Garits

Requirements specification and system design

**Servlets**

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**Summary**

**This is a Software Requirements Document, a proposal to the marketing team of Quick Fix Fitters by the software development team at Servlets.**

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# 1 Preface

## Purpose and scope of this document

This is a software requirements document for GARITS and covers the functional and non-functional requirements with implementation constraints presented by the customer Quick Fix Fitters.

This document will firstly define the existing system and the problems the company faces using the current system. Secondly, it will show the requirement specification of the new system and go in details of how the new system will be designed and implemented.

## History of the document

The current version of this document is 0.3, In this version the formatting of the document was refined, Chapter 2 was added which looks at the problems with the current system at the company and provides the cause of those problems along with how the new system can be implemented to solve those problems.

All the versions and changes made in them is shown in the table below:

|  |  |
| --- | --- |
| **Version** | **Changes made** |
| 0.1 | This was the first draft of the document, when it was created, and the rough layout of the format was created. |
| 0.2 | The first chapter was expanded, and version history was added. |
| 0.3 | Chapter 2 was added where the problems in the old system are examined and detailed, along with the solutions that might be used in the new system to |

# 2 Examine old system and the problems

Overview

This branch of Quick Fix Fitters PLC’s system overall has a lot of problems, and mainly they are all geared towards the fact that they don’t have a proper system. Most of the operations / jobs are recorded with no proper backup, not properly documented or not having an alternative source of storing the data and operations. Jobs for the mechanic is allocated on a whiteboard, everything is filled on sheets, outstanding invoices are recorded on a book with no proper alerting system to remind about the dates, stock control is being done by person with a list making edit with a pencil, … By not having a proper system in place, the operations are being done with no attentions to details, minor / ineffective supervising and could lead to possible workflow problems and issues that can’t be fixed when get out of hand.

List of all possible problems

|  |  |  |
| --- | --- | --- |
| **Problems** | **Possible Reasons** | **Possible Consequences** |
| Part shortages are happening more frequently | - Stock control for the parts are not being recorded properly (with pencil and papers)  - Stock control is being done by person (the ledger) and the person doing it is losing track of the stock levels and when to order replacements  - Restocking is only done monthly and is being written by a person | - Lost track of stock levels, leads to misleading information to customers and to workers in the workshop to carry out operations, wasting time and resources duo to misinformation  - Customers dissatisfaction duo to task being carried out took way too long duo to misinformation |
| Jobs are not being recorded and allocated properly to mechanics | - Job sheets are being recorded / assigned on a whiteboard  - Only the mechanics that is assigned to the job can keep track of the job they are doing | - Jobs are not being properly scheduled and assigned, lead to a waste of time and late on deadlines  - This lead to unwanted issues that affects the service that the customer can receive, e.g : receiving 2 invoices, their cars are not fixed on time, etc |
| Debts and overdue invoice are not properly recorded / keeping track and getting resolved | - Reminders for the debt are being sent by the administrator  - Debts / overdue invoices are recorded on a book  - Invoices are not being reminded, just being kept on a file and wait for the customer to come and pay | - Losing money on jobs  - Can be exploit by the customers to get free services  - losing out on profits and could lead to business collapsing |
| MoT Tests are not being reminded to customers accordingly / in time | - Customers details are being filled on cards that doesn’t have enough space for further important details  - Reminder system is non-existent | - Customers are losing out on benefits that they signed up / paid for  - Losing customer’s trust on the service provided => lose customer to competitors |
| Customer’s satisfaction level is low | - The service is not properly given, e.g. jobs are being delayed, not properly supervised, parts are not available to buy  - Communication and operations between the departments are very poor and this increases job response time to customers  - There are other alternatives that can provide similar service in quicker times and better quality | - Customers leaving the business => business losing out on sale => losing out on profit => failing as a business |