**SYSTEM SPECIFICATIONS**

**FOR**

**Inventory Management System (IMS)**

Kyle Parker

Christopher Andrews

Chaitanya Chakka

Erik Wojcik

Sarim Janjua

Mohib Ahmed

Nick Turner

Quentin Terry

Table of Contents

[Introduction 3](#_Toc525563432)

[About the Project 3](#_Toc525563433)

[Document Conventions 3](#_Toc525563434)

[Project Scope 3](#_Toc525563435)

[Overall Description 5](#_Toc525563436)

[Product Features 5](#_Toc525563437)

[User Classes and Characteristics 5](#_Toc525563438)

[Supported Environment 5](#_Toc525563439)

[System Features 6](#_Toc525563440)

[Inventory Control 6](#_Toc525563441)

[Description 6](#_Toc525563442)

[Functional Requirements 6](#_Toc525563443)

[Ordering System 6](#_Toc525563444)

[Description 6](#_Toc525563445)

[Functional Requirements 6](#_Toc525563446)

[Administration System 6](#_Toc525563447)

[Description 6](#_Toc525563448)

[Functional Requirements 6](#_Toc525563449)

# Introduction

## About the Project

IMS is an online system that satisfies the requirement of a generalized Inventory and Stock Maintenance system. It provides a user interface to perform daily transactions and generate analytical reports for the management.

The primary goal of this application is to reduce the manual effort involved in the maintenance of inventory. The manual process is tedious and it requires the staff to count the items sold and update the inventory with available stock. The products that are low in stock need to be restocked by filling out forms and sending requests to vendors.

## Document Conventions

**Product** - Goods maintained by the company will henceforth be called as product throughout the document

**Supplier** – Dealer/Vendor supplying the manufactured goods which are sold directly or repackaged and sold to clients

**Request for Proposal (RFP)** – Proposal sent out to supplier to provide an updated price for the product

**Purchase –** Product purchased from Supplier will be referred to as a purchase

**Customer –** Entity buying from the company

**Order –** Product sold to a customer

**Shipper** – Freighters who move the goods from supplier, ship an order to a customer

## Project Scope

The proposed project is an implementation of a general inventory control system. The intent is to market the product and customize it specific to clients. The design would be flexible to allow customizations.

Manual systems involve the staff to keep track of the inventory. This involves an end of the day process of counting all the items sold and count of inventory left. This process involves too much of effort and can be better performed by using a software system.

The suppliers providing quotes are not kept updated about their quotes. This does not provide the company a list of vendors who provide competing products and if they would like to requote to be reconsidered.

# Overall Description

## Product Features

The system should be self-serving in other words the users should be able to complete every action from system such as setting up emails for notification, updating passwords. The system should always soft delete modules in the Administrative System this allows the shippers, suppliers, customers to be reusable if they ever plan to be back and provides a complete report of their business since inception.

## User Classes and Characteristics

**User** (Supplier / Internal / Customer) will be the supported user types. Every supplier & customer user would have to be integrated to a supplier this allows providing a personalized experience. Internal users are users of the company and will have access to modules depending on their authorization.

## Supported Environment

The application will be supported on most operating systems as the intent is to build a Web based application which allows the data to be most accurate and centralized. A companion mobile application for Android and IOS devices will be also provided. The app companions will have modified versions of the original modules for a more user friendly experience where it is necessary.

# System Features

## Inventory Control

### Description

The first priority of the system would be the ability to provide an inventory snapshot of the stock in hand, along with orders that are currently in progress and purchases that are being coordinated.

### Functional Requirements

1. Snapshot of current stock in hand
2. Allow user to raise RFP
3. Notify the vendor of a new RFP
4. Notify the internal user of a response to RFP

## Ordering System

### Description

The ordering system is the second and probably the most important moving component of the system. The goal of the system is to automate the experience of the customer and provide real time information such as available quantity, estimated delivery dates and notification regarding the orders.

### Functional Requirements

1. Provide an interface to place an order. Allow placing multiple products in one order and display available quantity
2. Notifications regarding an order can be sent directly to the customer
3. Based on available inventory/processing of an order. Appropriate actions like RFP, notification to the internal user should be sent

## Administration System

### Description

The administration system will provide all the maintenance interfaces for keeping the system updated with latest information. Shipper, Customer, Supplier and Internal User creation / updates/ deletion.

### Functional Requirements

1. Shipper Maintenance interface allows the internal user to update information, add a new shipper and delete a shipper
2. Customer maintenance interface will allow internal user to add a new customer, update information and delete and existing customer
3. Supplier maintenance interface allows to add, update or delete a supplier and update important information related to the supplier
4. Internal User maintenance allows to provide permission to the internal users depending on the modules authorized