



WPWIS

# Web-based Porcelain Workshop Inventory System

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System Demo:<https://youtu.be/ZSX8Jtij0lk>

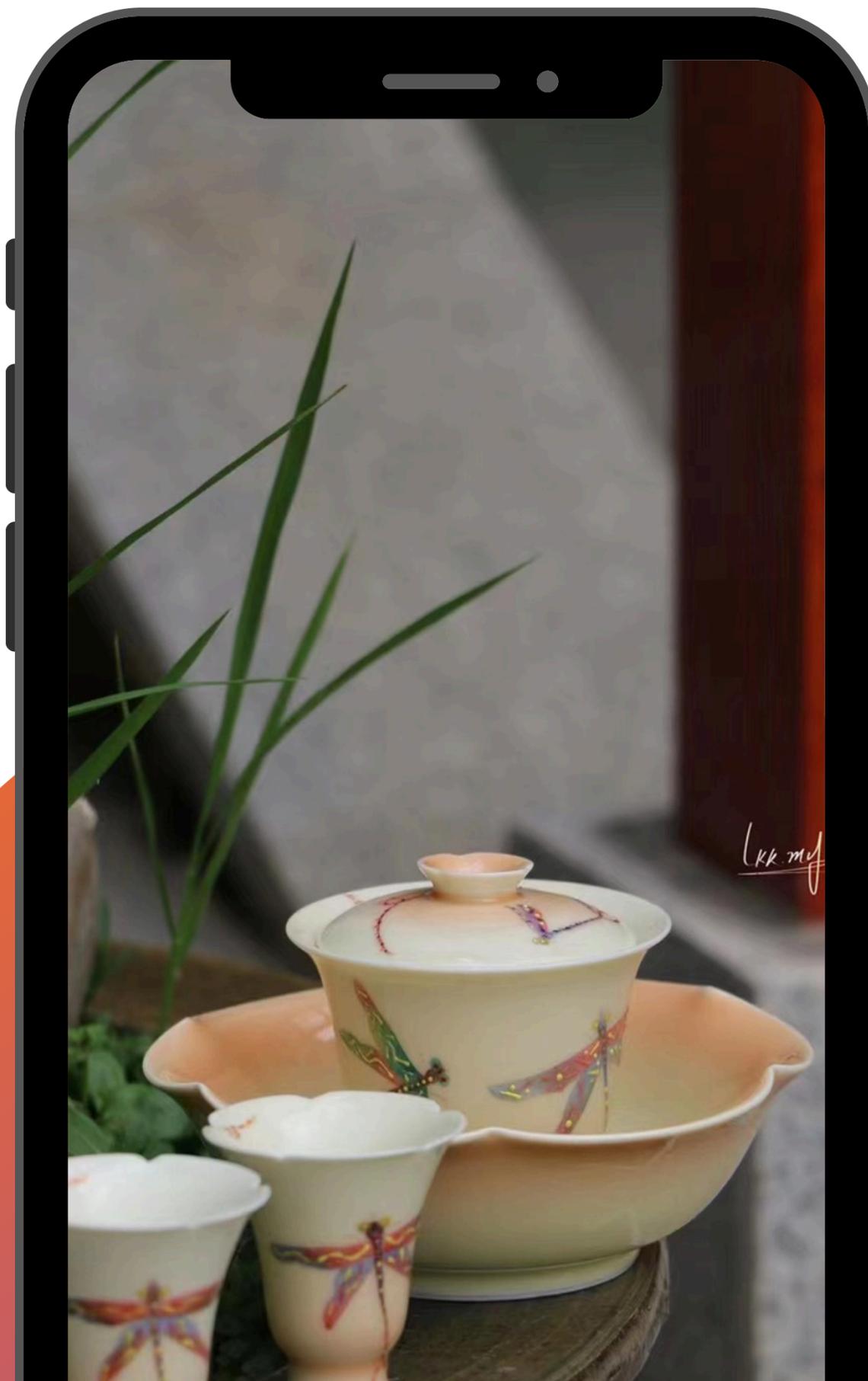
Presentation Video:[https://youtu.be/mscSXsfF\\_cQ](https://youtu.be/mscSXsfF_cQ)



WPWIS

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- Chapter 1
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WPWIS

# Chapter 1 – Introduction



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# Problem Background

- Manual Inventory System
- Inaccuracy in inventory
- Labor Intensive
- Result in significant losses for businesses
- Lack the technical knowledge needed to operate such systems
- Lost record of the inventory



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# Project Aim

To develop a web-based porcelain workshop inventory system that can help the local porcelain workshop to enhance their productivity on product sales and production tracking. It provides accurate and traceable inventory by applying MySQL, HTML and Larval as database, front-end and back-end respectively.





WPWIS



# Project Objectives

1. To do requirement analysis from the user(QinYiTang workshop & HuaJingYa workshop) of Web-based Porcelain Workshop Inventory System (WPWIS) so that the system can fulfill workshop owners' needs.
2. To design a web-based porcelain inventory system for local workshops and complete SDD document to illustrate the detailed developing plan and functionalities of WPWIS.
3. To develop a high- fidelity prototype by using Figma tool so that the users can have a glance of how the system functions during the period of PSM1
4. To develop the completed Web-based Porcelain Workshop Inventory System during the phase of PSM2 to allow users to use the system.
5. To do system testing to ensure user requirement satisfaction has been met and high quality results of using WPWIS .



