

Darshan University

A Project Report on

"Food Delivery Management System"

Under the subject

Software Engineering (2101CS503)

B. Tech, Semester – VI

Computer Science & Engineering Department

Submitted By

Student Name: Nikhil Faldu Enrollment No.: 21010101209

Academic Year

(2023-2024)

Internal Guide Dean-DIET

Prof. Ekta Baldha Dr. Gopi Sanghani

Darshan University Darshan University



Computer Science & Engineering Department Darshan University

DECLARATION

Engineering (2101CS503) for entitled "Parts Management System" submitted in partial fulfilment for the Semester-5 of Bachelor Technology (B. Tech) in Computer Science and Engineering (CSE) Department to Darshan University, Rajkot, is a record of the work carried out at Darshan University, Rajkot under the supervision of Prof. Ekta Baldha and that no part of any of report has been directly copied from any students' reports, without providing due reference.

e supervision of Prof. Ekta Baldha and that no part of any of report has been							
ectly copied from any students' reports, without providing due reference.							
Nikhil Faldu							
Student's Signature							
Date:							



Computer Science & Engineering Department Darshan University

CERTIFICATE

This is to certify that the SRS on "Parts Management System" has been satisfactorily prepared by Nikhil Faldu (21010101057) under my guidance in the fulfillment of the course Software Engineering (2101CS503) work during the academic year 2023-2024.

Internal Guide Prof. Ekta Baldha Darshan University Dean-DIET
Dr. Gopi Sanghani
Darshan University

SRS – Food Management System

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to my project guide **Prof. Ekta Baldha** and all the faculty members for helping me through my project by giving me the necessary suggestions and advices along with their valuable co-ordination in completing this work.

I also thank my parents, friends and all the members of the family for their precious support and encouragement which they had provided in completion of my work. In addition to that, I would also like to mention the Darshan University personals who gave me the permission to use and experience the valuable resources required for the project from the University premises.

Thus, in conclusion to the above said, I once again thank the faculties and members of **Darshan University** for their valuable support in completion of the project.

Thanking You

Nikhil Faldu

ABSTRACT

A Parts Management System (PMS) is an essential tool for organizations across various industries to efficiently and effectively oversee the procurement, storage, tracking, and utilization of spare parts and components. This abstract provides an overview of the key functionalities and benefits of a Parts Management System. The Parts Management System serves as a centralized database and control center, enabling businesses to streamline their inventory management processes. It encompasses a range of features such as cataloging, categorization, and identification of parts, facilitating easy access to crucial information about each component. Additionally, it incorporates features like real-time monitoring, reorder alerts, and maintenance scheduling, contributing to optimal inventory levels and reduced downtime. Moreover, a Parts Management System aids in cost optimization by minimizing overstocking or understocking of parts, resulting in substantial savings. It also enhances operational efficiency by enabling quick and accurate retrieval of parts, reducing the time required for repairs and maintenance tasks. The system often integrates with other enterprise resource planning (ERP) software, ensuring seamless communication and data sharing across departments.In conclusion, a Parts Management System plays a pivotal role in enhancing operational efficiency, reducing costs, and ensuring the availability of critical components when needed. As businesses strive to streamline their operations and minimize downtime, implementing a robust Parts Management System emerges as a strategic imperative in today's competitive landscape. This abstract highlights the significance of such a system in optimizing parts-related processes and ultimately contributing to the overall success of an organization.

Table of Contents

Li	st of Fig	gures	
Li	st of Ta	bles	ا
1.	Intro	oduction	1
	1.1	Parts perspective	1
	1.2	Parts features	1
	1.2.	There are two different users who will be using this parts:	1
	1.2.	The features that are required for the Admin are:	1
	1.2.	The features that are required for the Customer are:	1
	1.3	Functional Requirement	2
	1.3.	1 Admin	2
	1.3.	2 Customer	2
	1.4	Non-Functional Requirement	3
	1.4.	1 User-Friendly Interface:	3
	1.4.	Data Privacy and Security:	3
	1.4.	Fast and Reliable Access:	3
	1.4.	4 Cross-Browser and Platform Compatibility:	3
	1.4.	5 Mobile Responsiveness:	3
	1.4.0	6 Payment Gateway Security:	3
2.	Desi	ign and Implementation Constraints	4
	2.1	Use case diagram	
	2.2	Activity diagram and Swimlane diagram	
	2.3	Sequence diagram	
	2.4	State diagram	
	2.5	Class diagram	9
	2.6	Data flow diagram	
	2.6.		
	2.6.		
	2.6.		
3.	Exte	ernal interface requirement (Screens)	
	3.1	Screen-1: Parts Card	
	3.2	Screen-2: Cart	
	3.3	Screen-3: Checkout	
4.		abase design	
	4.1	List of Tables	
5.		ries and Scenario	
	5.1	Story-1: Customer Registration	18

SRS – Food Management System

	5.1.	1	Scenario# S1.1	.18
	5.1.	2	Scenario# S1.2	.18
	5.1.	3	Scenario# S1.3	.18
	5.2	Stor	ry-2: Parts Catalog	.19
	5.2.		Scenario# S2.1	
	5.2.	2	Scenario# S2.2	.19
	5.2.	3	Scenario# S3.3	.19
	5.3	Stor	ry-3: Adding Items to Cart	.20
	5.3.	1	Scenario# S3.1	.20
	5.3.	2	Scenario# S3.2	.20
	5.3.	3	Scenario# S3.3	.20
	5.4	Stor	ry-4: Checkout and Payment	.21
	5.5	Stor	ry-5: Order History	.21
	5.6	Stor	ry-6: Inventory Management	.21
	5.7	Stor	ry-7: Customer Support	.21
	5.8	Stor	ry-8: Reporting and Analytics	.21
	5.9	Stor	ry-9: Discounts and Promotions	.22
	5.10	Stor	ry-10: Mobile Application Integration	.22
6.	Test	t case	25	.23
	6.1	Test	t Suite - 1	.23
	6.1.	1	Test Case - 1	.24
	6.1.	2	Test Case – 2	.25
	6.1.	3	Test Case – 3	.26
	6.2	Test	t Suite - 2	.27
	6.2.	1	Test Case - 4	.28
	6.2.	2	Test Case – 5	.29
	6.2.	3	Test Case – 6	.30
	6.3	Test	t Suite - 3	.31
	6.3.	1	Test Case - 7	.32
	6.3.	2	Test Case – 8	.33
	6.3.	2	Test Case - 9	.34
7.	Refe	erenc	ces	.35

