

Business IT Project

Level 5 Diploma in Computing with Business Management

 Presented by

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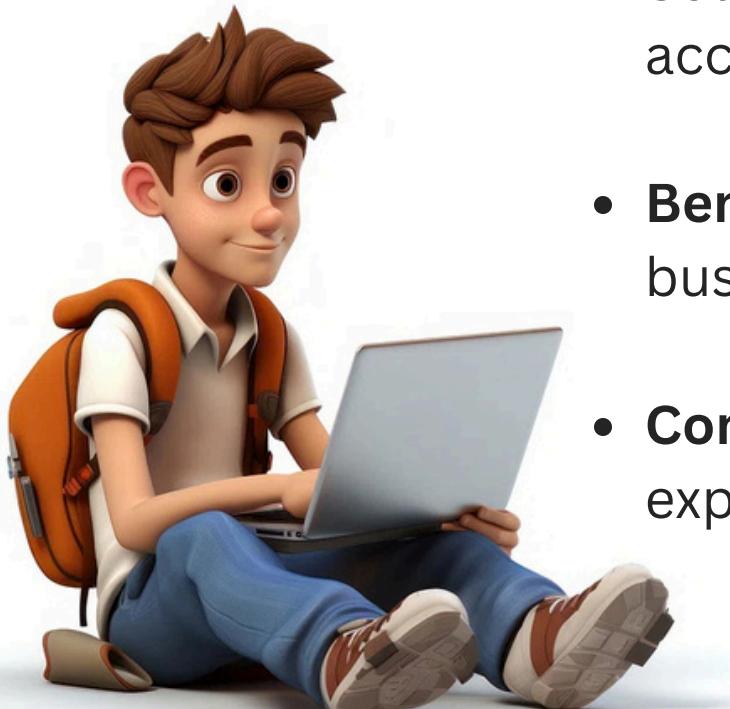
Content

- Overview
- Aim and Objectives
- Requirement Analysis
- System Design (Use case, Class Diagram)
- IT Project Management Approach
- Evaluation Matrix
- Conclusion



Overview

- **Introduction:** Founded in a busy urban area, GearUp specializes in laptop and smartphone sales and repairs for both individuals and corporate clients.
- **Current Challenges:** Reliance on walk-ins, phone calls, and social media is inefficient and limits the ability to handle growing demand.
- **Solution:** An integrated online platform for browsing products, booking repairs, and accessing customer support.
- **Benefits:** Streamlines service delivery, enhances customer convenience, and supports business growth.
- **Competitive Edge:** Increases efficiency, improves professionalism for corporate clients, and expands market reach.



Aims & Objective

Aims

- To develop comprehensive computing artefacts that can create digital solution for GearUp's laptop and smartphone retail and service operations.

Objective

- To conduct a thorough review of current retail and service platforms in the electronics sector
- To collect and define user requirements specific to GearUp's business needs
- To perform a system analysis using the CATWOE framework to understand stakeholders and system impact
- To create a system design utilizing Object-Oriented Modeling techniques To assess and validate the functionality and usability of the developed system.



Requirement Analysis

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iPhone 16 Pro Max
5,290,000 MMK



iPhone 16 Pro
4,470,000 MMK



iPhone 16 Plus
4,080,000 MMK



iPhone 16
3,560,000 MMK



iPhone 16e
2,920,000 MMK



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- Conducted fact-finding to identify customer pain points in electronics retail and repair.
- Analyzed leading platforms like Best Buy and iCare (Apple's service portal).
- Gained insights into seamless retail workflows, user-friendly repair request systems, and inventory transparency.
- Identified essential features such as real-time stock updates, service booking, and secure payment integration.
- Collected data to align the system with both customer expectations and operational efficiency goals.