WPWIS

# Stakeholders of WPWIS



**Ye YuTing**

Owner of HuaJingYaQi



**Chen Jing**

Owner of QinYiTang



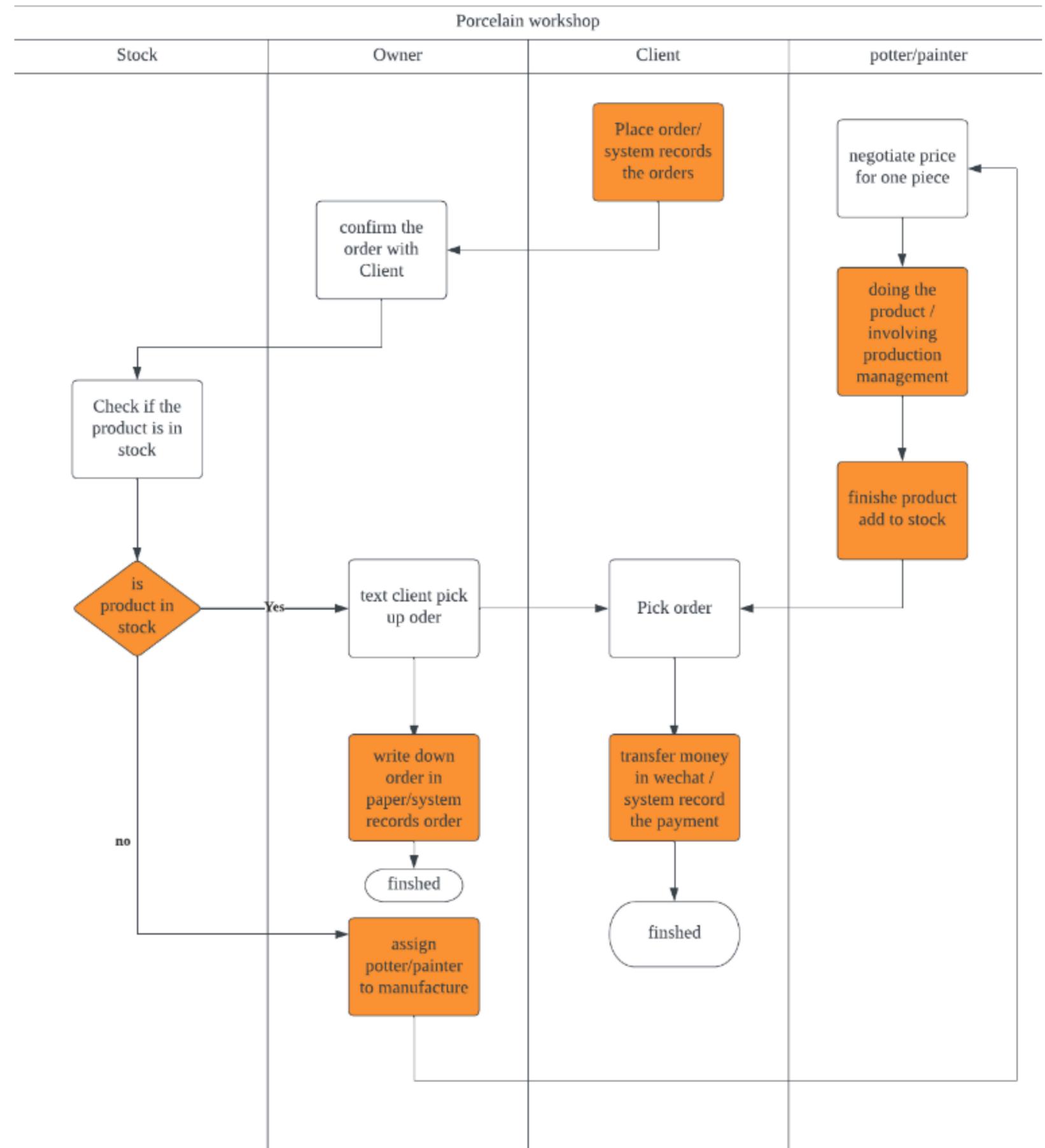
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# Chapter 2 – Literature Review



WPWIS

# Current System Analysis





WPWIS

# Current System Comparison

Current System/Features	InFlow Inventory	MuRho	WPWIS
Login	✓	✓	✓
Manage Purchase	✓	✓	✓
Registration	✓	✓	✓
Manage Material			✓
Manage Supplier	✓	✓	✓
Logout	✓	✓	✓
Manage Invoice	✓	✓	✓
Manage Production		✓	✓
Manage Customer	✓		
Product Management	✓		✓
Stock Management			✓
Shipment	✓	✓	
Manage Category			✓
Bar Code	✓	✓	
View profile	✓	✓	✓



WPWIS

# Technology Used

<b>Development and Operation Tools</b>	
<b>Plan</b>	<b>Jira</b>
<b>Build</b>	<b>VsCode</b>
<b>Test</b>	<b>cpanel</b>
<b>Deploy</b>	<b>Cpanel, mysql, myphpAdmin</b>
<b>Operate</b>	<b>Jira project management</b>
<b>Code</b>	<b>Laraval PHP, PHP Migration, HTML</b>