List of Figures

Figure 2.1-1 Use case diagram for Parts Management System	4
Figure 2.2-1 Activity diagram for Parts Purchase	
Figure 2.2-2 Swimlane diagram for Parts Purchase	
Figure 2.3-1 Sequence diagram for Parts Purchase	
Figure 2.4-1 State diagram of Payment Process	
Figure 2.5-1 Class diagram for Parts Management System	
Figure 2.6-1 Context diagram for Parts Management System	
Figure 2.6-2 DFD level-1 for Parts Management System	
Figure 2.6-3 DFD level-2 for Parts Purchase	
Figure 3.1-1 Screen-1: Parts Card	
Figure 3.2-1 Screen-2: Cart	
Figure 3.3-1 Screen-3: Checkout	

SRS – Food Management System

List of Tables

Table 3.1-1 Screen element of Parts Card	13
Table 3.2-1 Screen element of Cart	14
Table 3.3-1 Screen element of Checkout	15
Table 4.1-1 Table: Parts	16
Table 4.1-2 Table: Admin	16
Table 4.1-3 Table: Customer	17
Table 4.1-4 Table: Order	

1. Introduction

1.1 Parts perspective

The Parts Management System (PMS) represents a groundbreaking leap in the landscape of Parts commerce, redefining how businesses manage, distribute, and excel in the industry. As the demand for Parts parts continues to surge globally, the need for a comprehensive, agile, and intelligent management system has never been more critical. PMS is not just a solution; it is a strategic innovation tailored to meet the intricate challenges faced by manufacturers, distributors, and retailers in this dynamic market.

In an era where digital transformation has become a cornerstone for sustainable business growth, PMS emerges as a catalyst for change. Its inception arises from a profound understanding of the industry's intricacies and a vision to empower businesses with unparalleled efficiency, accuracy, and customer satisfaction. As businesses grapple with evolving consumer preferences, fluctuating market demands, and the imperative for sustainability, PMS steps forward as an indispensable partner, offering not just management tools but a holistic approach to navigate these complexities.

This introduction marks the gateway to a comprehensive exploration of PMS, delving into its myriad features, user-centric design, integration capabilities, security protocols, and performance benchmarks. By offering a seamless fusion of cutting-edge technology and industry expertise, PMS stands poised to transform the Parts industry, shaping a future where businesses not only adapt to market demands but also anticipate and innovate. Let us embark on this journey, unravelling the layers of innovation and efficiency encapsulated within the Parts Management System.

1.2 Parts features

- 1.2.1 There are two different users who will be using this parts:
 - Admin who will be acting as the administrator.
 - Customer who will Purchase Parts.
- 1.2.2 The features that are required for the Admin are:
 - Create, edit, and monitor admin/customer accounts, assign roles, and track activities.
 - Add, edit, and delete parts, manage categories, and upload images/specifications.
 - Process orders, update status, manage returns, and generate invoices.
 - Monitor stock levels, track parts movement, and manage replenishment.
 - View profiles, handle inquiries/feedback, and send personalized offers.
 - Generate sales reports, analyse data, and export reports for insights.
 - Create/manage offers, set discount rules based on various criteria.
 - Manage website content, implement SEO, and optimize parts pages.
 - Implement secure authentication, update protocols, and perform audits.
- 1.2.3 The features that are required for the Customer are:
 - Create accounts, log in, and reset passwords securely.
 - Browse, view details, and add parts to cart for future purchase.
 - Manage cart, proceed to secure checkout, and receive order confirmations.
 - View past orders, track real-time order status, and access invoices.
 - Save parts for future purchase and mark favourites for quick access.
 - Leave parts reviews, read others', and make informed decisions.
 - Update personal info, manage subscriptions, and customize notifications.
 - Utilize search, apply filters for quick and precise parts discovery.

1.3 Functional Requirement

1.3.1 Admin

- User Management: The admin should have the ability to manage user accounts, assign roles, and control access levels within the PMS, ensuring secure and organized user interactions.
- Parts Management: The admin should be able to add, edit, and remove Parts parts, including details such as images, descriptions, and prices, ensuring an up-to-date parts Catalog.
- Order Tracking and Processing: The admin must have a dashboard to monitor incoming orders, update order statuses, and oversee the entire order fulfilment process, ensuring efficient and accurate deliveries.
- Reporting and Analytics: The admin should have access to comprehensive sales reports, customer behaviour analytics, and inventory turnover insights, aiding in strategic decision-making and business planning.
- Customer Support Management: The admin should be able to track customer inquiries, respond to support tickets, and manage customer feedback, ensuring high-quality customer service and satisfaction.
- Promotions and Discounts: The admin should have the capability to create and manage promotional offers, discounts, and loyalty programs, enhancing customer engagement and boosting sales.

1.3.2 Customer

- User Registration and Authentication: Customers should be able to create accounts, log in securely, and recover forgotten passwords, ensuring personalized shopping experiences and account security.
- Browsing and Parts Search: Customers should easily browse parts categories, search for specific items, and filter results based on preferences, enhancing the shopping efficiency.
- Order Placement and Tracking: Customers should be able to place orders, customize parts, view order history, and receive real-time updates on order status and delivery schedules.
- Cart Management: Customers should have the capability to add/remove items from their shopping cart, view total costs, apply discounts, and save carts for later purchases, ensuring flexibility and convenience
- Parts Reviews and Ratings: Customers should be able to leave reviews, ratings, and feedback on purchased parts, fostering a sense of community and aiding other shoppers in their decisions.
- Communication and Notifications: Customers should receive order confirmations, shipping notifications, and personalized parts recommendations through email or SMS, enhancing their engagement and shopping experience.

