A PROJECT REPORT ON

SPARE PARTS BOOKING SYSTEM

Submitted by

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Under the guidance of

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In partial fulfillment of the requirement for the award of the Degree Of

Bachelor of Computer Applications

Mahatma Gandhi University, Kottayam, Kerala.

DEPARTMENT OF COMPUTER SCIENCE

ILAHIA COLLEGE OF ARTS AND SCIENCE

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(Affiliated to Mahatma Gandhi University, Kottayam, included U/S 2(f)of UG Act)

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CERTIFICATE

Certified that this is a Bonafide report on the project work entitled **"SPARE PARTS BOOKING SYSTEM"** done by **A.J.JITHESH, Reg.No:220021083426,** during the year 2025 in partial fulfillment of the requirements of the award of degree of Bachelor of Computer Application of Mahatma Gandhi University, Kottayam, Kerala.

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DECLARATION

I hereby declare that this project work entitled "**SPARE PARTS BOOKING SYSTEM**" has been prepared by me under the guidance of **Mrs.Anilamol M.M**, Department of Computer Science, Ilahia College of Arts and Science, Muvattupuzha, in partial fulfillment of the degree of Bachelor of Computer Application is an authentic record of my original work.

I further declare that this project work has not been submitted for the award of any degree of this university or any other university.

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At the outset, I thank the God Almighty for making this endeavor a success. I express my gratitude to Dr.Badarudeen Rawther.H Principal, Ilahia College of Arts and Science, Muvattupuzha for providing me with adequate facilities, ways and means by which I have able to complete the project work.With immense pleasure I take this opportunity to record my sincere thanks to shown keep interest in the development of this project.

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Place: Muvattupuzha **A.J.JITHESH**

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INTRODUCTION

1. INTRODUCTION

In the automotive and machinery industry, managing spare parts efficiently is crucial for smooth operation and maintenance. The **Spare Parts Booking System** is a web-based application designed to streamline the process of browsing, booking, and managing spare parts. This project aims to simplify the interaction between customers, shop owners, and administrators by providing a centralized platform for spare parts inventory, orders, and transactions.

The system enables users to browse available parts, place booking requests, and view transaction history, while the administrators and shop owners can manage product listings, approve or reject orders, and keep track of stock levels. The project promotes transparency, convenience, and organization in spare parts management.

This documentation details the system architecture, features, database schema, and workflow of the Spare Parts Booking Website.

The system supports **three primary user roles**:

- **Admin**: Responsible for overseeing the platform, managing users, and maintaining the integrity of the system.
- **Owner**: Typically shop owners or vendors who can add, update, or manage spare parts inventory and handle booking requests.
- **User (Customer)**: End users who can browse the catalog, request spare parts, and view their bookings and payment history.

ABOUT THE ORGANIZATION

2. ABOUT THE ORGANIZATION

Luminar Technolab is a leading IT finishing school that provides advanced Gen 4.0 software training to equip students with the latest industry-relevant skills. With training centres located in key IT hubs across Kerala—Infopark Kochi, Mavoor Road Calicut, and Pattom Trivandrum—the institute ensures accessibility to high-quality education for aspiring tech professionals. Backed by a team of seasoned IT experts with over 15 years of industry experience, Luminar combines theoretical knowledge with practical insights to prepare students for real-world challenges.

The institute is affiliated with the National Council for Technology and Training (NACTET), a testament to its commitment to standardized and recognized training programs. Luminar specializes in cutting-edge technologies such as Artificial Intelligence (AI), Machine Learning (ML), Big Data, Data Science, Full Stack Development, Python, and Digital Marketing, ensuring learners stay ahead in the competitive tech landscape. The curriculum is designed to provide hands-on experience, fostering both technical proficiency and problem-solving abilities.

One of Luminar's standout features is its 100% placement support, facilitated by strong industry connections and career guidance initiatives. The institute prioritizes not just skill development but also employability, helping students secure roles in top IT companies. With a vision to become a premier training centre, Luminar emphasizes innovation, quality education, and a dynamic learning environment. By blending expert mentorship, practical training, and robust placement assistance, it empowers students to excel in the rapidly evolving tech industry.

SYSTEM ANALYSIS

3. SYSTEM ANALYSIS

System analysis is the process of understanding a system thoroughly—its functions, interactions, and limitations—in order to design a better solution. It involves collecting and interpreting facts, identifying issues, and using logical tools and methods to design improved systems. In the case of the Spare Parts Booking System, the goal is to digitize and streamline the spare parts management and purchasing process.

