, I want to see the list of online orders and physical orders in my dashboard, so that I can add them as my projects.	16	1	To be Started
301	As a creator, I want to approve payments made by online customers, so that I can make sure financial transactions are processed accurately and efficiently.	20	1	To be Started
302	As a creator, I want to update project details and status so that I can be on track.	18	1	To be Started
303	As a studio operator, I want to update the status of my studio (Baby onboard, Vacant, Occupied) so that the cashier can notify customers before they enter my studio	10	2	To be Started
400	As a customer, I want to explore event packages and book events upon selection	12	1	To be Started
401	As a customer, I want to view booked events, edit the details of an already booked events and cancel an event if necessary	12	2	To be Started
402	As a manager, I want to manage event packages so that the system is up to date for the customers to have a satisfactory service.	10	1	To be Started
403	As a manager, I want to check the payments of the booked events and approve or decline accordingly so that I can confirm the event booking to the customer.	14	1	To be Started
500	As a customer, I want to place online orders for photography services or prints so that I can specify details such as date, time, and package required.	32	1	To be Started



501	As a customer, I want to view my order history report to track past transactions so that I can view all my past activities.	24	2	To be Started
502	As a user, accessing 'cart' allows me to view all items in the customer's cart.	15	2	To be Started
503	As a user, accessing the My Order List menu is facilitated by selecting 'My Orders' from the navigation bar.	10	2	To be Started
504	As a user, when navigating the "Orders" menu, I can view details of paid items with pending transactions, Processing orders and items in complete and click 'Details' for more information on both.	21	1	To be Started
505	As a user, choosing 'Generate Order History Report' I can view successful items and generate reports for a specific time period.	05	3	To be Started
600	As a manager, I want to manage employee details and can add or remove employees so that I can streamline workforce management and maintain accurate records of the team composition.	30	1	To be Started
601	As a manager, I want to calculate the salary of each employee so that I can ensure fair compensation for my employees and maintain payroll integrity.	48	1	To be Started
602	As a manager, I want to analyse salary reports and employee performance so that I can improve overall business performance.	35	3	To be Started
603	As an employee, I want to view pay slip so I can access details regarding my salary.	24	1	To be Started
700	As a manager, I want to manage customer reviews and loyalty programs, so that I can ensure customer satisfaction.	35	1	To be Started
701	As a customer, I want to view loyalty details and request loyalty so that I can experience all the loyalty privileges.	18	1	To be Started
702	As a customer, I want to add reviews about the services so that I can share the genuine experience I get.	25	2	To be Started
703	As a customer, I want to view and edit my profile to make sure my information is current.	20	1	To be Started
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800	As a supplier, I want to view the supply requests sent by the manager and manage them, so that I can effectively manage them.	48	1	To be Started
801	As a supplier, I want to add, modify or remove supply items which I am willing to supply, so that I can ensure they are managed well.	24	1	To be Started
802	As a supplier, I want to generate reports on items supplied to the studio.	16	3	To be Started



### 1st Sprint

Priority	Tasks	User Story ID	Est. Hours	Owner
1	As a cashier, I want to add new order invoices for each specific order so that I can provide an error-free bill to the customers.	200	24	IT22201164
1	As a manager, I want to add, modify, or remove items, so that I can effectively maintain and update items in inventory, ensuring accurate stock levels.	100	24	IT22144126
1	As a creator, I want to see the list of online orders and physical orders in my dashboard, so that I can add them as my projects.	300	16	IT22200938
1	As a user, when navigating the "Orders" menu, I can view details of paid items with pending transactions, Processing orders and items in complete and click 'Details' for more information on both.	504	21	IT22219084
1	As a manager, I want to manage customer reviews and loyalty programs, so that I can ensure customer satisfaction.	700	35	IT22167514
1	As a manager, I want to view stock availability in real-time and request Items from the suppliers so that I can fulfil the re-order level requirement.	101	20	IT22144126
1	As a creator, I want to approve payments made by online customers, so that I can make sure financial transactions are processed accurately and efficiently.	301	19	IT22200938
1	As a customer, I want to explore event packages and book events upon selection	400	12	IT22282804
1	As a customer, I want to view and edit my profile to make sure my information is current.	703	20	IT22167514