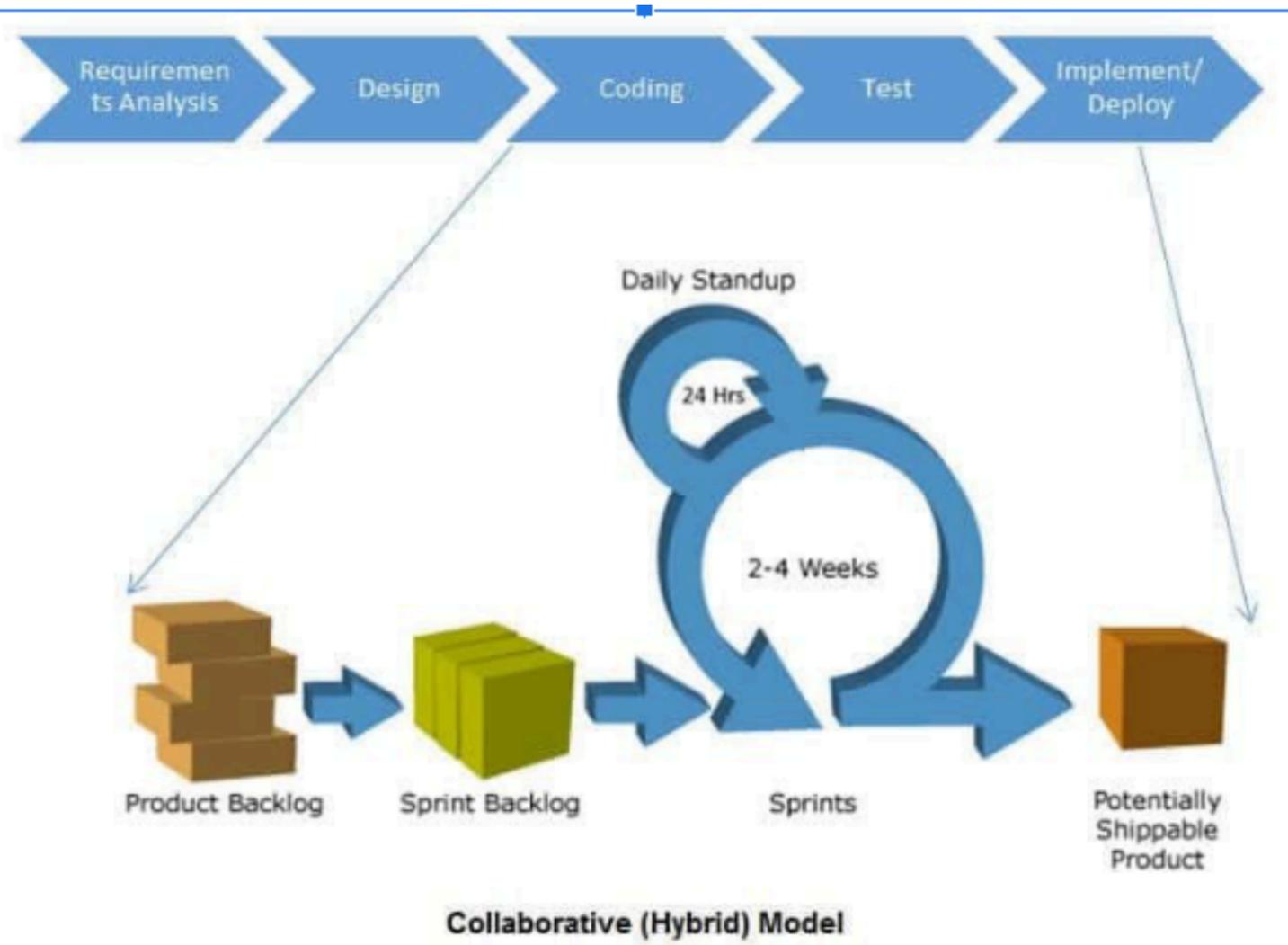


WPWIS

# Chapter 3 – System Development



# Development Methodology



hybrid waterfall and Agile



WPWIS



# Jira Project Management

WPWIS  
Software project

PLANNING

- Roadmap
- Backlog
- Board

DEVELOPMENT

- Code

Project pages

Add shortcut

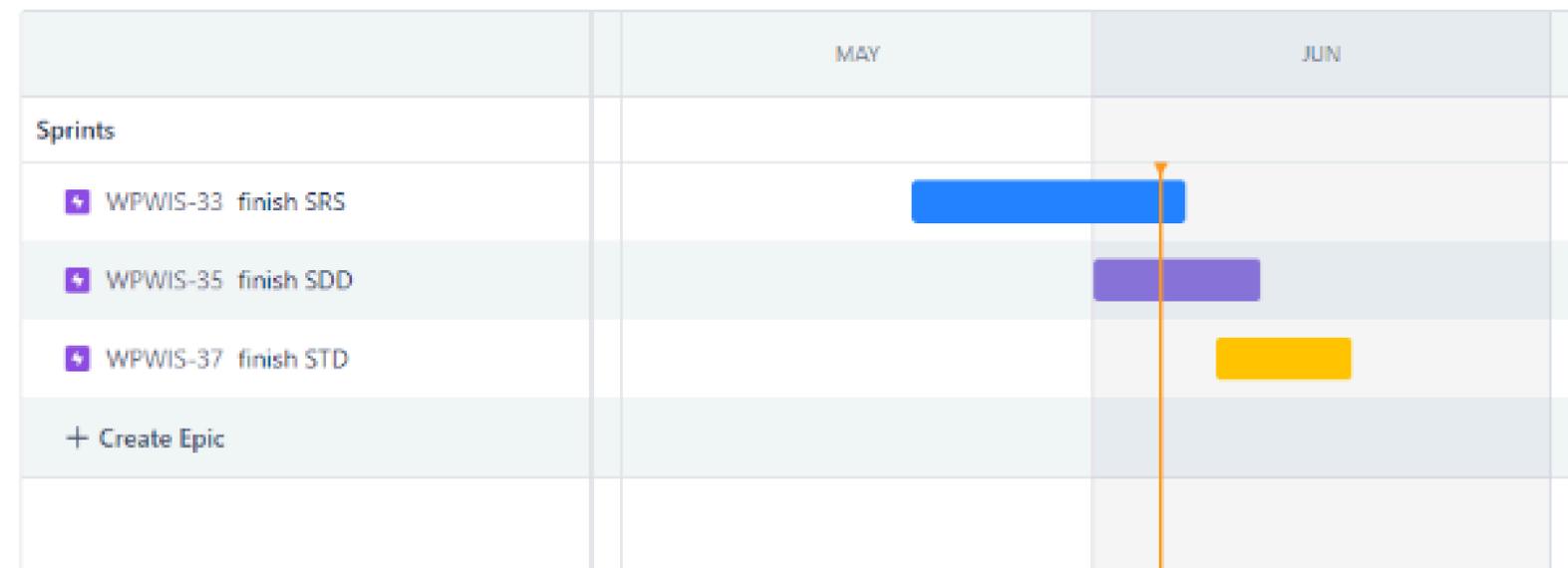
Project settings

Projects / WPWIS

## Roadmap

Give feedback Share Export

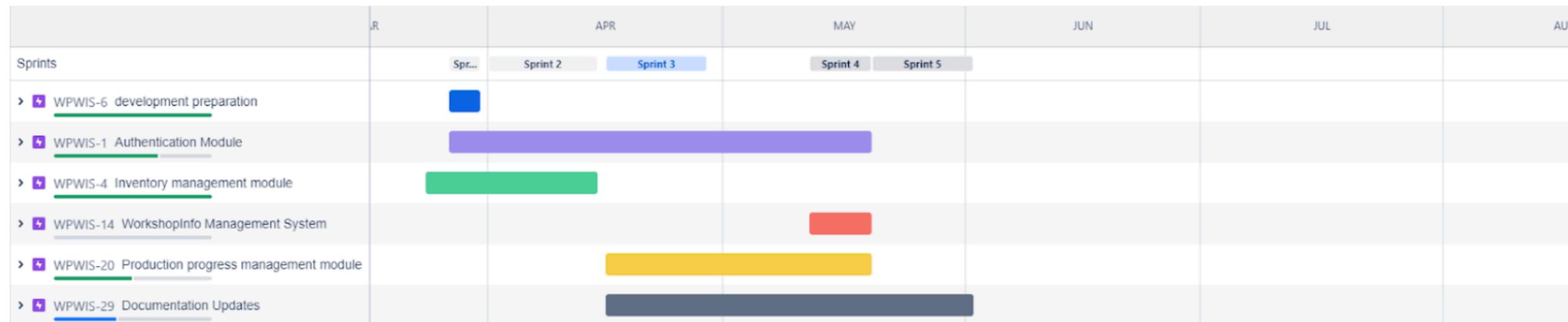
Search [CY] [User] [Add] Status category Epic 3 Clear filters