1.4 Non-Functional Requirement

1.4.1 User-Friendly Interface:

• The customer interface should be visually appealing, intuitive, and responsive, providing an effortless and enjoyable shopping experience across various devices and browsers

1.4.2 Data Privacy and Security:

• Customer data, including personal and payment information, must be encrypted, ensuring privacy, and complying with international data protection standards such as GDPR.

1.4.3 Fast and Reliable Access:

• PMS should ensure fast page loading times and high availability, providing customers with quick access to parts and services without delays or downtime.

1.4.4 Cross-Browser and Platform Compatibility:

• The customer interface should be compatible with popular web browsers and operating systems, ensuring consistent functionality and appearance for all users.

1.4.5 Mobile Responsiveness:

• The customer interface must be optimized for mobile devices, offering seamless navigation and smooth user experience on smartphones and tablets, catering to the growing mobile user base.

1.4.6 Payment Gateway Security:

• PMS should integrate with trusted and secure payment gateways, encrypting payment data during transactions, and providing customers with confidence in their payment security.

2. Design and Implementation Constraints

2.1 Use case diagram

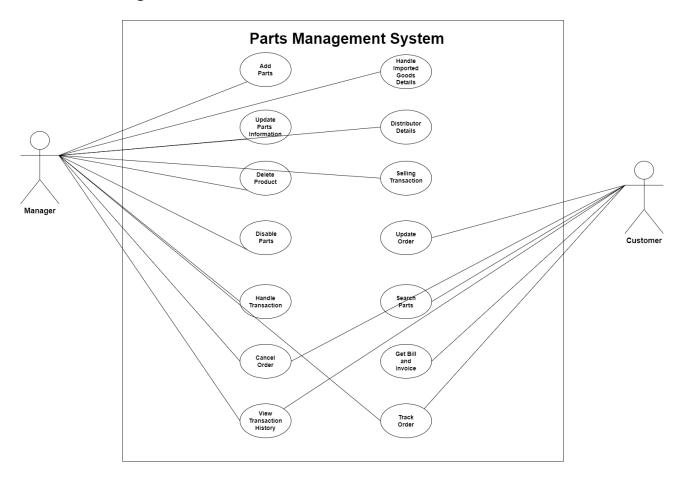


Figure 2.1-1 Use case diagram for Parts Management System

2.2 Activity diagram and Swimlane diagram

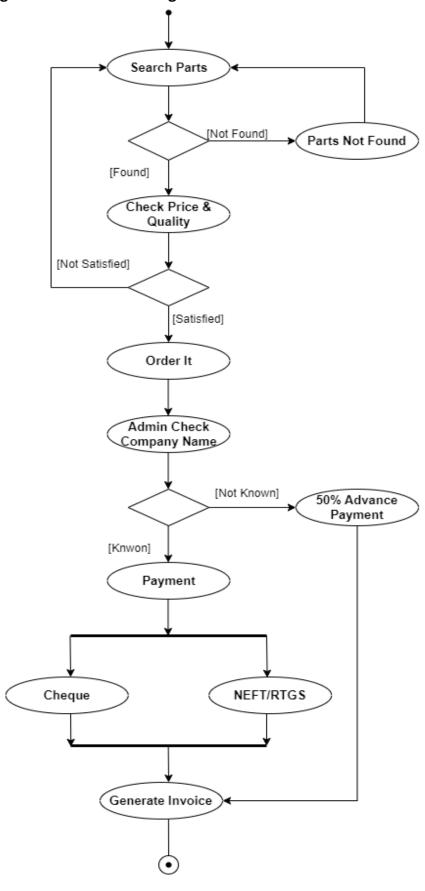


Figure 2.2-1 Activity diagram for Parts Purchase

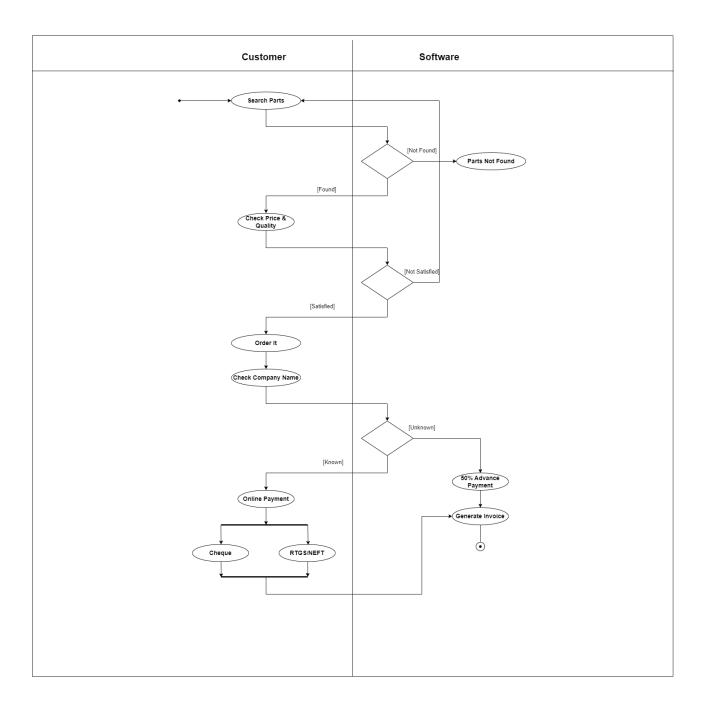


Figure 2.2-2 Swimlane diagram for Parts Purchase

2.3 Sequence diagram

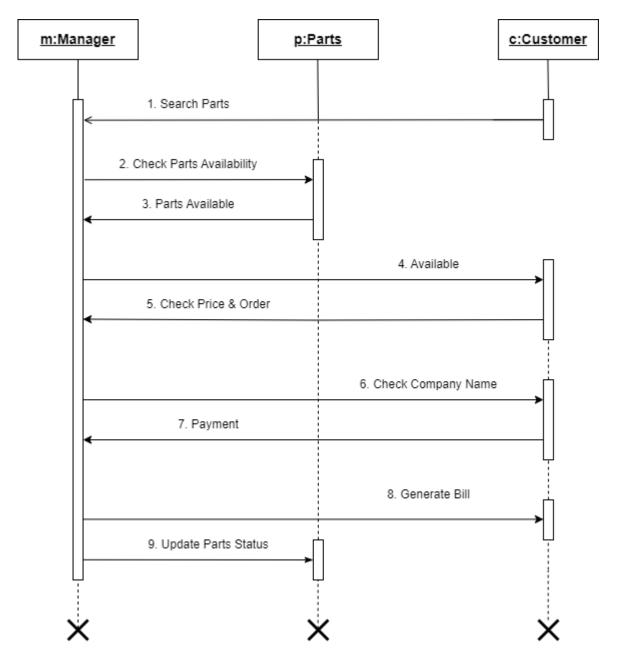


Figure 2.3-1 Sequence diagram for Parts Purchase

2.4 State diagram

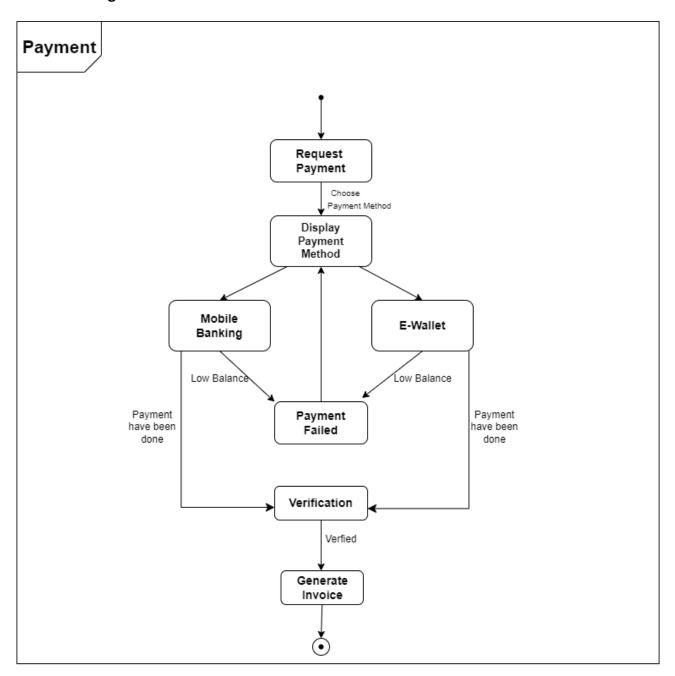


Figure 2.4-1 State diagram of Payment Process

2.5 Class diagram

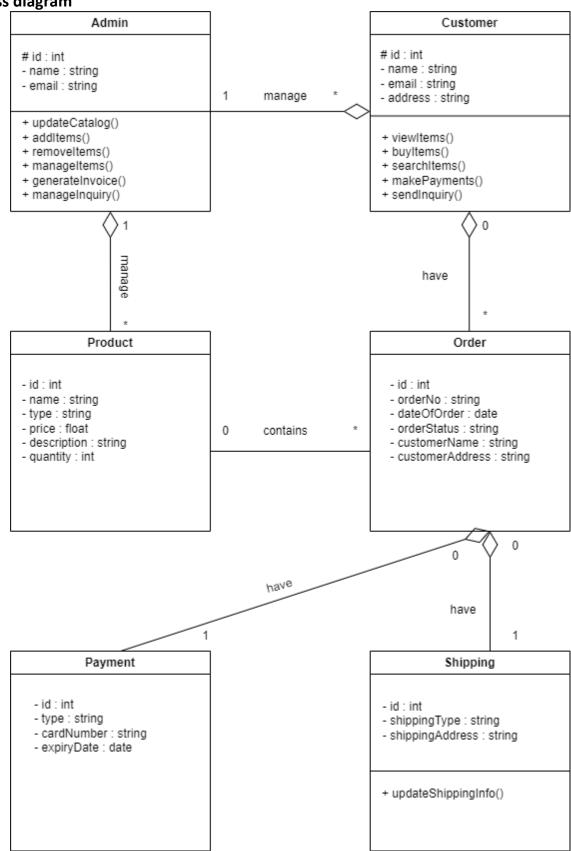


Figure 2.5-1 Class diagram for Parts Management System

2.6 Data flow diagram

2.6.1 Context diagram (level-0)

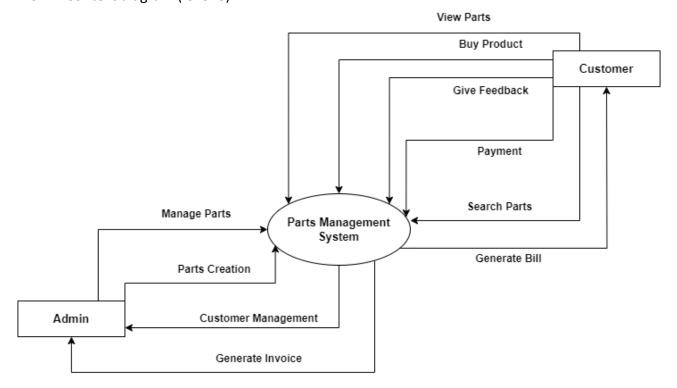


Figure 2.6-1 Context diagram for Parts Management System

2.6.2 DFD Level-1

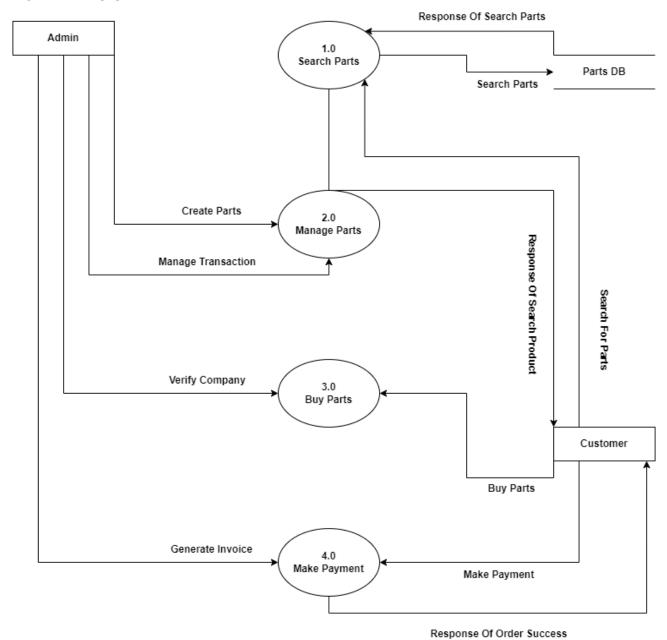


Figure 2.6-2 DFD level-1 for Parts Management System

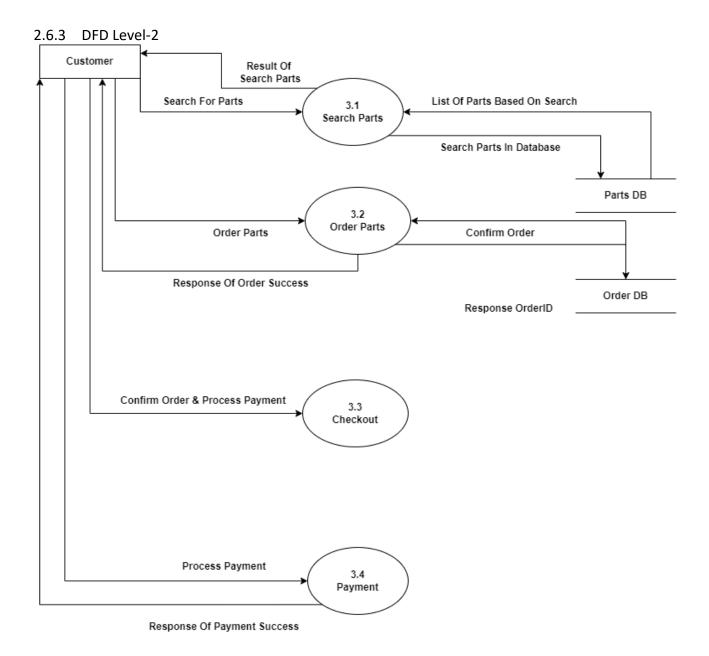


Figure 2.6-3 DFD level-2 for Parts Purchase

3. External interface requirement (Screens)

3.1 Screen-1: Parts Card

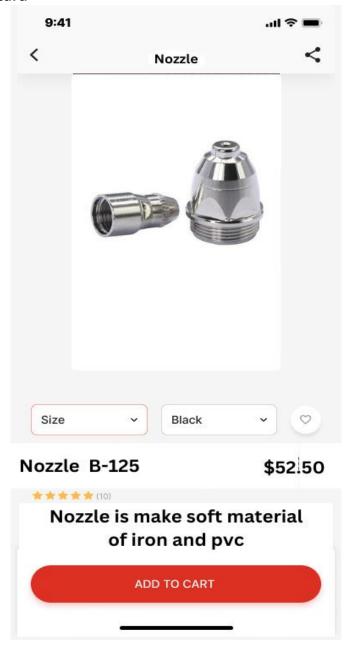


Figure 3.1-1 Screen-1: Parts Card

Purpose: The purpose of a parts card is to provide concise, visually appealing information about a specific parts.

