Motor Part Shop Software
Software Requirements Specification

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1. Introduction

1.1. Document Purpose

The purpose of the document is to serve as a guide to designers, developers and testers responsible for the engineering of Motor Part Shop project. It should give the engineers all of the information necessary to develop the software.

1.2. Product Scope

The motor part shop deals with large no. of motor parts of various manufacturers and various vehicle types. Some of the motor parts are very small and some are very large. To streamline the sales and supply ordering, the shop owner has asked us to develop the following motor part shop software.

The system can be accessed by:

- Customers (normal users)
- Shop owner(with unlimited access)

Both the user and shop owner are authorised before using the software.

1.3. Intended Audience and Document Overview

This document is intended for developers, shop owner, testers, and documentation writers. Start with the purpose, followed by the product scope, functional and non-functional requirements of the system and contains the contextual and data flow diagrams.

1.4. Definitions, Acronyms and Abbreviations

HTML	Hyper Text Markup Language
CSS	Cascading Style Sheet
PHP	Hypertext Preprocessor

1.5. Document Conventions

This document follows the IEEE formatting requirements. Document text is single spaced and maintains the 1” margins.

Conventions	**Description**	**Examples**
Font (Arial)	Whole of the document is this font.	
Bold	Headings of topics, links are written in Bold.	**1.5 Document Conventions**
Italics	personalized comments and notes	
Capital letters	Shorts forms of words	HTML,SRS,MPS

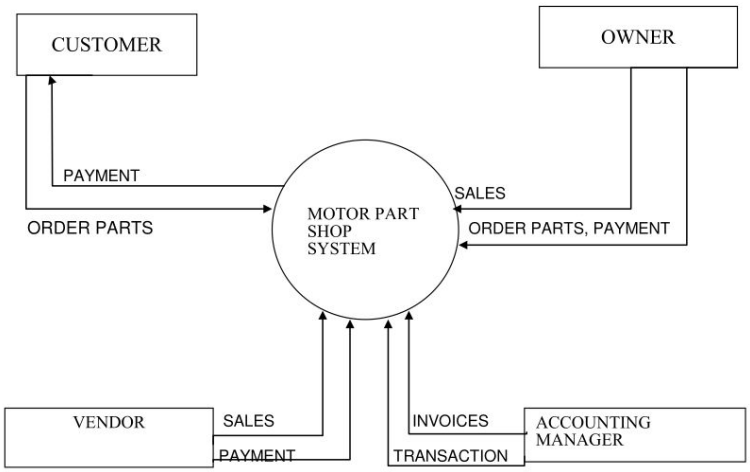
1.6. References and Acknowledgements

github.com

2. Overall Description

2.1. Product Perspective

The motor part shop system will be a self contained product. The following contextual diagram which gives information about the entities and the interface between them.



2.2. Product Functionality

The motor part shop software must include the following functionality

- Large inventory of motor parts of various manufacturers and various vehicle types.
- The software must solve the problem of the shop owner to order products as soon as the number of items of the product in the inventory goes down a certain threshold. It ensures that the number of items are sufficient for at least one week.
- The software auto generates the items to be ordered, prints out the quantity required, the total amount and also the address of the vendor supplying the part.
- The software generates the revenue for each day and at the end of the month it must show a graph showing sales of each day of the month.

2.3. Users and Characteristics

Administrator:

- Maintenance: Well ordered and numbered racks are used to ease managing of sales and supply orders
- View customer details: View and verify customer details
- Manage sales: allocate product stocks according to customer's preference
- Manage inventory: track number of stocks bought and sold

Vendor:

- Supply materials to company
- Receive payment

Customer:

- Registration: Make new account by using valid user details
- Login: Can enter personalised user space by using correct credentials
- Manage details: Can edit or update user details when necessary
- View store: Can browse through items in the store
- Purchase: Can make a valid payment to purchase items
- Logout: Can exit their personalised user space

Accounting Manager:

- Manage invoice and receipts
- Manage transactions

2.4. Operating Environment

The software will operate in any environment, including the hardware platform, operating system and versions, and any other software components or applications. This product is web based and can be viewed by any browser and has been tested for compliance with Mozilla, IE and Opera.

2.5. Design and Implementation Constraints

- The front end should be implemented using HTML5, CSS3 and Javascript.
- The backend should be implemented using PHP and SQL.

2.6. User Documentation

The user documentation can be found in this SRS.

2.7. Assumptions and Dependencies

We are assuming that extra documentations beyond this SRS would not be required for the user to utilize this product.

3. Specific Requirements

3.1. External Interface Requirements

3.1.1. User interface

The user interface of the software will be loaded using a web browser. This page includes a login and a sign up tab. After entering into the system using a password, users can search their required parts and can add the item to the cart. At the end the invoice will be generated.

3.1.2. Hardware interface

Hardware requirements will be the same for all parties.

1. Hard disk - 1GB
2. Processor - pentium 4 or faster
3. Memory - Minimum of 256MB RAM
4. Input & Output Devices

3.1.3. Software interface

Good internet connection with some important software are required like:

1. Operating System - MS 2000
2. Backend - SQL Server 2008
3. Programming Language

3.2. Functional Requirements

1. Secure registration of consumers
2. Easy access to the required part.
3. Creating a shopping cart.
4. Demonstrating popular items in each category.
5. Maintaining databases of regular customers.
6. Accounting manager keeping track of each invoices and sales per month.
7. On reaching the threshold value, Owner orders the materials from vendors.

4. Other Non-Functional Requirements

4.1. Performance Requirements

- Connection to the server based on the criteria of attributes of the user like location and server will be working whole 24x7 times.
- Transaction will not take more than 10 sec.
- System shall function in real time.
- System shall allow at a time use at least 100 users, without data corruption.
- ❏ System will try to retain the integrity of data.

4.2. Safety and Security Requirements

- Users must first authenticate themselves by entering a username and password.System shall not allow access if user login is incorrect.
- Only the administrator will be allowed to do the updates.

4.3. Software Quality Attributes

- System should be flexible enough to handle several additions and deletions of user parts and support extensions in the functionalities.
- Software will be maintainable so that extra feature can be added or modified at any time
- Web site can be tested with a number of users using it at a time.
- It will be reliable and will send the correct information to the correct users who have registered.
- Software will be easy to use and will be portable to transfer from one server to another.

5. Appendix A - Data Dictionary

5.1. Login

5.1.1. Login success

5.1.2. Login fail

5.2. User page

5.2.1. User page for owner

5.2.2. User page for normal user

5.2.3. User page for accounting manager

5.3. Owner special job

5.3.1. Add/delete parts

5.3.2. Order raw material

5.3.3. Add/delete user

5.4. Accounting manager special job

5.4.1. Manage invoices

5.4.2. Manage transactions