**Software Requirements Specification (SRS)**

***<T.I. Systems>***

***<Coffee House>***



***TEAM***

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7. **Introduction**
   1. **Purpose**

To deploy a system that will assist and simplify the job of Delaware Technical Community College technicians when called to a classroom to replenish toner of various printers on the Wilmington campus

* 1. **Scope**
  + Extract the data within a CSV file
  + Control DB filled with printer toner for restock
  + Assists the existing system of ‘trouble requests’
  + Tracks printer toner quantity by the printer’s asset tag, location, color, model number
  + Keep IT technicians up to date on toner supply
  + Each classroom has a printer that will need to be tracked
  + Program should not exceed 10% of RAM on the given terminal
  + Program should at maximum take 1 second for response times within the interface
  1. **Definitions, acronyms, and abbreviations**

CSV File – Comma separated value file

DB – Data Base

IT – Information Technology

DTCC – Delaware Technical Community College

Asset tag – A form of identification used by DTCC

Trouble requests – The current solution to solving IT issues at DTCC

GUI – Graphical User Interface

Critical Data – Client given data: Asset tag, Color, Quantity, Model Number (Toner), Model Number (Printer)

RAM – Random Access Memory

1. **Input Requirements**
   1. **CSV File**

The system must be given a CSV File in order to implement the correct data into the given program, the CSV must contain the information specified by the client, including but not limited to asset tag, toner quantity, brand, model number, location; IT technicians must know this and manually enter spreadsheet into the system.

* 1. **User Events**

The system must be able to handle any stimulus conducted by the end user within the user interface (GUI).

* 1. **Toner Compatibility**

There should be a list created by *Coffee Hous*e that details which toner model is associated to the given printer model

1. **Process Requirements**

The following are among the inherent requirements that the toner inventory system must be able to handle

* 1. **Data Extraction**

The system must be able to extract the data from the given CSV File in an efficient manner such that the end user will not have missing data within the system. For the case that the given CSV File has missing data, please see page 3-Section 3.4.

* 1. **User Interface Interactions**

The systems interface must be able to handle events produced by the end user such that each event will trigger a response. The response time of any action conducted within this interface should be at most 1 second. If an error were to occur, please see page 3-Section 3.4

* 1. **Data Base Transactions**

The system must be able to connect to the DB, as well as receive and communicate to and from the software

* 1. **Data Validation**

The system must handle data and DB errors in an efficient manner. There will be validation and error-handling as part of the system; this will deal with the case of incorrect inputs

* 1. **Control Printer Inventory**

The system must have an option such as a button that will allow the end user to remove/add inventory from the DB registry

* 1. **Data Repository**

The system must store the extracted data from the CSV File into the DB that will then communicate that data to and from the various components of the system

1. **Output Requirements**

**4.1.User Interface**

The user interface must be organized in a way that all critical data is visible at first glance, including but not limited to the asset tag

* 1. **Accurate and Accessible Data**

The information provided by the system will be directly taken from the given CSV file(s), and will have exact information with minimal error. The critical data will be on display to the user as they navigate through the user interface (GUI).

1. **Non-Functional Requirements**
   1. **Performance**

The system must be interactive and delays must be minimal, the response time of the program must be at maximum 1 second. The system should not take any unnecessary memory to function, at maximum the program should take 10% of all available RAM on the terminal

* 1. **Safety**

The information from the CSV File will not be altered in any way while being transferred to the data base and communicated back to the program

* 1. **Reliability**

The program will be available during all working hours according to DTCC

* 1. **Availability**

In the case that the program is stopped abruptly, the system will have to be restarted and the data will have to be re-entered

* 1. **Security**

The system will be accessed at one terminal on the Wilmington campus at DTCC and it will only be able to be accessed from that terminal

* 1. **Usability**

The system is expected to handle events triggered by the user, as well as traverse quickly amongst the different states within the program

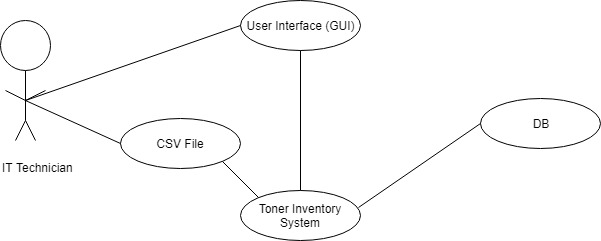
* 1. **Maintainability**

The system should be descriptive during all processes of engineering, such that the system can be easily refactored if needed

1. **General View**

Diagram that describe the overall intended function of the system

* 1. **General view**

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