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Booking overview

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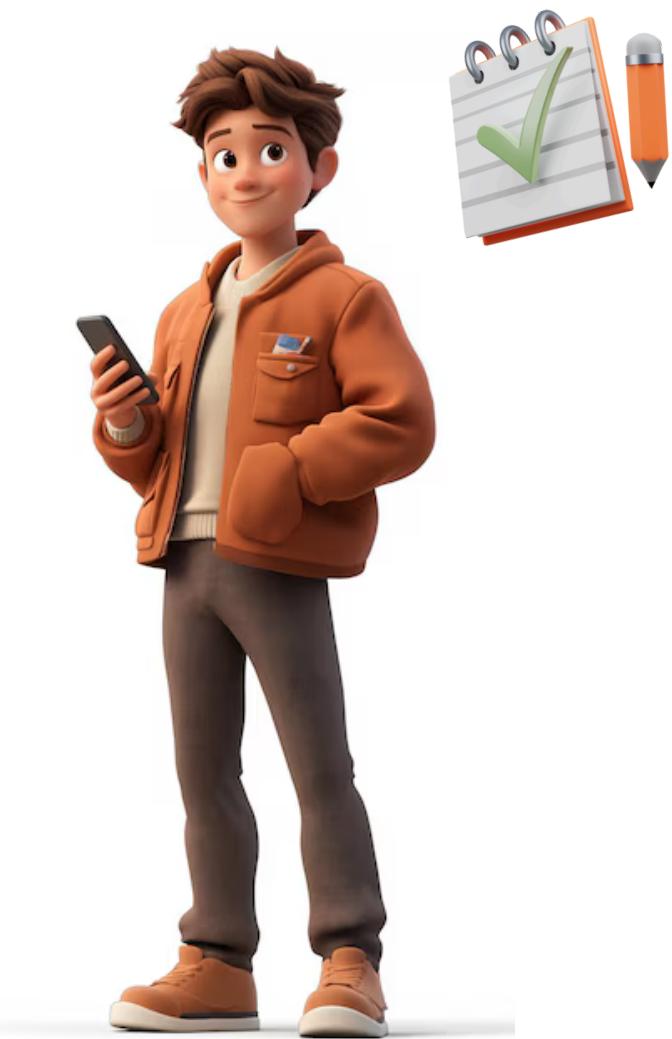
Requirement Analysis (CATWOE)

Element	Definition
C	Walk-in customers, tech enthusiasts, corporate clients seeking purchases or repair services.
A	Owners, sales staff, technicians, customer service, marketing team, inventory managers, IT support.
T	Customer requests are transformed into product purchases or repair completions, followed by feedback and support.
W	Promote accessible and reliable technology for all, supporting digital life through quality service and sustainable solutions.
O	Owners and senior management guide strategic planning, investments, and business growth.
E	Influenced by tech trends, competition, regulations, economic shifts, and sustainability demands in a fast-paced digital market.