3.1 EXISTING SYSTEM

Currently, many spare parts shops and distributors rely on manual processes or isolated systems for managing parts inventory, orders, and payments. These outdated systems often result in data redundancy, errors, delays in service, and poor customer experience. Customers need to visit the store physically or contact by phone to inquire about spare parts, check availability, and place orders. There is no centralized way for users to browse parts, track order status, or provide feedback.

3.2 PROPOSED SYSTEM

The proposed system is a **Spare Parts Booking Website**, developed using Django as the backend framework. The platform allows users to register, browse spare parts, make purchases, and provide feedback seamlessly through a web interface. Admin users can manage product listings, monitor transactions, and respond to feedback.

Key features include:

- User registration and login with role-based access (Admin, Owner, User)
- Viewing and searching available spare parts
- Real-time inventory tracking

- Payment tracking and order history
- Feedback system to gather customer input

This web-based approach enhances operational efficiency and user convenience by automating major tasks and providing a responsive user interface.

3.3 HARDWARE & SOFTWARE REQUIREMENTS

HARDWARE REQUIREMENTS

COMPONENT	SPECIFICATION
Processor	Intel i5 or above
RAM	4 GB or more
Storage	40 GB or more
Display	15.6" monitor

SOFTWARE REQUIREMENTS

COMPONENT	TECHNOLOGY USED
Operating System	Windows 10/Linux
Backend	Django (Python)
Frontend	HTML, CSS, JavaScript
Database	SQLite3
IDE	Visual Studio Code
Web Server	Django development server (runserver)
Browser	Chrome, Firefox

3.4 FEASIBILITY STUDY

3.4.1 ECONOMIC FEASIBILITY:

The system is cost-effective as it uses open-source technologies (Django, SQLite, HTML/CSS/JS). There's no need for expensive infrastructure or software licenses.

3.4.2 TECHNICAL FEASIBILITY:

All required technologies are readily available and the development can be done on a basic setup. The system architecture is simple, and Django handles routing, ORM, and security efficiently.

3.4.3 BEHAVIORAL FEASIBILITY:

The platform is designed with user-friendliness in mind. Intuitive navigation, visual feedback, and simple forms ensure smooth interaction for users of all technical levels.

3.5 DATA FLOW DIAGRAM

To start the system design, something analogue to the architecture blue print as a starting point to design is required. It is a way to focus on functions rather than physical implementation. One such tool is a DFD.

Structured analysis is a set of techniques and graphical tools that help the analyst to develop a new kind of system specification that are easily understandable to the user.

DFDs show the major decompositions of the system functions and their interfaces. The DFD is graphic and presents a picture of what is being specified and is conceptually easy to understand presentation of the application.

one important feature of DFD’s is that it is logical rather than physical. The elements of the system do not depend on vendor or hardware. They specify in precise, concise manner the working of the system and how it hangs together.

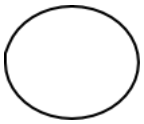
DFD is the graphic representation of data movement process, and files used in support of an information system. There are several rules of thumb used in drawing DFDs.

- Process should be named and numbered for easy references.
- The direction of flow is from top to bottom and from left to right.
- When a process is imported in the lower levels details, they must be numbered.
- Process and data flow names have the first letter of each word must be a capital letter.

The symbol used in DFD are shown be

Source or destination of data

Data flow



Process that transform data flow

Data store

SYSTEM DESIGN

4. SYSTEM DESIGN

System design is the architectural blueprint of the entire system. It transforms the requirements identified during system analysis into a form that can be implemented using programming languages and technologies. For the Spare Parts Booking Website, the design phase involves specifying modules like user management, product management, order processing, payment integration, and feedback handling.

A well-designed system should possess the following characteristics:

- **Accessibility** – Easy to use across different devices and by different users.
- **Decision-Making Ability** – Supports user and admin decisions through real-time data.
- **Economy** – Minimal use of system resources.
- **Flexibility** – Easily scalable or extendable for future requirements.
- **Reliability** – Consistent performance and fault-tolerance.
- **Simplicity** – Easy to understand, manage, and use.