Table 3.1-1 Screen element of Parts Card

Sr.	Screen Element	Input Type	O/M	1/N	Description	
1	Size	Dropdown	М	1	Parts Size can be Selected from Given List	
2	Colour	Dropdown	М	1	Parts Colour can be Selected from Given List	
3	Like	Button	0	1	User Can Add Parts to Favourite Section	
4	Add to Cart	Button	М	1	User Can Add Item to Cart	

3.2 Screen-2: Cart

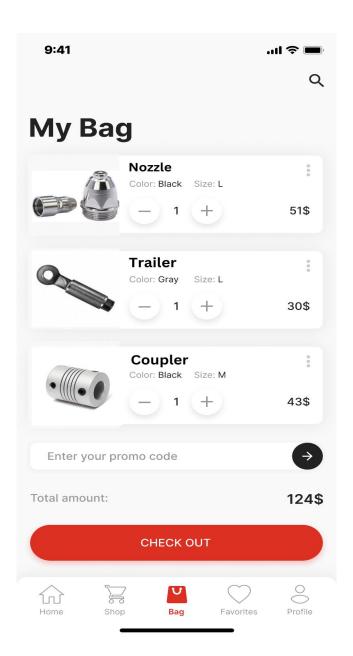


Figure 3.2-1 Screen-2: Cart

Purpose: The purpose of the cart screen is to serve as a virtual shopping basket, allowing users to review, modify, and confirm their selected items before making a purchase.

Table 3.2-1 Screen element of Cart

Sr.	Screen Element	Input Type	О/М	1/N	Description
1	Delete Parts	Button	М	1	Parts will be deleted from Cart.
2	Decrease Item	Button	М	1	Parts count will be decreased by 1.
3	Increase Item	Button	М	1	Parts count will be increased by 1.
4	Promo Code	Textbox	М	1	Promo code can be entered for discount & other special orders.
5	Apply Promo Code	Button	М	1	Promo code will be checked weather it is valid or not.
6	Check Out	Button	М	1	User will redirect to checkout page.

3.3 Screen-3: Checkout

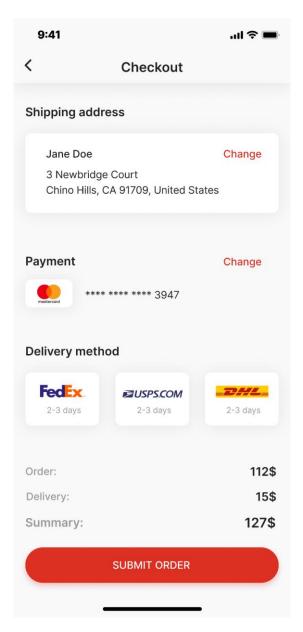


Figure 3.3-1 Screen-3: Checkout

Purpose: The purpose of the checkout process is to facilitate the completion of a purchase.