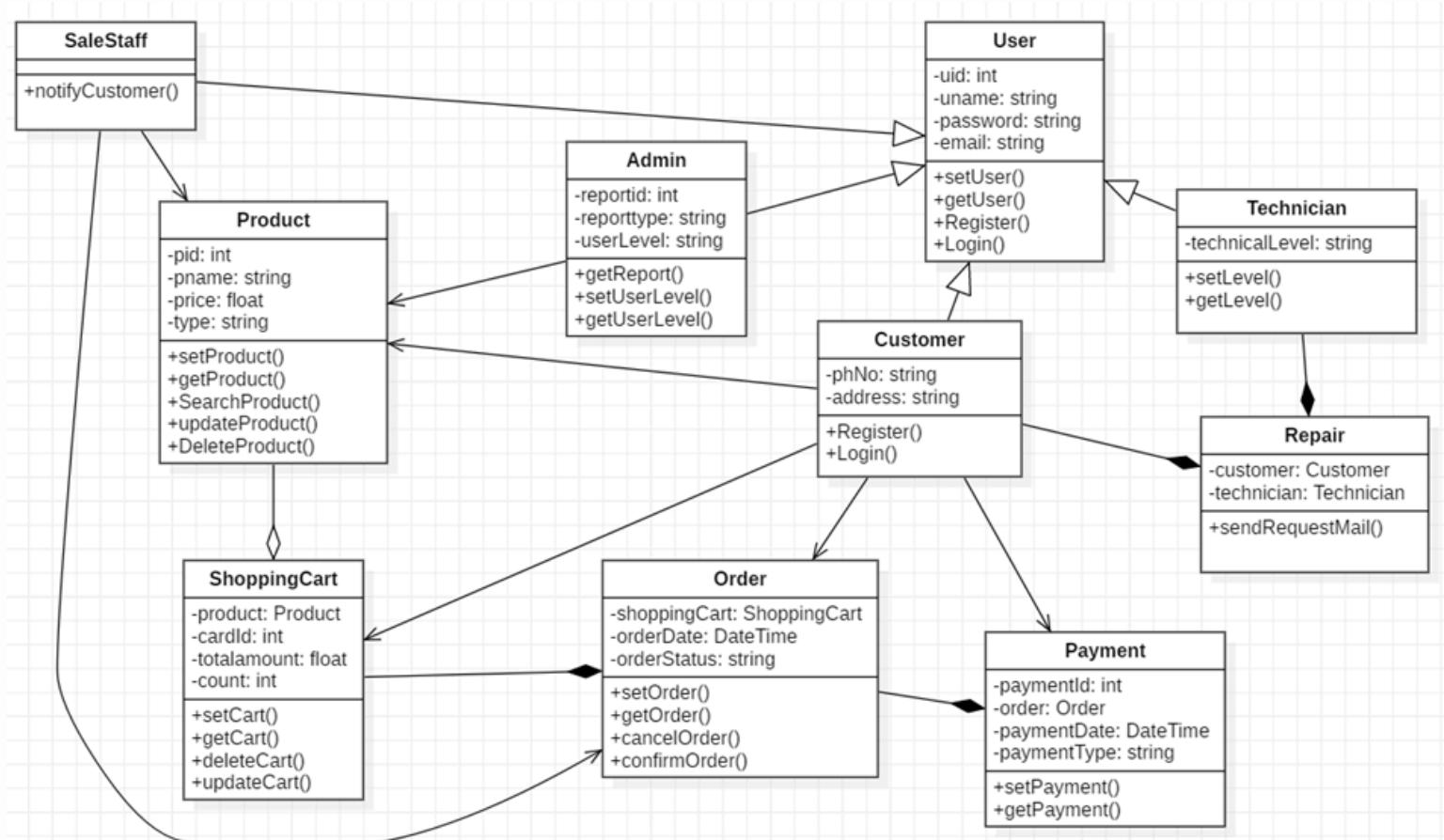
Prioritized Functional and Non-Functional Requirements

Functional Requirements	Non-Functional Requirements	Not in Scope
<ol style="list-style-type: none"> 1. Product Catalog (Admin) 2. Product Browsing (Customer) 3. Product Search 4. Inventory Management (Admin) 5. Shopping Cart (Customer) 6. Online Payment Gateway (Customer) 7. Sales Data Export (Admin) 8. Customer Profile Management (Admin) 9. Repair Service Booking (technician) 10. Order Confirmation & Notification Emails 	<ol style="list-style-type: none"> 1. Easy user interfaces 2. Clear and attractive page design 3. Secured Socket Layer (SSL) 4. Quick loading 	<ol style="list-style-type: none"> 1. Customized Product orders 2. Accounting features 3. Online chatting