The system design process is divided into:

- **Logical Design** – Focuses on the logical flow of the system through Data Flow Diagrams (DFDs), use cases, and process definitions.
- **Physical Design** – Focuses on the actual coding logic, data structures, file formats, and user interface layout to build the final system.

4.1 INPUT DESIGN

Input design is crucial in ensuring that user data is collected accurately and efficiently. It includes the structure and validation of data entered into the system by users, admins, and part owners.
For this system:

- **User Registration/Login**: Username, password, email, role.
- **Product Addition**: Part name, description, part number, manufacturer, quantity, price.
- **Order Request**: User-selected product, requested quantity.
- **Feedback**: Text-based feedback submission.

All inputs are validated for format, completeness, and uniqueness (where required). Any invalid input triggers user-friendly error messages. For example:

- Email format validation
- Required field checks
- Part number uniqueness
- Quantity validation (non-negative integers)

4.2 OUTPUT DESIGN

The output design determines how the processed data is presented to the user. Outputs can be in the form of web pages, database records, confirmation messages, alerts, or reports.
In the Spare Parts Booking system, the outputs include:

- **Dashboard Displays**: Summary of product availability, orders, and user activities.
- **Order Confirmation**: Notification and display of successful order requests.
- **Product Listings**: Product name, price, available stock, description, and image.
- **Transaction History**: List of payments or purchases done by the user.
- **Feedback Reports**: Feedback entries visible to admins.

The outputs are designed to be:

- Clear and readable
- Intuitive in layout
- Responsive across devices
- Customizable for admin panels

These outputs provide meaningful insights for the users and administrators, helping them interact efficiently with the system.

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4.3 TABLE DESIGN

A database is a collection of data. Database design refers to the design of the tables used to store data. The database involves name of records, data item with its name, type and size. In the design of the database program first we must thoroughly look into the requirements of the program for the design of database. Then we must design how much tables are required in the database.

Thereafter as per the requirement of the end users we can decide which fields that must be in this table. As per a general rule a provision must be taken in the design for the future enhancement of the program.

TABLE STRUCTURE

USERS TABLE :

This table will store user details. We can add a role field to differentiate between Admin, Owner, and User.

Column Name	Data Type	Description
id	INT	Primary Key, Auto Increment
username	VARCHAR	Unique username for login
password_hash	VARCHAR	Hashed password
email	VARCHAR	User's email address (Unique)
role	ENUM	Enum: Admin, Owner, User
first_name	VARCHAR	User's first name
last_name	VARCHAR	User's last name
created_at	DATETIME	Timestamp when the user was created
updated_at	DATETIME	Timestamp when the user was last updated

PRODUCT TABLE:

This table will store the details of each spare part available in the system.

Column Name	Data Type	Description
id	INT	Primary Key, Auto Increment
part_name	VARCHAR	Name of the spare part

description	TEXT	Description of the spare part
part_number	VARCHAR	Unique part number
quantity_in_stock	INT	Quantity available in stock
price	DECIMAL(10,2)	Price per unit
manufacturer	VARCHAR	Manufacturer name
created_at	DATETIME	Timestamp when the part was added to the system
updated_at	DATETIME	Timestamp when the part details were last updated

PAYMENT TABLE:

This table will track each transaction (e.g., spare part purchases or usage).

Column Name	Data Type	Description
id	INT	Primary Key, Auto Increment
user_id	INT	Foreign Key: Refers to the Users table
part_id	INT	Foreign Key: Refers to the SpareParts table
transaction_type	ENUM	Enum: Purchase, Sale, Usage
quantity	INT	Quantity involved in the transaction
transaction_date	DATETIME	Timestamp when the transaction occurred
total_price	DECIMAL(10,2)	Total cost of the transaction (price * quantity)

ORDERS TABLE:

If users need to request spare parts, you can create a table for this.

Column Name	Data Type	Description
id	INT	Primary Key, Auto Increment
user_id	INT	Foreign Key: Refers to the Users table
part_id	INT	Foreign Key: Refers to the SpareParts table
request_date	DATETIME	Timestamp when the request was made
status	ENUM	Enum: Pending, Approved, Rejected
requested_quantity	INT	Quantity of the spare part requested

FEEDBACK

Column Name	Data Type	Description
id	INT	Primary Key,Unique, Account id
user_id	INT	Foreign Key, link to user table
feedback	VARCHAR(200)	description

4.4 PROCESS DESIGN

There are 3 modules in the system :

1. **Admin**
2. **Seller**
3. **User**

1. ADMIN

- **Login:** Admin can securely log into the system.
- **Manage Sellers:** Admin can approve, reject, or view registered sellers.
- **View Users:** Admin can see all registered users.
- **Manage Products:** Admin can view all products added by sellers.
- **View Orders:** Admin can monitor all orders placed by users.
- **Handle Payments:** Admin can review and verify payment transactions**.**
- **View Feedback:** Admin can read and analyze feedback submitted by users.
- **Generate Reports:** Admin can create reports on sales, orders, and system usage.