**Waterfall implemented during requirement analysis and generating the STD, SRS, SDD.**



# Sprints for Development & Testing



**Roadmap of the sprint, based on four modules of WPWIS.**



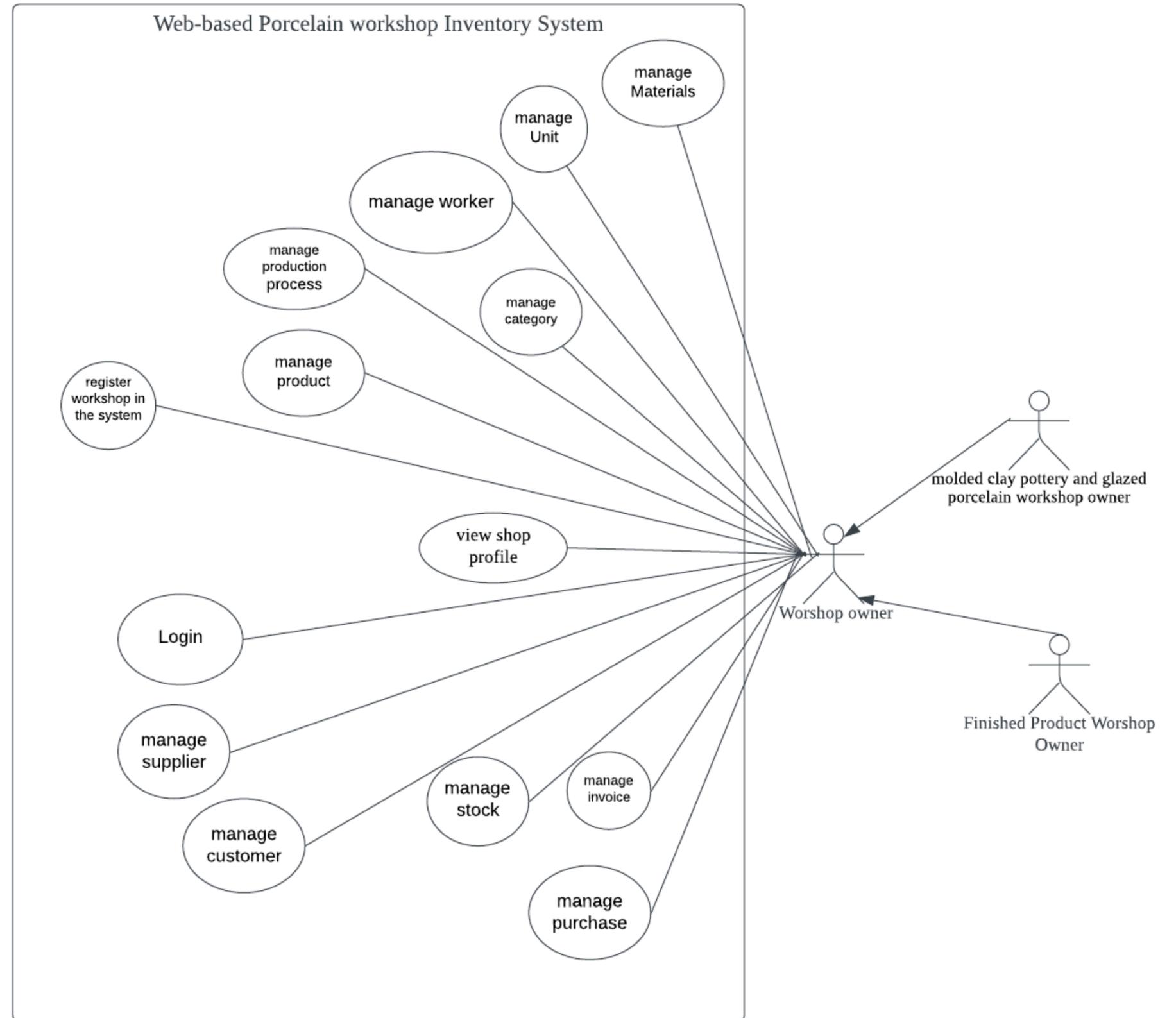
WPWIS

# Chapter 4 – Requirement Analysis Design



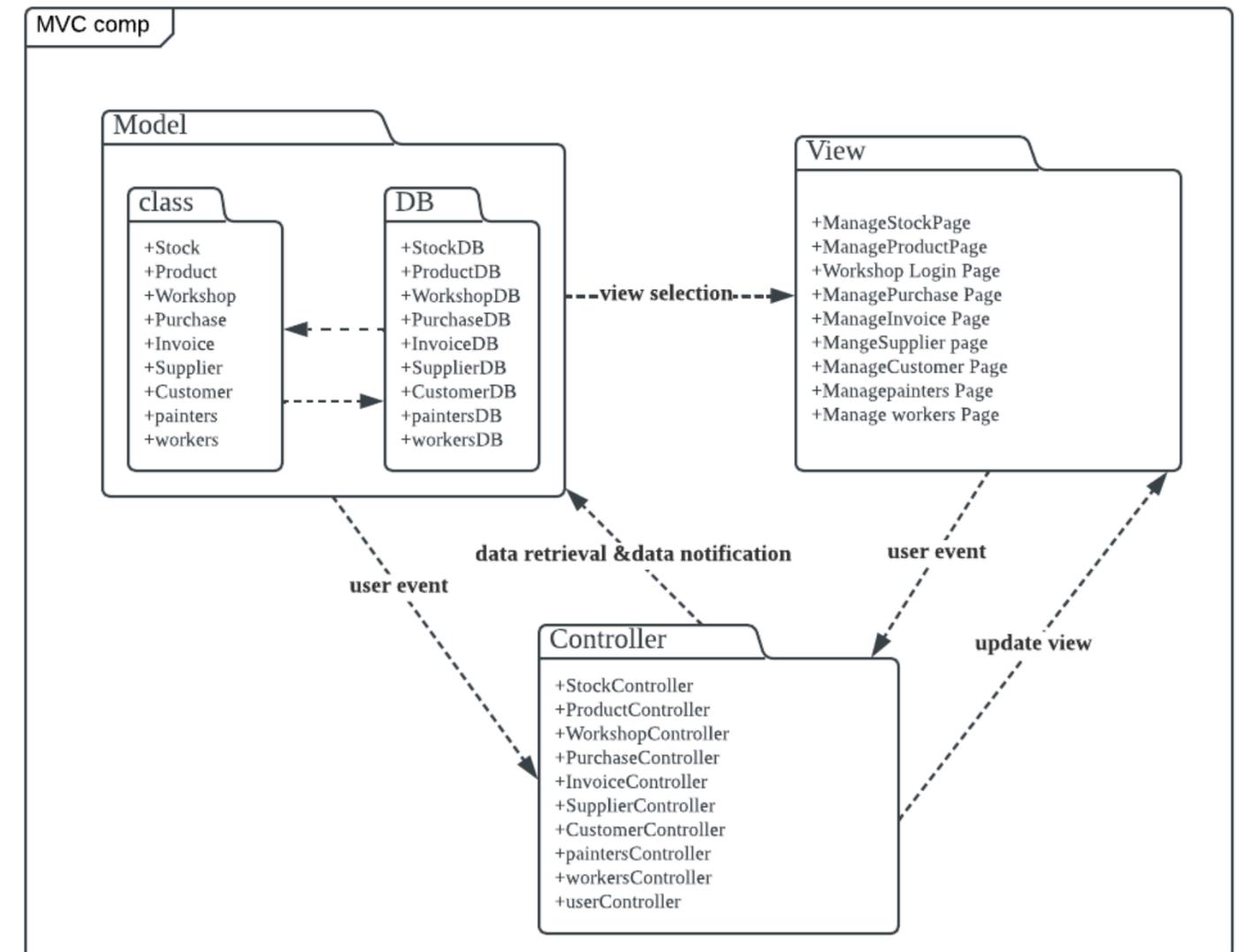
WPWIS

# Use Case Diagram Of WPWIS



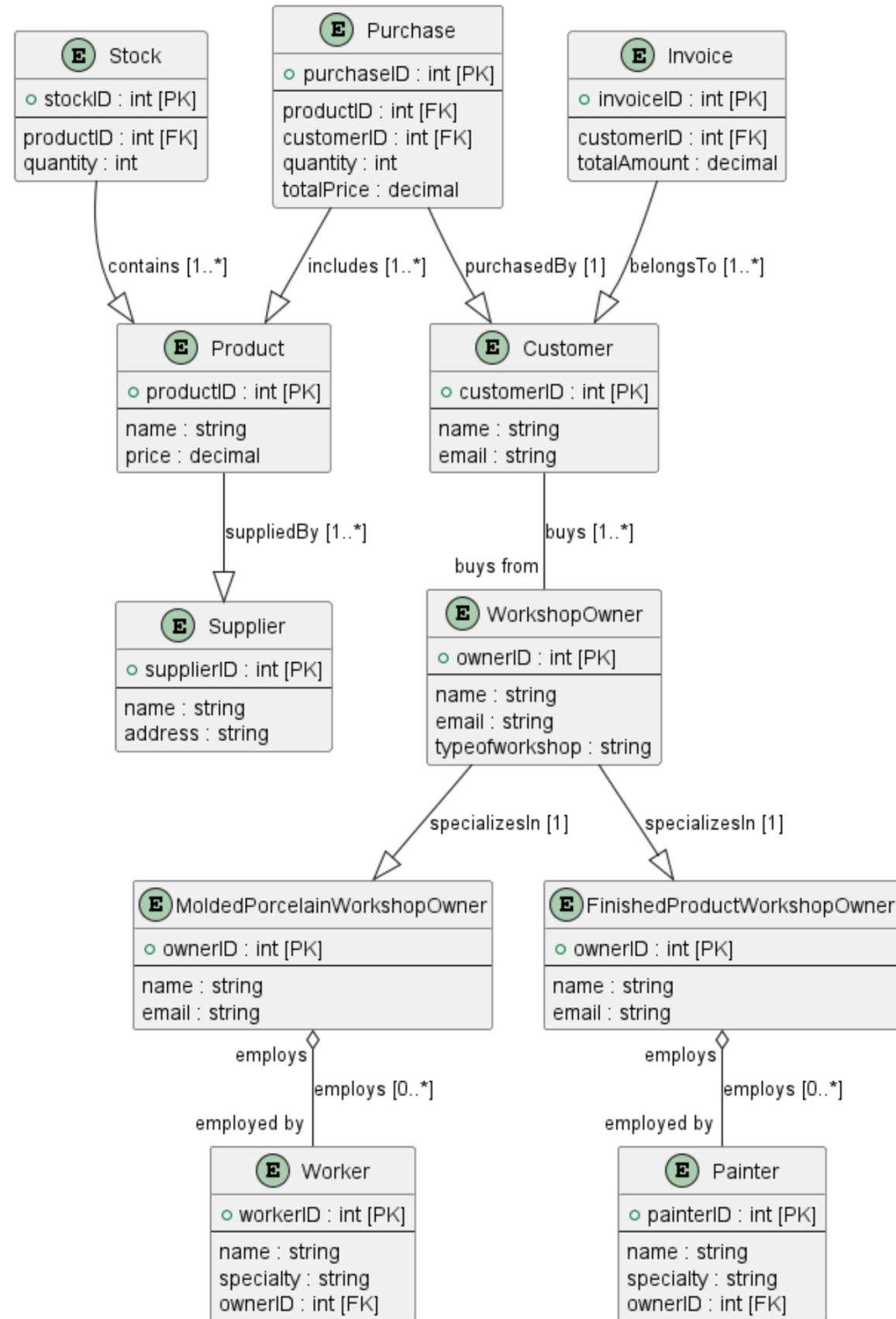
# WPWIS adapts MVC model

- The Model handles data and business logic.
- The View presents the user interface.
- The Controller manages user interactions and communication between the Model and View.





WPWIS



# Database Design





WPWIS

# Interface Design

WPWIS

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DASHBOARD

- Dashboard
- Suppliers
- Worker
- Customers
- Category
- Unit
- Material
- Purchase
- Product
- Invoice
- Production
- Stock

LOG OUT

- Log Out

Today Purchase Statistics -

0	0	0
Pending	Approved	Total

Total Purchase today: 0

Production Statistics -

0	3	3
Assigned	Completed	Total

Total Production: 3

Total Sales today: \$ 0

Total Product: \$ 1

Product

Product ID	Product Name	Stock
1	50ml molded clay	6

Invoices

Invoice ID	Customer Name	Status
1	laochen	partial_paid

Purchase

Purchase No.	Product Name	Date
ea-2024	gaolin clay	2024-05-17

Material

Material ID	Material Name	quantity
1	gaolin clay	350

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WPWIS

Hi, Vikki Chen

DASHBOARD

- Dashboard
- Suppliers
- Worker
- Customers
- Category
- Unit
- Material
- Purchase
- Product
- Invoice
- Production
- Stock

LOG OUT

- Log Out

Suppliers Info

10 entries per page

Search:

SI No.	Thumbnail	Name	Email	Phone	Address	Action
1		yiqu	vikkichen333@gmail.com	0147979422	The Garden Residence Tower D	<a href="#">Edit</a> <a href="#">Delete</a>

Showing 1 to 1 of 1 entry

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WPWIS

# Chapter 5 – System Implementation & Testing



WPWIS

# Coding of Main Function

```
