Company Management System

Version 1.2

Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 7/OCT/10 | 1.0 | Initial version of the SRS | Michael Laws |
| 29/OCT/10 | 1.1 | Revision of Corrected SRS | Ryan D. Rabe |
| 19/JAN/11 | 1.2 | Minor modifications and corrections | Michael Laws |

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# Introduction

## Purpose

The purpose of this Software Requirements Specification (SRS) document is to provide a detailed description of our software project, specification, and goals. This document describes the features that are included in our project, its user interface, and its functionality. The document describes how our team sees and understands the requirements of the software.

## References

There are no references cited in this document.

# System Overview

This application is to be a fully-functional company management web interface. It will consist of many different modules that apply to all of the many moving parts that define managing a company. Some of the modules will include: inspections, chits, and 0800 reports.

All paperwork that is converted to be used in this system will adhere to all Naval Academy standards set forth in the orders referenced in the vision.

This application will be solely based on the web and accessible by anyone within the USNA network. The server will handle all of the concurrency issues associated with the multiple users operating on the same database. The software will handle all the user authentication and data storage on the server.

# Functional Requirements

## Authentication

The system must allow an individual to login to an account.

## Credentials

The system must manage an individual’s credentials and access based on the user role.

## Enter Information

The system must allow users to enter information, depending on the credentials provided.

## View Information

The system must allow users to retrieve information, depending on the credentials provided.

## Update Information

The system must allow users to update information, depending on the credentials provided.

## Send Information

The system must allow users to send information, depending on the credentials provided.

## Manage Users

Administrative users must be able to manage subordinate’s credentials.

## Navigation

An authorized user must be able to navigate to pages that that individual has credentials to navigate to.

# Interfaces

## User Interfaces

The interface will be entirely web based.

## Hardware Interfaces

No hardware interfaces will be used in this project.

## Software Interfaces

Software interfaces that will be used are databases and web services.

### Databases

A database will be harnessed to provide dynamic data retrieval and insertion. The centralized database will allow for data concurrency.

### Web services

Intuitive and ergonomic web services will streamline database access and use. Dynamically generated output based from user generated and built in queries will provide the user with useful statistics and functionality.

## Communications Interfaces

The CMS will not directly interface with any other systems as it is web based.

# Non-Functional Requirements

## Performance

As this is a web based application, all performance will be handled by the server, which is outside of the scope of this project. The only performance requirement that we have is concurrent capacity. All other performance requirements are handled by preexisting services.

### Required capacity is n concurrent users.

## Safety

### There are no safety requirements for this project.

## Security

### Security will be achieved through SHA1 encryption.

### Data access and integrity will be defined through use of granular user roles as defined by the login credentials. This will prevent unauthorized access of sensitive information.

## Quality

### Availability

The CMS will be accessible depending on the accessibility of the hosting servers. This can be mitigated by HTML5 capabilities of local data storage via the browser’s cache.

### MTTR

Based on the web based nature of this project, there will be no time period where the System is unavailable due to internal factors. However, external factors, such as network outages may impede System usage

### Ergonomic

The system will require a certain amount of inherent intuitive properties in the interface in accordance with human capabilities. The average user must be able to immediately comprehend, understand, and interpolate all output of the system.

# Design Constraints

## Software Languages

CMS will utilize HTML5/XML, PHP, AJAX, MySQL, Django, JavaScript, Perl, Python, and other web based languages and APIs that will be required. The number of different languages used allows for the tailored efficiency within the System.

## Policy

### USNA/DOD Network usage and privacy policy orders must be adhered to.

### Privacy must be followed in accordance with the Privacy Act of 1974 which has the following statements:

#### The government should not maintain any secret records.

#### Individuals must be able to see what personal information about them is stored and how it is used.

#### Individuals must provide prior written consent before personal information collected for one purpose can be used for a different purpose.

#### Individuals must be allowed to fix or clarify personal information about them.

#### Organizations that store or use personal data must be responsible for the information's veracity and must attempt to prevent its misuse.