**HI-TEC ELECTRONIC SUPPLY LTD**

**Warehouse Management System**

Project Proposal

Prepared for:

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CSIS 3275 002 – Software Engineering

Development Team

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**Curtis Windsor**

**Sam Zhou**

**SUMMARY & SCOPE**

This document serves as a software requirements specification for HI-TEC Electronic Supply Ltd., a fictional business-to-business supplier that operates in the Lower Mainland; dealing primarily in individual computer components as well as complete pre-built machines. The software system in question is a management system for the company’s warehouse; tracking current stock, incoming orders, and outgoing shipments. This system is comprised primarily of : 1) A mySQL Database, 2) A website for clients, and 3) A program for employees.

The ultimate **objective** of this project is to create a comprehensive system for managing the movement of products in the warehouse.

**Deliverables** of this project will be:

1. A database complete with data
2. A fully-functional website with read-only capability from the database
3. A fully-functional application written in C# with different GUIs for specific departments
4. A comprehensive technical manual for the end user detailing the use of each module of the system
5. A detailed documentation log for programmers designed to assist in the system’s upkeep

**Technical** requirements of this system include:

1. A server running a LAMP stack
2. All machines running the application must have:
   1. Windows 7 and above
   2. 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
   3. 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
   4. 16 GB available hard disk space (32-bit) or 20 GB (64-bit)
   5. DirectX 9 graphics device with WDDM 1.0 or higher driver
   6. Internet Access

**Limitations** of this software system include:

1. The system assumes there are already separate systems in place for Sales, Accounting, and so forth to handle issues such as payment processing.
2. Due to the warehouse focus of the system, the components that deal with orders and shipments exists solely to track inventory inputs and outputs.
3. Inventory inputs and outputs are entered into the system via the application when the appropriate waybill is received.

The development team for this system project consists of the following people with the following primary areas of responsibility. Despite this, it is projected that team members will assist each other in differing areas as required.

**Project Management:** Matthew Lai

**Website Design:** Manjot Sangha and Manveer Sidhu

**Software Programming:** Sam Zhou

**Server Administration:** Curtis Windsor

**COMPONENTS & TECHNOLOGIES**

Component A – MySQL Database

This will store the information needed to track our products in the warehouse. An ERD is available in the appendix of this document.

CA - Technologies Involved:

* MySQL
* phpMyAdmin

CA - Development Tools:

* AWS EC2
  + Linux – Ubuntu 15.04
  + Apache
  + Cloud software specifications:
    - 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
    - 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
    - 16 GB available hard disk space (32-bit) or 20 GB (64-bit)
    - DirectX 9 graphics device with WDDM 1.0 or higher driver
* MySQL Workbench 6.3 CE
* Mockaroo

Component B – Client Website

This displays information about our warehouse inventory for use by clients. This is necessary for our system as it assumes clients order products by phone only.

CB - Features and Functions:

* Displays basic product information:
  + SKU
  + Name
  + Price
  + Manufacturer
  + Category
  + Image
* Filter by:
  + Product Category
  + Product Manufacturer
* Search by:
  + SKU
  + Name
* All the above display results can be ordered by price ascending/descending
* A contact form for clients who want more information will be provided

CB - Technologies Involved:

* HTML
* JavaScript
* AJAX
* PHP
* CSS
* Bootstrap

CB - Development Tools:

* Adobe Dreamweaver
* Codelobster
* FileZilla
* AWS EC2
  + Linux – Ubuntu 15.04
  + Apache
  + Cloud software specifications:
    - 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor
    - 1 gigabyte (GB) RAM (32-bit) or 2 GB RAM (64-bit)
    - 16 GB available hard disk space (32-bit) or 20 GB (64-bit)
    - DirectX 9 graphics device with WDDM 1.0 or higher driver

Component C – Staff Application

This program allows warehouse staff to manipulate the information stored in the database as products are moved around.

TIMELINE

APPENDIX