System Design

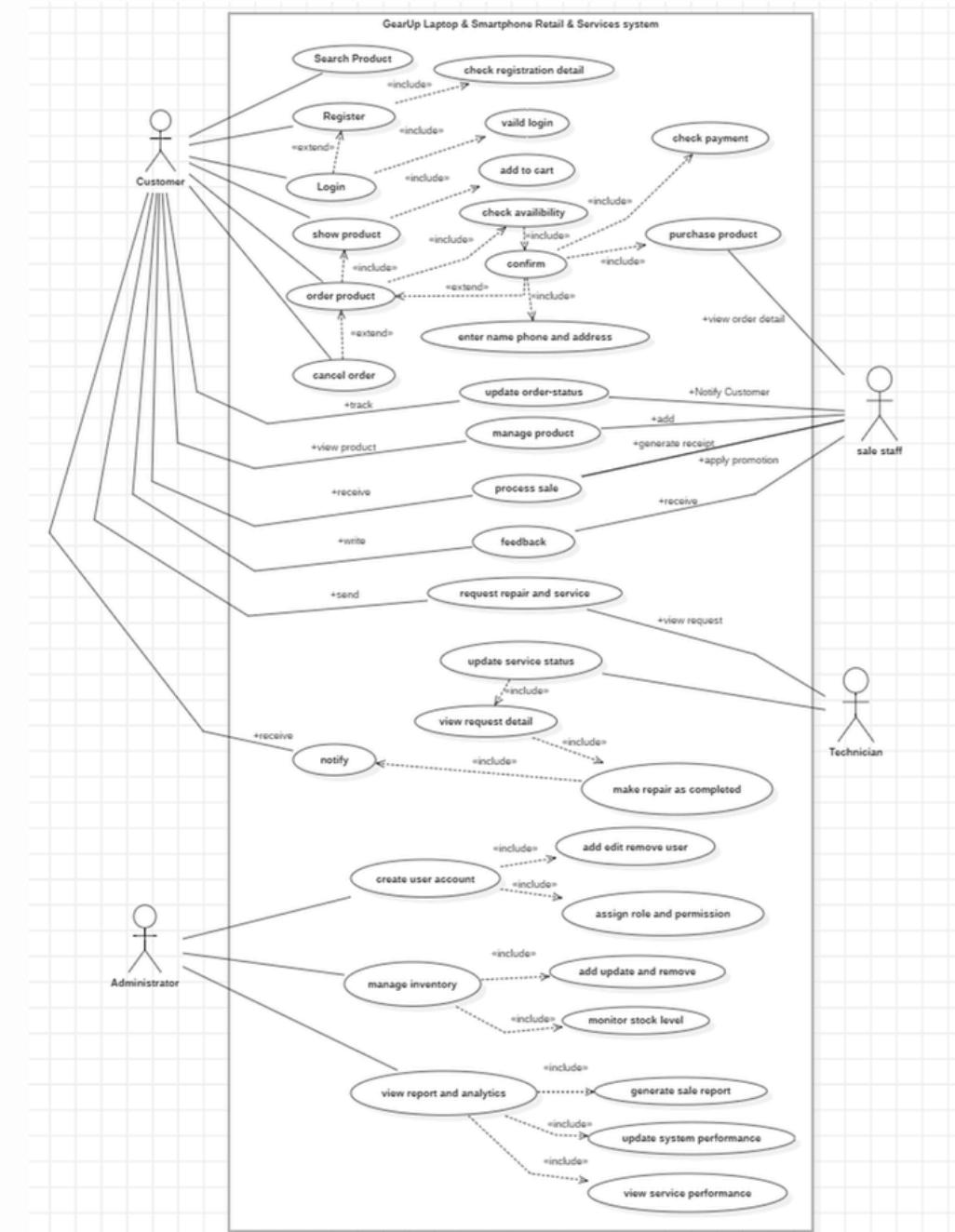
- Class diagram for Structural modelling as static aspect