2. SELLER

- **Register/Login:** Sellers can register and log in to the system.
- **Add Products:** Sellers can add new spare parts with detailed information.
- **Manage Products:** Sellers can update, edit, or delete their listed products.

- **View Orders:** Sellers can see incoming orders for their products.
- **Update Stock:** Sellers can manage inventory levels.
- **Respond to Feedback:** Sellers can view user feedback on their products.

3. USER

- **Register/Login:** Users can create an account and log in.
- **Browse Products:** Users can search and view spare parts listed on the platform.
- **Place Orders:** Users can place orders for required spare parts.
- **Make Payments:** Users can pay for their orders using available payment options.
- **View Order History:** Users can track their previous orders.
- **Provide Feedback:** Users can leave feedback for products and sellers.

SYSTEM TESTING AND IMPLEMENTATION

5. SYSTEM TESTING & IMPLEMENTATION

Testing is a crucial process in software development that ensures the application behaves as expected. For the **Spare Parts Booking System**, testing was done to compare the actual behaviour of the software with the expected outcomes, ensuring the system is reliable, user-friendly, and meets the requirements.

System testing detects defects and confirms the application functions as intended. It is the final stage before user acceptance and live deployment. This project underwent a comprehensive testing phase, followed by proper implementation planning.

Testing Steps Performed:

- **Unit Testing**
- **Integration Testing**
- **Validation Testing**
- **Output Testing**
- **Acceptance Testing**

UNIT TESTING

Each module in the system (Admin, Seller, User) was tested individually:

- Admin module: functionalities like login, view users, manage sellers, view bookings, and view feedback were tested.
- Seller module: tested for registration/login, adding and managing products, viewing bookings and payments.
- User module: tested for registration/login, browsing and ordering products, making payments, and submitting feedback.

Test cases were created for all input forms (e.g., registration, product addition, payment forms) to check correct data validation and error handling.

- Interface testing: ensured data flows correctly in and out of each module.
- Boundary testing: verified inputs like price limits, quantity fields, and email/password formats.
- Path testing: executed all logical paths in each function.
- Error handling: checked system responses to invalid inputs.

INTEGRATION TESTING

Modules were integrated using **incremental integration**, primarily in **bottom-up** order:

- Admin was integrated with Seller and User data tables.
- Seller module was integrated with the Product and Booking tables.
- User module was integrated with Product browsing, Orders, and Payment modules.

Each integration was tested for:

- Data consistency between modules.
- Correct flow of information between forms (e.g., order details appearing correctly in both user and seller views).
- Backend validation (e.g., product availability, payment success).

VALIDATION TESTING

Validation was done to confirm that the system met both functional and non-functional requirements:

- **Client-side validation** was tested (e.g., required fields, invalid email or phone formats).
- **Alpha Testing**: Conducted by developers in a simulated environment to test module interaction.

- **Beta Testing**: Conducted by selected users from Luminar Technolab. Feedback was collected on usability, design, and performance.

Sample validations tested:

- Incorrect login credentials
- Invalid mobile number or password formats
- Missing product information
- Incomplete payment details

OUTPUT TESTING

Output testing verified that:

- Screens displayed the correct information (e.g., user dashboards, booking summaries, feedback listings).
- Reports and order summaries matched the expected format.
- Output generated for payment receipts and booking confirmations met the user's requirements.

Output formats were validated in:

- Onscreen formats (in HTML/CSS with PHP)
- Downloadable confirmations (where applicable)

ACCEPTANCE TESTING

Acceptance testing ensured that the system met the needs of all three user roles:

- **Admin** accepted the functionality for managing users, products, payments, and reports.
- **Sellers** found it intuitive to add, update, and manage spare parts listings and view bookings.
- **Users** successfully browsed, booked, paid for spare parts, and left feedback.