Table 3.3-1 Screen element of Checkout

Sr.	Screen Element	Input Type	O/M	1/N	Description
1	Change Address	Button	0	1	User will able to change their added address.
2	Change	Button	0	1	User will be able to change their payment
	Payment				method or card details.
	Method				
3	Submit Order	Button	M	1	Order will be submitted.

4. Database design

4.1 List of Tables

- Parts
- Admin
- Customer
- Order

Table 4.1-1 Table: Parts

Column	Data Type	Null	Keys & Constrains	Default Value & Description
PartsID	int	NN	PK (Auto Increment)	The unique identifier for the parts.
PartsName	varchar (100)	NN		The name of the parts.
PartsDescription	varchar (100)	NN		A detailed description of the parts.
PartsPrice	int	NN		The price of the parts.
QuantityInStock	int	NN		The number of units of the parts that are in stock.
CategoryID	int	NN	Foreign Key Refences Category (CategoryID)	The ID of the category to which the parts belongs.
ImageUrl	varchar (100)	NN		The URL of the parts image.

Table 4.1-2 Table: Admin

Column	Data Type	Null	Keys & Constrains	Default Value & Description
	int	NN	PK (Auto Increment)	The unique identifier for the
ID				admin user.
Name	varchar (100)	NN		The name of the admin user.
	varchar (100)	NN		The email address of the
Email				admin user.
	varchar (100)	NN		The password of the admin
Password				user.
	varchar (100)	NN		The role of the admin user
				(e.g.,"SuperAdmin","Admin",
Role				"Customer Support").

SRS – Food Management System

Table 4.1-3 Table: Customer

Column	Data Type	Null	Keys & Constrains	Default Value & Description
	int	NN	PK (Auto Increment)	The unique identifier for the
CustomerID				customer.
FirstName	varchar (100)	NN		The first name of the customer.
LastName	varchar (100)	NN		The last name of the customer.
	varchar (100)	NN		The email address of the
Email				customer.
Password	varchar (100)	NN		The password of the customer.
	varchar (100)	NN		The phone number of the
PhoneNumber				customer.
Address	varchar (100)	NN		The address of the customer.
City	varchar (100)	NN		The city of the customer.
State	varchar (100)	NN		The state of the customer.

Table 4.1-4 Table: Order

Column	Data Type	Null	Keys & Constrains	Default Value & Description
	int	NN	PK (Auto Increment)	The unique identifier for the
OrderID				order.
	int	NN	Foreign Key References	The ID of the customer who
CustomerID			Customers (CustomerID)	placed the order.
	int	NN	Foreign Key References	The ID of the parts that was
PartsID			Parts (PartsID)	ordered.
	int	NN		The quantity of the parts that
Quantity				was ordered.
	int	NN		The price of the parts at the
Price				time the order was placed.
	int	NN		The total price of the order,
TotalPrice				including shipping and taxes.
	datetime	NN		The date and time the order
OrderDate				was placed.
	varchar (100)	NN		The status of the order (e.g.,
				"Pending","Processing",
				"Shipped","Delivered",
OrderStatus				"Cancelled").

5. Stories and Scenario

5.1 Story-1: Customer Registration

Story # S1	:	As a customer,
		I want to register account
		So that a purchase process can began.
Priority	:	High
Estimate	:	XXL
Reason	:	To allow customers to place orders and view their order history, we need a
		user registration system.

5.1.1 Scenario# \$1.1

Scenario# \$1.1	:	New Customer Registration
Prerequisite	:	User is not registered.
Acceptance	:	Given: that a user is on the registration page.
Criteria		When: the user fills in the registration form with valid information and submits it.
		Then the system should create a new customer account with the provided details, and a confirmation email should be sent to the user.

5.1.2 Scenario# \$1.2

Scenario# \$1.2	:	Existing Customer Login
Prerequisite	:	User is registered.
Acceptance	:	Given: that a registered customer is on the login page.
Criteria		When: the user enters their valid credentials and clicks the "Login" button.
		Then the system should allow the user to access their account information
		and the associated dashboard.

5.1.3 Scenario# \$1.3

Scenario# \$1.3	:	Password Reset
Prerequisite	:	User forgot the password.
Acceptance	:	Given: that a user has forgotten their password and is on the password
Criteria		reset page When: the user enters their registered email address and
		requests a password reset.
		Then : the system should send a password reset email to the user's
		registered email address, allowing them to set a new password.

5.2 Story-2: Parts Catalog

Story # 52	:	As a customer,
		I want to purchase parts
		So that a proper purchase happens.
Priority	:	High
Estimate	:	XL
Reason	:	To showcase our Parts cloth parts and allow customers to browse and select
		items.

5.2.1 Scenario# S2.1

Scenario# \$2.1	:	Viewing Parts Categories
Prerequisite	:	User is on the parts Catalog page.
Acceptance	:	Given: that a user is on the parts Catalog page
Criteria		When: the user clicks on a parts category.
		Then the system should display a list of parts related to the selected
		category.

5.2.2 Scenario# S2.2

Scenario# \$2.2	:	Parts Search
Prerequisite	:	User is on the parts Catalog page.
Acceptance	:	Given: that a user is on the parts Catalog page
Criteria		When: the user enters keywords into the search bar and initiates the search Then the system should display a list of relevant parts matching the entered keywords.

5.2.3 Scenario# S3.3

Scenario# \$2.3	:	Parts Details
Prerequisite	:	User clicks on a parts.
Acceptance	:	Given: that a user clicks on a parts from the Catalog.
Criteria		When: the user selects a parts.
		Then: the system should display detailed parts information, including
		images, descriptions, and pricing.

5.3 Story-3: Adding Items to Cart

Story # \$3	:	As a customer,
		I want to purchase parts.
		So that a purchase process can began.
Priority	:	High
Estimate	:	L
Reason	:	To allow customers to place orders and view their order history, we need a
		user registration system.

5.3.1 Scenario# \$3.1

Scenario# \$3.1	:	Adding Parts to Cart
Prerequisite	:	User is viewing a parts.
Acceptance	:	Given: that a user is viewing a parts.
Criteria		When: the user clicks the "Add to Cart" button and specifies the desired quantity. Then the system should add the selected items to the user's cart, reflecting the chosen quantity.