ProductionController.php InvoiceController.php Product.php SupplierController.php PurchaseController.php ×
app > Http > Controllers > PurchaseController.php > PurchaseController > PurchaseApprove()
2
3 namespace App\Http\Controllers;
4 use App\Models\Purchase;
5 use App\Models\Supplier;
6 use App\Models\Material;
7 use App\Models\Unit;
8 use App\Models\Category;
9 use Illuminate\Http\Request;
10 use Auth;
11 class PurchaseController extends Controller
12 {
13     0 references | 0 overrides
14     public function index()
15     {
16         $purchases = Purchase::orderBy('date','desc')->orderBy('id','desc')->get();
17         $page_title = 'All Purchases';
18         return view('purchase.index', compact('purchases', 'page_title'));
19     }
20     0 references | 0 overrides
21     public function create()
22     {
23         $suppliers = Supplier::all();
24         $units = Unit::all();
25         $categories = Category::all();
26         $materials = Material::all();
27         $page_title = 'Create Purchase';
28         return view('purchase.create', compact('suppliers', 'units', 'categories', 'materials', 'page_title'));
29     }
30     0 references | 0 overrides
31     public function store(Request $request)
32     {
33         if ($request->category_id == null) {
34             $notification = array(
35                 'message' => 'Sorry you do not select any item',
36                 'alert-type' => 'error'
37             );
38             return redirect()->back()->with($notification);
39         } else {
40             $count_category = count($request->category_id);
41             for ($i=0; $i < $count_category; $i++) {
42                 $purchase = new Purchase();
43                 $purchase->date = date('Y-m-d', strtotime($request->date[$i]));
44                 $purchase->purchase_no = $request->purchase_no[$i];
45                 $purchase->supplier_id = $request->supplier_id[$i];
46                 $purchase->category_id = $request->category_id[$i];
```