DEBUGGING

Debugging was done throughout development and testing phases. It involved:

- Reproducing and isolating bugs
- Capturing variable states and outputs
- Fixing logical and syntax errors
- Verifying changes did not introduce new errors

Common tools used: XAMPP PHP error logs, browser console, and manual code reviews.

IMPLEMENTATION

The system was implemented in phases after successful testing. Key steps included:

Implementation Plans:

- Testing with sample data
- Fixing detected bugs
- Modifying logic or UI based on tester feedback
- Installing system on localhost using **XAMPP**
- Ensuring database connection with MySQL tables: Users, Product, Payment, Feedback
- Training sessions and demos for users (facilitated by Luminar Technolab mentors)

System installation included:

- Deployment of all PHP files to htdocs directory
- Database import via phpMyAdmin
- Linking of login/registration to user dashboards and backend actions

SECURITY TECHNOLOGIES AND POLICIES

6. SECURITY TECHNOLOGIES AND POLICIES

SYSTEM SECURITY

SYSTEM SECURITY

In the context of the **Spare Parts Booking** system, ensuring data confidentiality, integrity, and availability is crucial for the smooth and safe operation of the platform. The system handles various users such as **Admins, Sellers, and Customers**, along with sensitive data related to **product listings, orders, payments, and feedback**. Therefore, the implementation of robust security mechanisms is essential to avoid unauthorized access, data breaches, and system failure.

THREATS TO SYSTEM SECURITY

A **threat** is any potential danger to data or operations. Threats can arise due to intentional attacks or accidental circumstances. Here are some of the possible threats the Spare Parts Booking system might face:

- Unauthorized attempts to access or modify the website contents.
- Injection of malicious scripts or malware (e.g., SQL injection, Trojans, viruses).
- Accidental deletion or corruption of data by users.
- Server downtime due to hardware failure or power loss.
- Environmental hazards like fire, flood, or natural disasters.

SECURITY TECHNOLOGIES AND POLICIES

After the system is implemented, maintaining a secure and stable environment becomes a continuous responsibility. **Security policies and maintenance practices** are applied to safeguard data and ensure consistent system functionality.

Security features integrated in the Spare Parts Booking system include:

- **User Authentication:** Access to the system is granted only through valid username and password combinations for Admins, Sellers, and Users.
- **Role-Based Access Control:** Permissions are restricted based on the user role. For instance, Admins have full access to manage users and products, Sellers can manage their own products, and Users can place orders and provide feedback.
- **Session Management:** Each user session is handled securely to prevent session hijacking or unauthorized access.
- **Input Validation:** Client-side and server-side validation is performed to avoid malicious input in forms such as registration, login, product upload, and feedback.
- **Error Handling:** Errors are gracefully managed to avoid revealing system details that can be exploited.

SYSTEM SECURITY MEASURES

The following are the measures taken to secure the Spare Parts Booking system:

1. Passwords

Password protection is used as the primary authentication mechanism for all users in the system. Passwords are stored securely in the database using **encryption or hashing algorithms**, preventing direct exposure of user credentials.

2. Role-Based Access

Only **authorized users** can access specific modules of the system. For example:

- Admins can access the **Admin Dashboard** for managing users, viewing orders, and monitoring seller activity.
- Sellers can **add, modify, or delete** their own spare part listings.
- Users can view products, place orders, and view past transactions.

3. Data Validation and Sanitization

All inputs across the system (e.g., registration forms, product submission forms) are validated to ensure data correctness and sanitized to prevent SQL injection and XSS attacks.

4. Regular Backups

Periodic database backups ensure that in the event of a system failure or data corruption, the data can be recovered with minimal loss.

7. Software Updates and Patching

Keeping the server software, database management system, and code libraries up to date is essential to fix known vulnerabilities.

MAINTENANCE

7. MAINTENANCE

Maintenance is the process of modifying a software system after its deployment to correct faults, enhance performance, improve functionality, or adapt it to a changing environment. For the **Spare Parts Booking System**, maintenance ensures the platform continues to operate smoothly and securely while meeting evolving user needs.

This system, developed for managing spare parts through **Admin, Seller, and User modules**, may require changes even after its initial deployment. These changes may involve fixing bugs, improving interface responsiveness, updating product management workflows, or enhancing security protocols.

