**System Design Document Template**

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**System Design Document**

**<Autobid Customer Relation Management System>**

**Company Name**

**Street Address**

**City, State Zip Code**

**Date**

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# Introduction

This System Design Document has been created to outline the proposed system design for new Autobid Propriety Limited[Autobid(PTY)LTD] Customer Relation Management(CRM) system. The CRM is intended to create an internal system used to improve efficiency of the business. By designing, testing, and deploying the CRM ,Autobid will improve its capabilities in communication,department management, tracking, and reporting. This document and the technical specifications listed herein comply with all Autobid standards and infrastructure.

# Purpose

The purpose of this System Design Document is to provide a description for how the CRM system will be constructed. The Systems Design Document was created to ensure that the design elements meets the requirements specified in the CRM project requirements. The System Design Document provides a description of the system design,database and security. These specifications point towards the projects requirements of communication and emp-loyee management/work tracking

# System Overview\*

This section should describe the basic system design goals, functionality and architecture. It may include a high level description of the approach used to develop the system design. It may also include high-level descriptions of the system’s hardware, software, database, and security components. Depending on the complexity of the system this section may also include component and/or contextual diagrams of the system and system components.

Acme Corporation has historically faced many challenges and shortcomings in managing inter-organizational communication. The proposed CRM utilize existing Abd infrastructure and hardware to provide a communication platform which will improve the efficiency of Acme’s communications thus improving efficiency output and work productivity.

The MMS is designed as an enterprise software tool which is compatible with and leverages existing Acme hardware and infrastructure. Additionally, MMS is compliant with all internal Acme Corporation network security protocols and policies as well as industry regulatory policies.

The MMS tool is also compatible with existing Acme software suites to include MS Office applications and SharePoint, as well as SAP. The MMS tool will provide various user interfaces which will allow data entry, updates, tracking, and report generation. It will also allow users to export data to various existing software tools like MS Excel and SharePoint for various uses.

One of the primary benefits of the MMS tool over the legacy system is its ability to consolidate all maintenance data and generate real-time reports and analysis of fleet status, problem areas, chronic maintenance problems, and various other metrics. Until now Acme Corp. has relied upon legacy software with various reporting and data constraints and limited user interfaces which has resulted in poor reporting, tracking, and management as well as a general lack of continuity among the users.

The new CRM tool will provide the following capabilities:

# Design Constraints\*

This section should describe the constraints associated with the system design. Constraints are the result of various conditions beyond the scope of the project that affect and limit the system design. These may be due to hardware, software, business processes, organizational/industry standards, or other conditions which affect the system design. This section should provide a description of what the constraints are and how they affect or limit the system design.

The MMS Project Team identified several constraints which will impact and limit the design of the tool. These constraints are beyond the scope of the MMS Project but must be carefully factored into the system design. To date, the following constraints have been identified:

# Roles and Responsibilities\*

The following table defines the CRMSystem Design roles and responsibilities. This matrix also serves as the list of points of contact for issues and concerns relating to the CRM System Design.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Role** | **Phone** | **Email** |
| 1. Robert Aumuller | Project Manager |  |  |
| 1. Aidan Hogg | Lead Programmer |  | Aidan@autobid.co.za |
| 1. Nisheel Ravjee | Programmer | (+27)79 303 1052 | Nisheel@autobid.co.za |

# Project References

This section should describe what references exist which guide the system design. These references may be internal or external. Examples of references include white papers. System analyses, organizational standards, industry standards, meeting minutes/summaries, and findings. This section should provide a list of such references but the descriptions should be general and not include much detail since the documents on the list can be referred to individually if more information is needed.

The MMS tool is designed in accordance with several organizational guidelines, standards, analyses, and findings. These references serve as the basis for the requirement of a new maintenance management system. The following is a list of references. It should be noted that some of these documents are periodically updated and if more detailed information is needed, they should be referred to individually.

* Acme Corp. IT Security Policies and Guidelines, Oct 10, 20xx

# System Architecture

This section should describe the architecture necessary to achieve the system design for the project. This will usually consist of both hardware and software architecture. Additionally, it may be that the existing architecture (either hardware or software) is already in place, in which case the requirements should still be documented. The description of the architecture should include a list and summary of each component and, depending on the complexity of the design, it may be beneficial to include diagrams showing the relationship/connectivity between these components.

**Hardware:**

The CRM design is based on existing hardware architecture already deployed across the Autobid infrastructure

**Software:**

The MMS design is based on the individual design of various components in which users will enter and query data. The software architecture is designed to incorporate all data entries and modifications into an integrated database which tracks maintenance data in real-time as it’s manipulated. The components which comprise the software architecture include:

* User Data Entry Module: This component provides the user interfaces for all maintenance data entry. This component consists of several sub-components to include:
  + New System Data
  + Existing System Maintenance Updates
  + System Location Updates
  + System History
* Automated Reporting Module: This component provides all of the pre-built automated reporting capabilities. These are reports that are generated regularly and repetitively at known intervals.
* Manual Reporting Module: This component provides a list of all searchable fields in which the user can create a report as the need arises

# Database Design

The CRM will incorporate existing maintenance data in the legacy database into a new enhanced database with additional capabilities such as assignment. The database will also be responsible for ticket tracking and report management.

# Hardware and Software Detailed Design

# This section should describe the design of the hardware and software in more detailed terms. In the event that system utilizes the existing design of the hardware or software, it may not be necessary to restate the existing design in detailed terms. Again, like many other sections, the contents of this section may depend upon the complexity of the system design. The more complex, generally the more explanation and detail is required to communicate the design. Systems with a high level of complexity may require diagrams and/or conceptual illustrations to more easily convey understanding.

**Hardware:**

The CRM solution leverages existing Autobid hardware architecture and design. No additional hardware design is required for the CRM.

**Software:**

TheCRM software design is coded by Autobid’s It department to provide customized functionality specific to the operations of Autobid. It was determined through various analyses and studies that there is not an existing commercial-off-the-shelf (COTS) product with the ability to capture specific business operations unique to Acme Corp. As such, detailed requirements were gathered via investigation by the project manager,and the requirements found were used to develop the concept for the CRM design. The concept was then broken down into modules in order to segregate and compartmentalize various functionality.

Ticket Management Module:

Report Generation Module:

# System Security and Integrity Controls

This section should describe the measures included in the system design to ensure the system is secure and that the integrity of the system and data are maintained. This is an important consideration in the design of the system as failure to secure and control the system and its data can result in significant loss of time, money, and other resources.

The MMS tool design incorporates several security and integrity controls to ensure that the system and its data are continually protected. This is done through a multi-tiered approach to ensuring data integrity is achieved through only authorized user functions and assignments.

Sponsor Acceptance

Approved by the Project Sponsor:

Date:

<Project Sponsor>

<Project Sponsor Title>

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