Purchase Controller



# Coding of Main Function

```
ProductionController.php x InvoiceController.php Product.php SupplierController.php 5 PurchaseController.php
app > Http > Controllers > ProductionController.php > App\Http\Controllers\ProductionController > ProductionApprove()
1  <?php
2
3  namespace App\Http\Controllers;
4  use App\Models\Production;
5  use App\Models\Product;
6  use App\Models\Material;
7  use App\Models\worker;
8  use App\Models\Category;
9  use Illuminate\Http\Request;
10 use Auth;
11 class ProductionController extends Controller
12 {
13     0 references | 0 overrides
14     public function index()
15     {
16         $productions = Production::orderBy('date','desc')->orderBy('id','desc')->get();
17         $page_title = 'All Productions';
18         return view('production.index', compact('productions', 'page_title'));
19     }
20     0 references | 0 overrides
21     public function create()
22     {
23         $workers =worker::all();
24         $materials=Material::all();
25         $products = Product::all();
26         $page_title = 'Create Production';
27         return view('production.create', compact('workers', 'products', 'materials', 'page_title'));
28     }
29     0 references | 0 overrides
30     public function store(Request $request)
31     {
32         if ($request->product_id == null) {
33             $notification = array(
34                 'message' => 'Sorry you do not select any item',
35                 'alert-type' => 'error'
36             );
37             return redirect()->back( )->with($notification);
38         } else {
39             $count_product= count($request->product_id);
40             for ($i=0; $i < $count_product; $i++) {
41                 $production = new Production();
42                 $production->date = date('Y-m-d', strtotime($request->date[$i]));
43                 $production->production_no = $request->production_no[$i];
44                 $production->worker_id = $request->worker_id[$i];
45             }
46         }
47     }
48 }
```

Production Controller



# Coding of Main Function

```
ProductionController.php InvoiceController.php X Product.php SupplierController.php 5 PurchaseController.php
app > Http > Controllers > InvoiceController.php > ...
14 use App\Models\PaymentDetail;
15 use App\Models\Customer;
16 use DB;
17 class InvoiceController extends Controller
18 {
19     0 references | 0 overrides
20     public function InvoiceAll(){
21         $allData = Invoice::orderBy('date','desc')->orderBy('id','desc')->where('status','1')->get();
22         return view('invoice.invoice_all',compact('allData'));
23     } // End Method
24     0 references | 0 overrides
25     public function invoiceAdd(){
26
27         $category = Category::all();
28         $costomer = Customer::all();
29         $invoice_data = Invoice::orderBy('id','desc')->first();
30         if ($invoice_data == null) {
31             $firstReg = '0';
32             $invoice_no = $firstReg+1;
33         }else{
34             $invoice_data = Invoice::orderBy('id','desc')->first()->invoice_no;
35             $invoice_no = $invoice_data+1;
36         }
37         $date = date('Y-m-d');
38         return view('invoice.invoice_add',compact('invoice_no','category','date','costomer'));
39     } // End Method
40     0 references | 0 overrides
41     public function store(Request $request){
42         if ($request->category_id == null) {
43
44
45             return redirect()->route('invoice.add')->with('message','Sorry You do not select any item');
46
47         }
48         else{
49             if ($request->paid_amount > $request->estimated_amount) {
50
51                 $notification = array(
52                     'message' => 'Sorry Paid Amount is Maximum the total price',
53                     'alert-type' => 'error'
54                 );
55             }
56             return redirect()->back()->with($notification);
57
58             } else {
```

Invoice Controller



WPWIS

# Essential Interface and Results

Adding Supplier

WPWIS

Hi, Vikki Chen

DASHBOARD

- Dashboard
- Suppliers
  - Add Supplier
  - All Suppliers
- Worker
- Customers
- Category
- Unit
- Material
- Purchase
- Product
- Invoice
- Production
- Stock

LOG OUT

- Log Out

### Create Supplier

Name

Supplier Image



Email

Phone Number

Address

Submit



# Essential Interface and Results

Search Function

The screenshot displays the WPWIS interface. On the left is a sidebar menu with options like Dashboard, Suppliers, Add Supplier, All Suppliers, Worker, Customers, Category, Unit, Material, Purchase, Product, Invoice, Production, and Stock. The main content area is titled 'Suppliers Info' and includes a search bar with the text 'Search: jn'. Below the search bar is a table with columns: SI No., Thumbnail, Name, Email, Phone, Address, and Action. The table contains one entry for 'Wang Jinyi' with email 'jy@gmail.com' and phone '17767987124'. The Action column has 'Edit' and 'Delete' buttons. At the bottom, it says 'Showing 1 to 1 of 1 entry (filtered from 2 total entries)' and a pagination control showing '1'.

SI No.	Thumbnail	Name	Email	Phone	Address	Action
2		Wang Jinyi	jy@gmail.com	17767987124	Gansu Lanzhou	<a href="#">Edit</a> <a href="#">Delete</a>



# Essential Interface and Results

Add Purchase for raw material

WPWIS

Hi, Vikki Chen

DASHBOARD

- Dashboard
- Suppliers
- Worker
- Customers
- Category
- Unit
- Material
- Purchase**
  - Add Purchase**
  - All Purchase
  - Approval Purchase
- Product
- Invoice
- Production
- Stock

LOG OUT

- Log Out

### Create Purchase

Date: 04/06/2024 | Purchase No: ea-2024-01 | Supplier Name: Wang Jinyi

Category Name: Pigment | Material Name: red pigment | [Add More](#)

Category	Material Name	PSC/G	Unit Price	Description	Total Price	Action
Pigment	red pigment	50	80		4000	<a href="#">✖</a>
					4000	

[Purchase Store](#)

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# Essential Interface and Results

Approval for the raw material purchase

The screenshot displays the WPWIS dashboard interface. On the left is a sidebar menu with options like Dashboard, Suppliers, Worker, Customers, Category, Unit, Material, Purchase, Add Purchase, All Purchase, Approval Purchase, Product, Invoice, Production, Stock, and Log Out. The main content area is titled 'Purchase All Pending Data' and features a table with columns: SI, Purchase No, Date, Supplier, Category, Qty, Material Name, Status, and Action. A single entry is shown with SI '1', Purchase No 'ea-2024-01', Date '04-06-2024', Supplier 'Wang Jinyi', Category 'Pigment', Qty '50', and Material Name 'red pigment'. The Status is 'Pending' and the Action column contains a red button with a circular arrow icon. A modal dialog box is overlaid on the table, asking 'Are you sure? Approve This Data?' with 'Yes, Approve it!' and 'Cancel' buttons. The footer of the dashboard includes 'Copyright © 2018 • Design By Muhamad Nauval Azhar'.

SI	Purchase No	Date	Supplier	Category	Qty	Material Name	Status	Action
1	ea-2024-01	04-06-2024	Wang Jinyi	Pigment	50	red pigment	Pending	



# Essential Interface and Results

After approval purchase the stock changes.