TYPES OF MAINTENANCE ACTIVITIES

1. **Corrective Maintenance**
    - Involves identifying and fixing bugs or errors found in the system during operation.
    - Example: Fixing issues with login validation or product display errors.
2. **Adaptive Maintenance**
    - Performed when the software needs to be adjusted due to environmental changes (e.g., changes in operating systems, browser versions, or hosting platforms).
    - Example: Adapting the system for compatibility with mobile devices or cloud deployment.
3. **Perfective Maintenance**
    - Involves making improvements to enhance system performance or user experience.
    - Example: Optimizing database queries to reduce page load time or improving UI/UX for better navigation.

4. **Preventive Maintenance**

    - Carried out to detect and correct hidden faults before they become operational problems.
    - Example: Reviewing and refining code to prevent potential security vulnerabilities.

SCOPE OF MAINTENANCE IN THE PROJECT

- **Updating Code and Features:**

  Code may be modified to address newly reported issues or user-requested enhancements (e.g., new filtering options for parts or advanced order tracking features).

- **Documentation Updates:**

  User manuals, admin instructions, and developer guides will be updated alongside code changes for clarity and ease of use.

- **Database Maintenance:**

  Periodic backups, indexing, and cleanup of redundant data ensure database efficiency and integrity.

- **Hardware Considerations:**

  Though the software is the primary focus, the system is expected to run on reliable hardware. Hardware maintenance may include ensuring uninterrupted power supply and network availability in real-world deployments.

IMPORTANCE OF MAINTENANCE

Maintenance preserves the long-term value of the software. It helps:

- Enhance the customer experience by supporting additional requirements.
- Improve system stability and reliability.
- Integrate newer technologies.
- Ensure smooth functioning of the Admin, Seller, and User workflows.

FUTURE UPDATES

Even after deployment, the Spare Parts Booking system allows for flexible updates:

- New modules or features can be integrated (e.g., real-time chat support or invoice generation).
- Interfaces with third-party APIs (like payment gateways or delivery tracking) can be added or modified.
- Performance upgrades can be applied to scale the system for a larger user base.

CONCLUSION

8. CONCLUSION

In conclusion, the proposed **Spare Parts Booking System** aims to provide a comprehensive and efficient platform for users to explore, order, and manage spare parts online. By integrating a user-friendly interface with effective product management, secure payment features, and clear communication between users, sellers, and the admin, the system addresses the core needs of a modern online spare parts marketplace.

The platform also ensures smooth operation across three main modules—**Admin**, **Seller**, and **User**—each with specific functionalities tailored to their role. Developed using **PHP** and **MySQL**, and deployed on a **localhost environment (XAMPP)**, the system allows for scalable development and easy future integration of advanced features.

With features such as product search, favorites management, order processing, and feedback collection, the system not only streamlines spare parts booking but also fosters trust and transparency among users. Admin capabilities such as user management, product moderation, and seller controls make the backend robust and manageable.

The system has been fully tested with real-time data and fulfills all functional requirements specified in the planning phase. It stands as a reliable alternative to traditional systems, providing digital transformation in spare parts procurement and management.

8.1 SCOPE FOR FUTURE ENHANCEMENT

The entire project has been developed and implemented according to the user and organizational requirements, and all modules have been tested and verified to be bug-free based on the defined testing standards. However, scope always remains for continuous improvement and expansion.
Planned future enhancements include:

- **Order Tracking Integration**: Adding real-time shipment tracking and order status updates for users and sellers.
- **Payment Gateway Expansion**: Integrating more payment methods including UPI, wallets, and credit card options.
- **Notification System**: SMS or email alerts for order confirmations, status changes, and feedback responses.
- **Multi-vendor Support**: Enabling multiple sellers to manage their inventories and track individual orders.
- **Mobile Responsiveness**: Making the entire system mobile-friendly or developing a dedicated mobile app.
- **Advanced Analytics**: Adding dashboards and sales reports for sellers and admins to better monitor performance.
- **Security Enhancements**: Implementing role-based access control and improving data validation across the system.

The system can be updated and maintained even after deployment. Enhancements and modifications can be done by adapting existing components or adding new features based on user feedback and technological changes. Maintenance is not limited to bug fixing but also includes adapting to new requirements and platform environments.

With these future improvements, the **Spare Parts Booking System** is poised to grow into a more powerful, flexible, and scalable application that meets the evolving demands of both end-users and administrators.

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