GearUp's overall Class Diagram

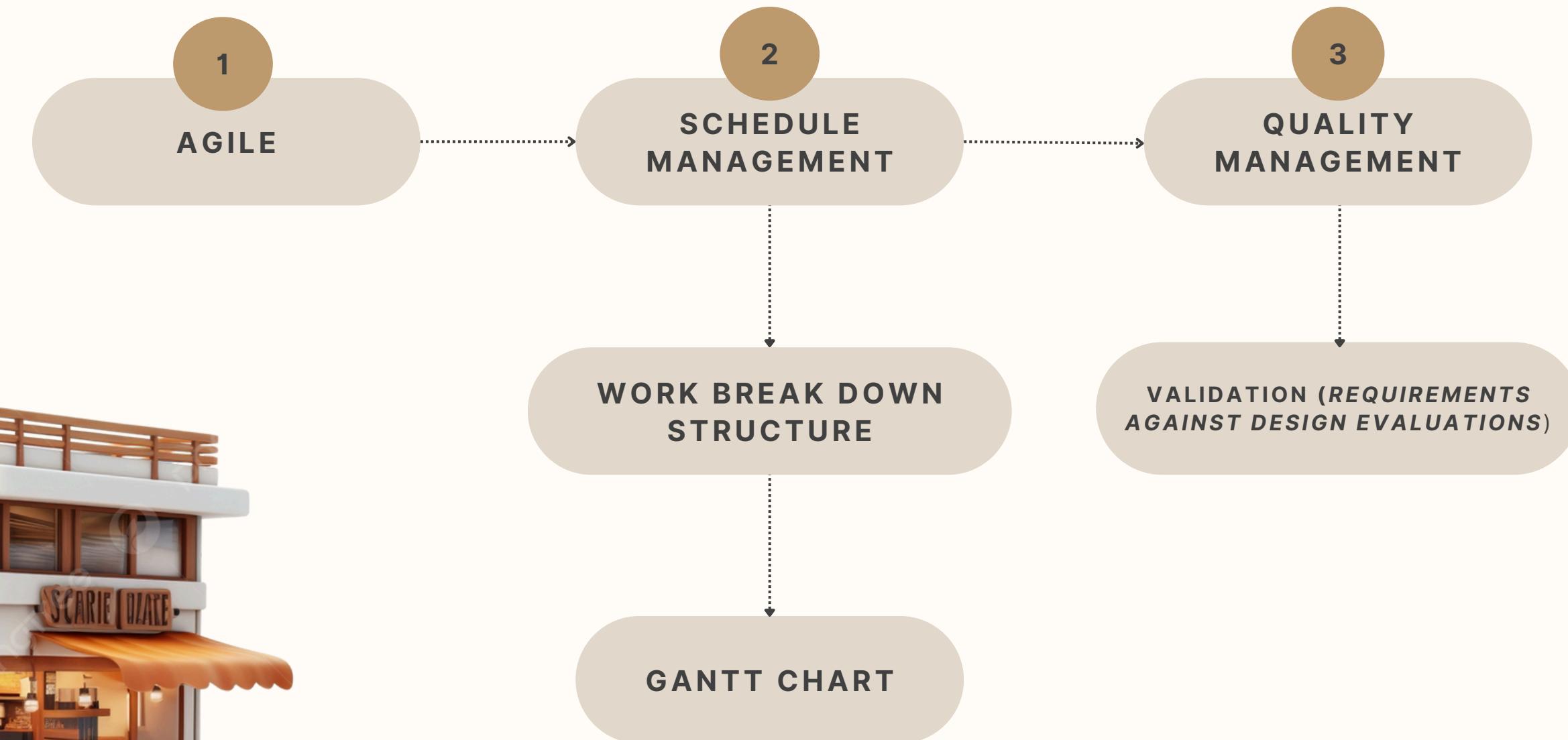


- Use Case diagram for behavioral modelling as dynamic aspect.



