B.K. Jewellers

**Software Requirement Specification (SRS)**

**Document for**

**“Manufacturing” part.**

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Group 2

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1. **Introduction**
   1. Purpose:

* The software requirement specification (SRS) is a document that lays out the description of the manufacturing software that is to be developed as well as the intention of the software under development.
* Software requirements specifications what the manufacturing department is supposed to do s well as how it suppose to perform.
  1. Scope:

The main focus of this document is on software requirements for the software to perform the tasks effectively.

* 1. Overview:

In this section all general factors described affects product and it’s requirements which user can understand easily.

1. **Product perspective**

This is a small part of whole jeweller’s management software. This section is totally independent. It implies on graphical user interface (GUI). All the working in this software is done in pre define sequence with dependencies in between them.

1. **Interface**

This software is using these following interfaces:

* GUI (Graphical User Interface),
* API (Application Program Interface),
* Alphabetization,
* WHSIWYG(What You See Is What You Get),
* Hypertext.
  1. System interface:

It is based on simple GUI (Graphical User Interface) from which user can see on the computer screen in very effective manner and easy to use functions present on the screen, it also provide simple platform to do sales activities and to record all this activities in the same software.

* 1. Software interface:
* Programming interface: this software is scripted in c++ computer programming language because it is object oriented programming language.
* Communication interface: SMTP (Simple Mail Transfer Protocol) email is used to communicate outside the software.
* Connection interface: the “software drivers” are used to activate peripheral devices.
  1. Hardware interface:

The hardware interfaces includes:

* Mouse,
* Keyboard,
* Printer,
* Barcode scanner.

1. **Operations**

The normal and specific operations which are required by the users are following:

* Carat calculation
* Work receipt
* Stock maintenance
* Jewellery receipt
* Barcodes generation
* Transfer
* Backup and recovery operation

1. **Product functions**

The manufacturing department is supposed to do these following activities:

* Login: it includes a simple login process to get into the software.
* Carat calculation: it includes the process for making purity of gold/silver.
* Work receipt: it includes process of generating work receipt before starting of each process.
* Stock: it includes stock maintaining process done with MS Excel.
* Barcode generation: it includes generation barcodes of jewellery before get transferred to other branches.
* Transfer: it includes the process of changing the location of item when the item is going outside of the shop or other branches of the organization.
* Backup and recovery: it includes the process of maintaining the sale record for future use

1. **Specific requirements**

Our system need one extra equipment “barcode scanner”, which is used to enter the item details by scanning the bar-codes present on the stickers with items.

1. **User characteristics**

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Computer knowledge | Role knowledge | Guidelines knowledge |
| Manufacturing head | 80% | 90-95% | 90-95% |

Note: All the measurements are the minimum level.

1. **Constraints**

The constraints must include the limitations as follows:

* Hardware: this applies to Manufacturing head only, for adding items only by barcode scanner.
* Parallel operations: multitasking environment must capable of handling 4 tasks concurrently.

1. **Performance requirements**
2. Static

* 4 terminals are supported (mouse, keyboard, barcode scanner and printer).
* Maximum 10 users on different machines with same role are supported.
* 100% loading must get completed into 2 seconds.

1. Dynamic

* Every loading process must get completed within 3 seconds maximum.
* Scanning shall be processed in less than 1-2 seconds.
* Data fetching process must get completed within 1 second.
* Additional calculations must apply within 1-2 seconds.

1. **Database requirements**

-------- (N/A) ---------

Note: insufficient knowledge.

1. **Security**

Our software provides a level of security required by the company that includes:

* Single user login on multiple machines at a time is restricted.
* No any credential information should pass on software.