1	As a cashier, I want to Add Studio Orders which have been submitted by the Studio Operator, so that I can generate the total bill and issue it to the relevant customer.	201	10	IT22201164
1	As a creator, I want to update project details and status so that I can be on track.	302	13	IT22200938
1	As a manager, I want to manage event packages so that the system is up to date for the customers to have a satisfactory service.	402	10	IT22282804
1	As a manager, I want to manage employee details and can add or remove employees so that I can streamline workforce management and maintain accurate records of the team composition.	600	30	IT22212504
1	As a supplier, I want to view the supply requests sent by the manager and manage them, so that I can effectively manage them.	800	48	IT22203076
1	As a manager, I want to check the payments of the booked events and approve or decline accordingly so that I can confirm the event booking to the customer.	403	14	IT22282804
1	As a manager, I want to calculate the salary of each employee so that I can ensure fair compensation for my employees and maintain payroll integrity.	601	48	IT22212504
1	As a supplier, I want to add, modify or remove supply items which I am willing to supply, so that I can ensure they are managed well.	801	24	IT22203076
1	As a cashier, I want to settle supplier payments, so that all the payment are handled effectively.	203	27	IT22201164
1	As an employee, I want to view pay slip so I can access details regarding my salary.	603	24	IT22212504



# 2<sup>nd</sup> Sprint

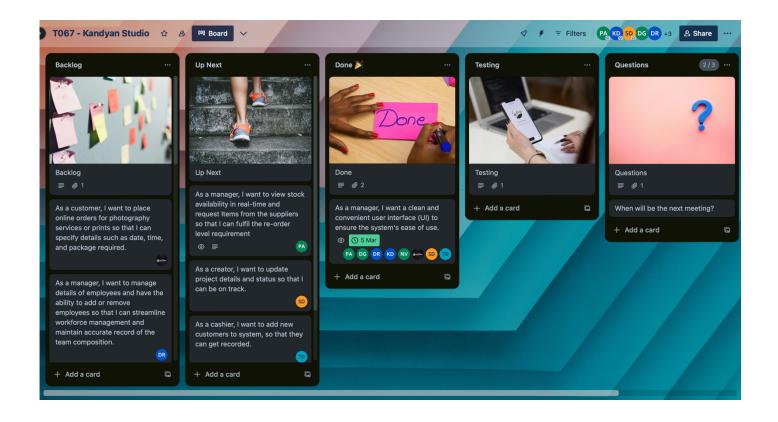
Priority	Tasks	User Story ID	Est. Hours	Owner
3	As a user, choosing 'Generate Order History Report' I can view successful items and generate reports for a specific time period.	505	05	IT22219084
3	As a supplier, I want to generate reports on items supplied to the studio.	802	16	IT22203076
3	As a manager, I want to analyse salary reports and employee performance so that I can improve overall business performance.	602	35	IT22212504
3	As a manager, I want to analyze inventory reports so that I can make decisions and improve the overall performance in managing stock and inventory resources.	102	16	IT22144126
2	As a customer, I want to add reviews about the services so that I can share the genuine experience I get.	702	25	IT22167514
2	As a cashier, I want to review the stock availability so that I can check whether a relevant product is available or not and notify the manager of the needed stock and notify the customer about the availability respectively.	103	10	IT22144126
2	As a user, accessing the My Order List menu is facilitated by selecting 'My Orders' from the navigation bar.	503	10	IT22219084
2	As a studio operator, I want to update the status of my studio (Baby onboard, Vacant, Occupied) so that the cashier can	303	12	IT22200938



	notify customers before they enter my studio			
2	As a customer, I want to view loyalty details and request loyalty so that I can experience all the loyalty privileges.	701	18	IT22167514
2	As a user, accessing 'cart' allows me to view all items in the customer's cart.	502	15	IT22219084
2	As a customer, I want to view my order history report to track past transactions so that I can view all my past activities.	501	24	IT22219084
2	As a customer, I want to view booked events, edit the details of an already booked events and cancel an event if necessary	401	12	IT22282804



#### Kanban Board



https://trello.com/invite/b/rzv8Pum2/ATTI483676981aac7fe23e7c6723ff1c7f99 A5A51EB1/t067-kandyan-studio