5.3.2 Scenario# \$3.2

Scenario# \$3.2	:	Cart Preview
Prerequisite	:	User has items in their cart.
Acceptance	:	Given: that a user has items in their cart
Criteria		When: the user views their cart.
		Then the system should display a summary of the cart contents, including
		parts details and the total price in real-time.

5.3.3 Scenario# S3.3

Scenario# \$3.3	:	Removing Items from Cart
Prerequisite	:	User has items in their cart.
Acceptance	:	Given: that a user has items in their cart.
Criteria		When: the user selects an item and clicks the "Remove" option.
		Then: the system should remove the selected item from the cart and
		update the total price accordingly.

5.4 Story-4: Checkout and Payment

Story # S4 : As a customer
I want to complement payment of parts
So that I can get it.

Priority : High
Estimate : M

Reason : To facilitate secure and efficient transactions for customers.

5.5 Story-5: Order History

Story # \$55 : As a customer,
I want to check my order history
So that I can know how much I spend on it.

Priority : Medium

Estimate : S

Reason : To provide customers with a record of their past orders for reference.

5.6 Story-6: Inventory Management

Story # 56 : As an admin,
I want to handle Inventory Management
So that customer can see all item properly.

Priority : Medium

Estimate : M

Reason : To keep track of parts stock levels and ensure availability.

5.7 Story-7: Customer Support

Story # 57 : As an Admin,
I want to provide customer support
So that customer can easily contact with us.

Priority : Medium

Estimate : S

Reason : To provide assistance and support to customers as needed.

5.8 Story-8: Reporting and Analytics

Story # 58 : As an admin,
I want to get report and analytics of every transaction.
So that I know how much parts is not available.

Priority : Low

Estimate : M

Reason : To gain insights into sales trends and make informed business decisions

5.9 Story-9: Discounts and Promotions

Story # \$9 : As an admin,						
	I want to give discount to my customer and will do promotion.					
		So that customer can buy more parts and sell increases.				
Priority	:	Low				
Estimate	:	L				
Reason	:	To attract and retain customers through special offers				

5.10 Story-10: Mobile Application Integration

3.±03t0. y	 0.	Mobile Application integration
Story # \$10	:	As an admin,
		I want to launch my mobile application.
		So that customer can easily see parts from mobile.
Priority	:	Low
Estimate	:	XS
Reason	:	To expand our reach and provide a convenient mobile shopping experience.

6. Test cases

6.1 Test Suite - 1

Project Name:	Parts System	Management	Test Designed by:	Nikhil Faldu
Module Name:	Payment		Test Designed date:	02-10-2023
Release Version:	1.0		Test Executed by:	Nikhil Faldu
			Test Execution date:	02-10-2023

Pre-condition	Pre-condition: Web application should be accessible							
Test Case ID	Test Title	Test Type	Description	Test Case ID				
TC_001	Payment screen - Available payment options		Verify that all the payment options are available and selectable.	TC_001				
TC_002	Payment screen - Mandatory fields	Functional	Verify that the user is not allowed to proceed to payment if any of the mandatory fields are blank.	TC_002				
TC_003	Payment screen - Invalid payment information		Verify that the user is not allowed to proceed to payment if the payment information is invalid.	TC_003				

6.1.1 Test Case - 1

Test Case Title	Payment screen - Available payment options
Test Type	Functional
Test Priority	High
Pre-condition	Web application should be accessible

Test	Test Case	Expected Result	Actual Result	Status	Comment	Data	BUG ID
Step 1	Description Verify that the available payment options are displayed correctly	The available payment options will be displayed correctly.	The available payment options are displayed correctly.	Pass	None	https://accounts. google.com/Servi ceLogin	
2	Verify that the selected payment option is highlighted	The selected payment option will be highlighted.	The selected payment option is highlighted.	Pass	None	Username: Nikhilfaldu78 @gmail.com	
3	Verify that the user is redirected to the payment confirmatio n page	Password field should be editable and accept the password and display as star or dot The user will be redirected to the payment confirmation page.	The user is redirected to the payment confirmation page.	Pass	None	Password: nikhilfaldu	

6.1.2 Test Case – 2

Test Case Title Payment screen - Mandatory fields			
Test Type	Functional		
Test Priority	High		
Pre-condition	Web application should be accessible		

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	Submit the payment form without entering a credit card number.	Payment screen should display an error message indicating that the credit card number is required.	Error message "Credit card number is required" is displayed.	Pass	None	1234-5678- 1234	
2	Submit the payment form without entering an expiry date.	Payment screen should display an error message indicating that the expiry date is required.	Error message "Expiry date is required" is displayed.	Pass	None	12-12	
3	Submit the payment form without entering a CVV.	Payment screen should display an error message indicating that the CVV is required.	Error message "CVV is required" is displayed.	Pass	None	123	

6.1.3 Test Case – 3

Test Case Title	Payment screen - Invalid payment information
Test Type	Functional
Test Priority	High
Pre-condition	Web application should be accessible

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	Enter a credit card number with incorrect format or digits (e.g., 123456789 012345).	Payment screen should display an error message indicating that the credit card number is invalid.	Error message "Invalid credit card number" is displayed.	Pass	None	None	
2	Enter a past expiry date (e.g., 01/22).	Payment screen should display an error message stating that the card has expired.	Error message "Card has expired" is displayed.	Pass	None	None	
3	Enter a CVV with fewer or more digits than required (e.g., 123 or 12345).	Payment screen should display an error message indicating that the CVV is invalid.	Error message "Invalid CVV" is displayed.	Pass	None	None	

6.2 Test Suite - 2

Project Name:	Parts Management System	Test Designed by:	Nikhil Faldu
Module Name:	Display Parts	Test Designed date:	02-10-2023
Release Version:	1.0	Test Executed by:	Nikhil Faldu
		Test Execution date:	02-10-2023

