**Fleet Management**

Software Domain Analysis

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Revisions

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Introduction

1.1Description

The Fleet Management System is used to automate the task of scheduling transit times, routes, and maintenance of a fleet of vehicles. It provides a simple interface that allows for full management of all of these tasks that previously required excesses of paperwork and wasteful labor.

The domain in which this software is to be used is the management of public or private transportation domain. The motivation behind doing a domain analysis is that it will allow us to more readily solve the problem of updating and enhancing the Fleet Management System.

1.2 Glossary

The Domain

2.1 General Knowledge about domain

2.2 Customers and users

Customers and users who might purchase this software are anyone who manages or deals with a fleet of vehicles. Currently the software is targeted toward school bus fleets, but the software can and will be updated to be able to manage any large fleet of vehicles. Any company that has a large amount of vehicles can benefit from this software. Taxi companies, trucking companies, large fire and police departments, waste management companies, government agencies with many vehicles, and any business that has a need to manage their fleet of vehicles more efficiently may want to purchase this software.

Users that will interact with the software include mechanics when to view service reports and keep track of when vehicles and parts need serviced. Managers on all levels to know what vehicles are operational in their fleet and can make more timely and efficient decisions based on the information. Also individual drivers of each vehicle may need to look up information on their vehicle as to when and how it needs serviced. The individual drivers may also be able to enter information about maintenance issues so that the mechanics can know what needs serviced.

2.3 The Environment

The systems used in this domain will be computers running at least Windows XP Professional Version 2002 service pack 2, a Pentium 4 class processor or higher, at least 2 gigabytes of RAM, and at least an 256MB ATI RADEON X6000. The system will also require internet access to update the software over the internet.

2.4 Tasks and procedures currently performed

Without the use of fleet management software, companies have to manage a massive amount of information using various incompatible systems. The mechanics don’t necessarily communicate with the managers, the managers don’t communicate with the managers. Everything is done using either paper and pen or incompatible computer systems. The only way to communicate what needs done is to write memos or send e-mails or write large amounts of documents that need passed between the various users.

2.5 Competing Software

Other competing products on the market include Fleet Operations Management Software by collectiveData which has features for fleet sizing, helping the fleet to “go green”, fuel monitoring, handling accidents and claims, keeps track of maintenance schedules which includes a preventative maintenance schedule, labor tracking, and inventory.

Another competing fleet management software product is GPS Fleet Management Software from Telogis. The main feature of this software is that it allows anyone to track their fleet using GPS. The advantage to this software is that the users will be able to track their fleet in real time. The major drawback to software like this is that it requires expensive hardware and a more complex system.

Another product is The Dispatch-Mate Suite from Infosite Technologies Inc. It has features for dispatching, maintenance, warehousing, and service and repair.

2.6 Similarities across domains and organizations

Other similar domains might include personal vehicle maintenance software or personal vehicles routing solutions such as GPS. This software might also share a similarity with emergency services dispatching and management, but that domain is more geared to emergency response. This software also has similarities to other fleet management software such as software that controls fleets of aircrafts or ships.