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### Material Stock Report

10 entries per page Search:

SI	Supplier	Unit	Category	Material Name	Stock
1	yiqiu	gram	clay	gaolin clay	350
2	Wang Jinyi	gram	Pigment	red pigment	50

Showing 1 to 2 of 2 entries

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# Essential Interface and Results

Error Message for Exceed Stock

WPWIS Hi, Vikki Chen

Sorry you approve Maximum Value

### Invoice Approve

Invoice No: #2 - 04-06-2024 [Pending Invoice List](#)

Customer Info      Name: laochen      Mobile:      Email: chen@qq.com

Description :

SI	Category	Product Name	Current Stock	Quantity	Unit Price	Total Price
1	molded clay	50ml molded clay	6	7	80	560
Sub Total						560
Discount						
Paid Amount						560
Due Amount						0
Grand Amount						560

Invoice Approve



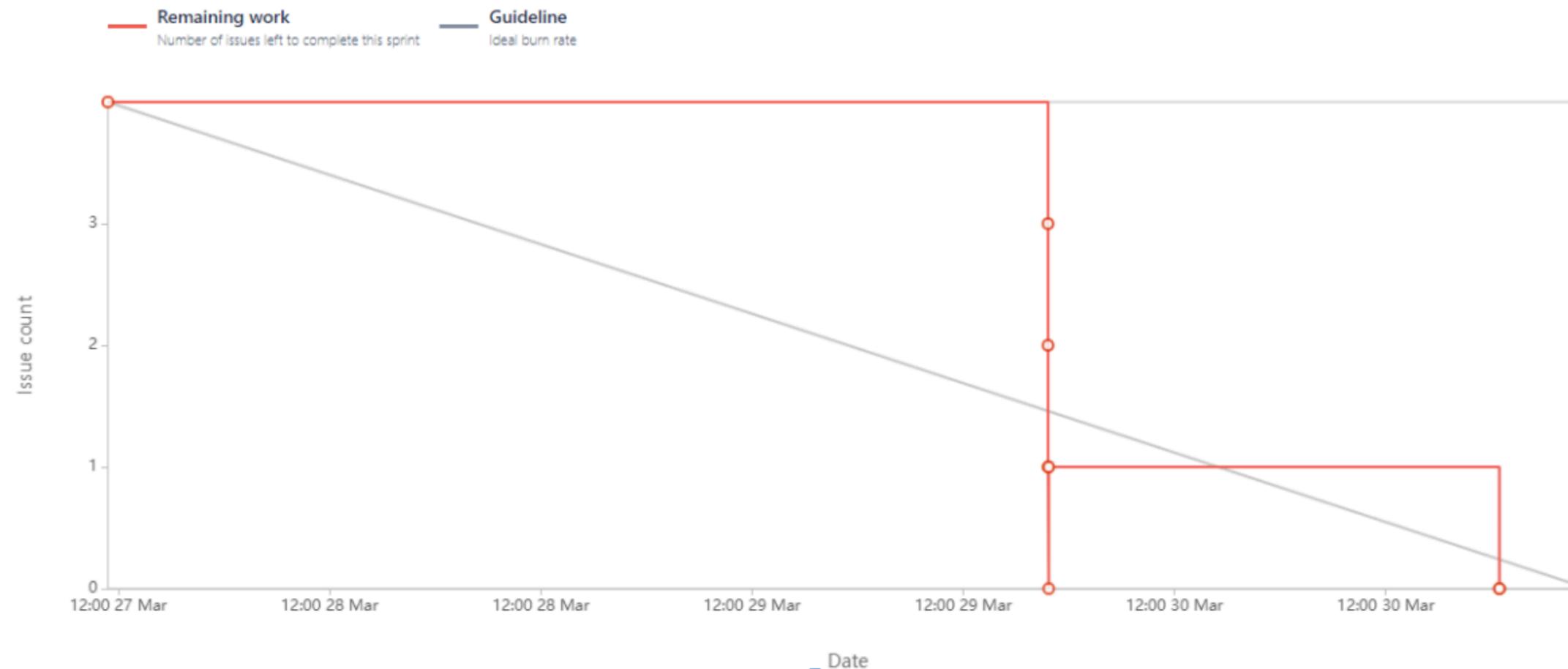
# System Implementation

## Sprint burndown chart

[How to read this report](#)

Sprint:  Estimation field:

Date - March 27th, 2024 - March 30th, 2024



The Sprint one was aimed to complete the config development environment setting and mainly focused on the authentication module development and inventory management module. In order to achieve these, the php migration for initiating a project was strictly followed, and it implemented MVC with a Client-Server structure using myAdmin php and laravel framework.



WPWIS

# System Implementation

Projects / WPWIS / Reports

## Sprint burndown chart

[How to read this report](#)

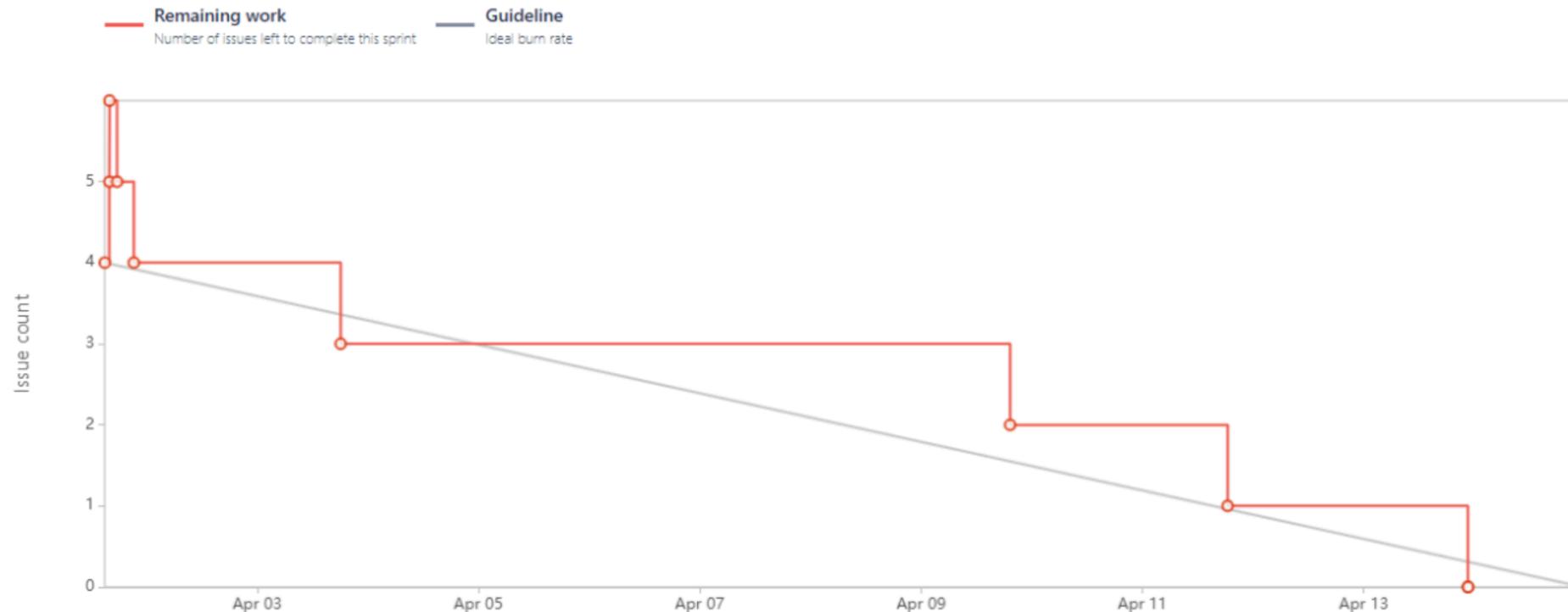
Sprint

Sprint 2

Estimation field

Issue count

Date - April 1st, 2024 - April 14th, 2024



During the development of sprint two, major functions of the inventory module were completed the manage purchases function and manage invoice function.