Pre-condition	Pre-condition: Web application should be accessible								
Test Case ID	Test Title	Test Type	Description	Test Case ID					
TC_004	Display parts screen - Parts information	Functional	Verify that the parts information is displayed correctly.	TC_004					
TC_005	Display parts screen - Add to cart button	Functional	Verify that the add to cart button is functional.	TC_005					
TC_006	Display parts page - Parts images	Functional	Verify that the parts images are displayed correctly and are of high quality.	TC_006					

6.2.1 Test Case - 4

Test Case Title	Display parts screen - Parts information
Test Type	Functional
Test Priority	High
Pre-condition	Web application should be accessible

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	Access the parts screen for a specific parts.	The parts name should be prominently displayed with correct spelling and formatting.	"PARTS Raxin" is displayed as the parts name.	Pass	None	None	
2	Open the parts screen for a specific parts.	The parts price should be displayed accurately with the correct currency symbol and formatting.	The parts price is displayed as \$1099.99.	Pass	None	None	
3	Access the parts screen to view its details.	The parts description should be displayed correctly, giving an accurate overview of the parts's features and details.	The parts description provides information about the parts's specifications and features.	Pass	None	None	

6.2.2 Test Case – 5

Test Case Title	Display parts screen - Add to cart button
Test Type	Functional
Test Priority	High
Pre-condition	Web application should be accessible

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	Navigate to the parts screen and click on the "Add to Cart" button.	After clicking the button, the parts should be added to the user's shopping cart.	After clicking the button, a notification confirms that the parts has been added to the cart.	Pass	None	None	
2	Open different parts screens and click on the "Add to Cart" button for each parts.	Each parts clicked on should be added to the cart individually.	All clicked parts are successfully added to the cart.	Pass	None	None	
3	Add a parts to the cart and observe the cart icon.	After adding a parts, the cart icon should show an updated count indicating the number of items in the cart.	The cart icon displays a number indicating the total items in the cart, including the newly added parts.	Pass	None	None	

6.2.3 Test Case – 6

Test Case Title	Display parts page - Parts images
Test Type	Functional
Test Priority	High
Pre-condition	Web application should be accessible

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	On the parts page, click on thumbnail images to switch between different views of the parts.	The main parts image should be clearly visible and accurately represent the parts.	The main parts image is displayed prominently, showing the parts from different angles.	Pass	None	None	
2	Verify that the selected payment option is highlighted	Clicking on thumbnail images should display alternate views of the parts, allowing users to inspect details.	Clicking on thumbnail images changes the displayed parts image to show different angles.	Pass	None	None	
3	On the parts page, hover over or click on the main parts image.	The image should enlarge or zoom in, allowing users to view parts details more closely.	Hovering over the image or clicking on it triggers a zoom effect, providing a closer look at the parts.	Pass	None	None	

6.3 Test Suite - 3

Project Name:	Parts Management System	Test Designed by:	Nikhil Faldu
Module Name:	Add To Cart	Test Designed date:	02-10-2023
Release Version:	1.0	Test Executed by:	Nikhil Faldu
		Test Execution date:	02-10-2023

Pre-condition: Web application should be accessible							
Test Case ID	Test Title	Test Type	Description	Test Case ID			
TC_007	Add to card screen - Parts quantity	Functional	Verify that the user can change the parts quantity.	TC_007			
TC_008	Add to card screen - Remove parts button	Functional	Verify that the user can remove a parts from the cart.	TC_008			
TC_009	Add to card screen - Checkout button	Functional	Verify that the checkout button is functional.	TC_009			

6.3.1 Test Case - 7

Test Case Title	Add to card screen - Parts quantity
Test Type	Functional
Test Priority	High
Pre-condition	Web application should be accessible

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	On the "Add to Cart" screen, click on the "+" button to increase the parts quantity.	The parts quantity should increment by one after clicking the "+" button.	Clicking the "+" button increases the parts quantity by one.	Pass	None	None	
2	On the "Add to Cart" screen, click on the "-" button to decrease the parts quantity.	The parts quantity should decrement by one after clicking the "-" button, but not go below 1.	Clicking the "- " button decreases the parts quantity by one, and it stops at 1 (minimum quantity).	Pass	None	None	
3	On the "Add to Cart" screen, input a number directly into the quantity field.	The parts quantity should update according to the entered value, within reasonable limits.	Manually entering a quantity updates the parts quantity accordingly.	Pass	None	None	

6.3.2 Test Case – 8

Test Case Title	Add to card screen - Remove parts button
Test Type	Functional
Test Priority	High
Pre-condition	Web application should be accessible

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	Verify that the remove parts button is displayed when a parts is added to the cart	The remove parts button is displayed.	The remove parts button is displayed.	Pass	None	None	
2	Verify that the remove parts button removes the parts from the cart	The parts is removed from the cart.	The parts is removed from the cart.	Pass	None	None	
3	Verify that the remove parts button does not remove the parts from the cart if the parts is not in the cart	Nothing happens.	Nothing happens.	Pass	None	None	

6.3.2 Test Case - 9

Test Case Title	Add to card screen - Checkout button		
Test Type	Functional		
Test Priority	High		
Pre-condition	Web application should be accessible		

Test Step	Test Case Description	Expected Result	Actual Result	Status	Comment	Data	BUG ID
1	On the "Add to Cart" screen, click on the "Checkout" button.	Clicking the "Checkout" button should take the user to the checkout process, where they can review and finalize their order.	Clicking the "Checkout" button navigates the user to the checkout page.	Pass	None	None	
2	Assess the "Add to Cart" screen's behaviour with different cart states.	The "Checkout" button should be disabled or hidden when the cart is empty and become enabled or visible when parts are added.	The "Checkout" button is greyed out and disabled when the cart is empty and becomes active when parts are added.	Pass	None	None	
3	Add parts to the cart, then click on the "Checkout" button to initiate the	The parts added to the cart should be accurately displayed on the checkout page for users to review.	The checkout page shows the added parts and their quantities as expected.	pass	None	None	

7. References

- https://www.g3pconsulting.com/
- https://themeforest.net/category/
- https://limblecmms.com/blog/spare-parts-management/