GearUp's overall UseCase Diagram

Project Management Methodology



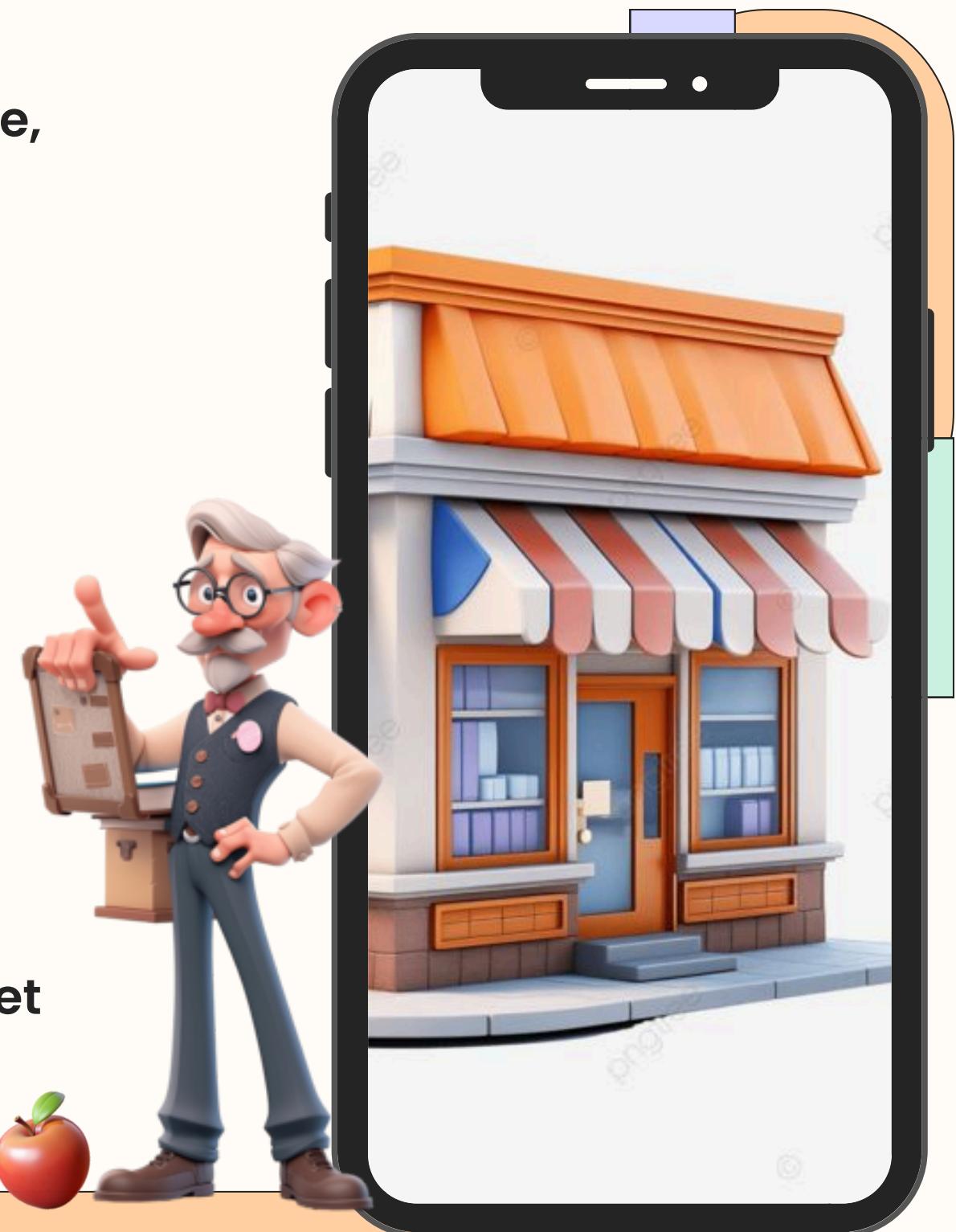
Evaluation Matrix

No	Functional Requirements	Class Name	Operation	Result
1	Product Catalog (Admin)	Product	setProduct(), getProduct() searchProduct(), updateProduct() deleteProduct()	Pass
2	Product Browsing (Customer)	User	setUser(), getUser() register(), login()	Pass
3	Product Search (Customer)	Customer	register(), login()	Pass
4	Inventory Management (Admin)	Order	setOrder(), getOrder() cancelOrder(), confirmOrder()	Pass
5	Shopping Cart (Customer)	ShoppingCart	setCart(), getCart() deleteCart(), updateCart()	Pass
6	Online Payment Gateway (Customer)	Payment	setPayment() getPayment()	Pass
7	Sales Data Export (Admin)	Technician	setLevel(), getLevel()	Pass
8	Customer Profile Management (Admin)	Admin	getReport(), setUserLevel(), getUserLevel()	Pass
9	Repair Service Booking (Technician)	Repair	sendRequestMail()	Pass
10	Order Confirmation & Notification Emails (Sale-Staff)	SaleStaff	notifyCustomer()	Pass



Conclusion

- GearUp's modern platform addresses retail inefficiencies with scalable, customer-focused solutions.
- Improves inventory accuracy, service access, and order automation.
- Modular architecture enables easy integration of new features like AI and AR.
- Boosts satisfaction, speeds up service, and secures a future-ready market position.



Thank You

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