There are intotal five sprints , during the last spring the system was deployed using cpanel, and tested with the user.



# Testing

During the process of testing, User Acceptance Testing (UAT) and Quality Assurance Testing (QAT) were carried out. Undergoing these two tests benefited the system's quality.

As for UAT, stakeholder MS.Ye participated in testing the system. She performed all use cases to test whether the system fulfilled her initial requirement and her expectation. The UAT results showed that the system smoothly passed all the use cases with expected outputs. Detailed test cases with input, output and exception were explained in Appendix D (STD). Therefore, the stakeholder was satisfied with the results of the system.

Regarding the QAT process, it was done by the system developer performing intensive interaction and navigation in the system to ensure the quality of the system. The system developer tested all use cases by inputting various fields and confirming the expected outputs. Based on the testing, the systems met the desired standards.



WPWIS

# Testing example

Test Case ID	TC003_01	Test Case Description	Test valid case for adding a supplier		
Created By	Chen Yiqiu				
Tester Name	Ye YuTing	Test Date	05/06/2024		
Prerequisites	User is logged in				
Test Data	Supplier name: LaoChenSupplier Image: xx.pngSupplier Address: SanBao RoadSupplier Phone: 13479847733				
Steps	Step Details	Expected Result	Actual Result	Pass/Fail	
1	Click 'Manage Supplier' in the sidebar	List of supplier management function	List of supplier management function	Pass	
2	Click 'add supplier' icon	The supplier form is displayed	The supplier form is displayed	Pass	
3	Input the form information	Inputs displays in the fields	Inputs displays in the fields	Pass	
4	Click 'submit' button	New supplier information is saved by redirecting to the supplier list	New supplier information is saved by redirecting to the supplier list	Pass	



WPWIS

# Chapter 6 – Conclusion



# Conclusion



## PSM1

PSM1 is executed accordingly, STD,SRS,SDD for WPWIS is produced, need to update interface and test cases based on the development during PSM2.

## PSM2

During PSM2 , the system is developed deployed, and tested with the users.

## Future Improvement

Data security and privacy would be guaranteed by putting in place a strong user management system with improved roles and permissions.

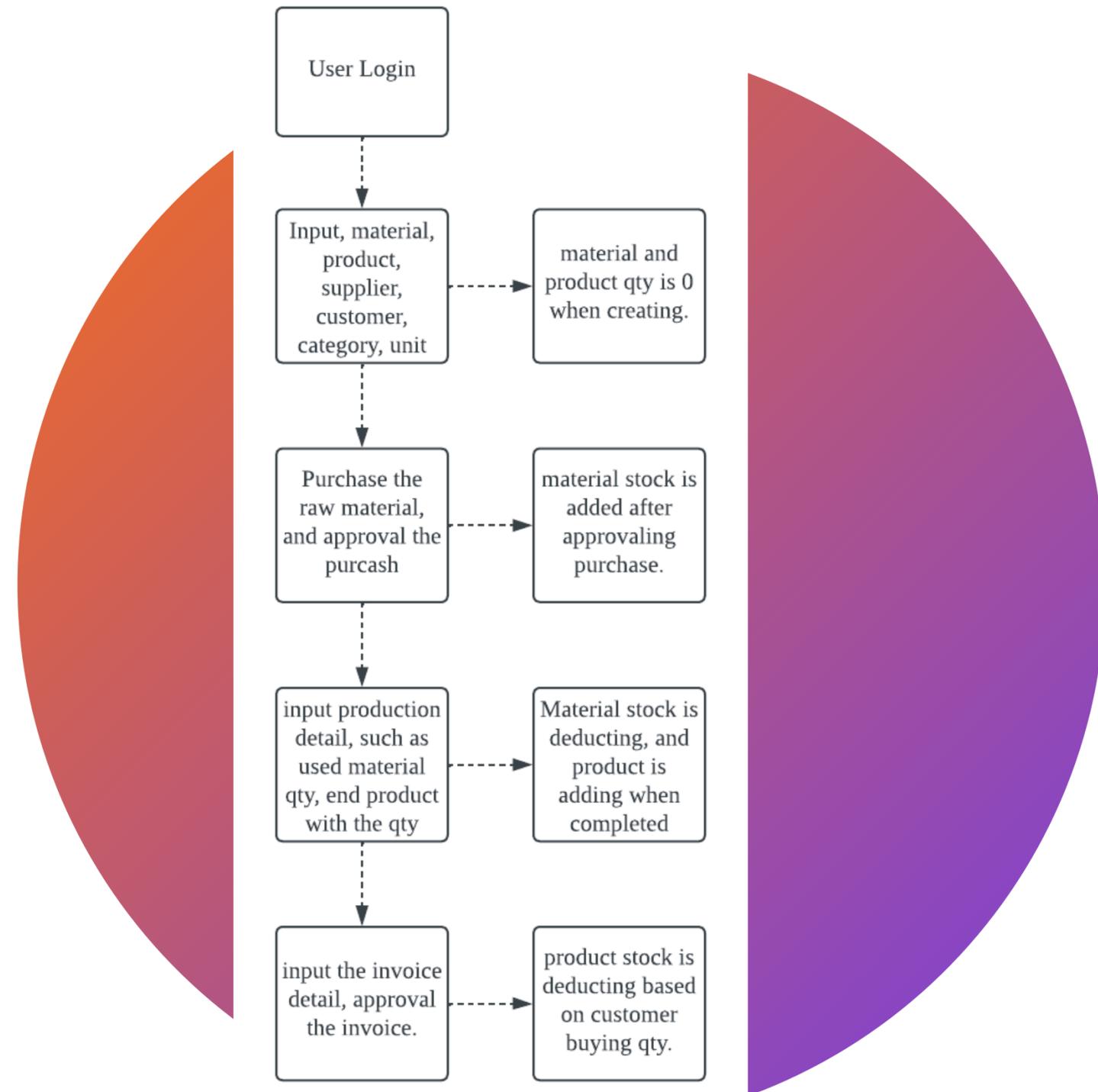
Integrate API for Payment Platform.

Provide System in Chinese Version



WPWIS

# System Flows





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# Thank You