Music Store

Supplementary Specification

Version <1.0>

Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| <dd/mmm/yy> | <x.x> | <details> | <name> |
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Supplementary Specification

# Introduction

The introduction of the Supplementary Specification provides an overview of the entire document.

The Supplementary Specification captures the system requirements that are not readily captured in the use cases of the use-case model. Such requirements include:

Legal and regulatory requirements, including application standards.

Quality attributes of the system to be built, including usability, reliability, performance, and supportability requirements.

Other requirements such as operating systems and environments, compatibility requirements, and design constraints.

*This Supplementary Specification document applies to the team that will develop a customizable, decentralized system that allows individuals or organizations to easily and efficiently order or sell musical instruments. The document will describe nonfunctional requirements such as availability, performance*

# Non-functional Requirements

*[Define system quality attributes in terms of scenarios according to the following template:*

* *Quality attribute definition*
* *Source of stimulus: the entity (human or another system) that generated the stimulus or event*
* *Stimulus: a condition that determines a reaction of the system*
* *Environment: the current condition of the system when the stimulus arrives*
* *Artifact: is a component that reacts to the stimulus. It may be the whole system or some pieces of it*
* *Response: the activity determined by the arrival of the stimulus*
* *Response measure: the quantifiable indication of the response*
* *Tactics*

*]*

*NFRs define system attributes such as reliability, performance, security, testability and usability. They serve as constraints or restrictions on the design of the system across the different backlogs. Also known as system qualities, NFRs ensure the usability and effectiveness of the entire system.*

## Reliability

*Reliability is described as the ability of a system to perform its required functions under static conditions for a specific period.*  *is also defined as the probability that a software system fulfills its assigned task in a given environment for a predefined number of input cases, assuming that the hardware and the input are free of error.*

*The system has to be very reliable due to the importance of data and the damages incorrect or incomplete data can do.*

### **Availability**

*The system is available 100% for the user and is used 24 hours a day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.*

### **MTBF**

The system will be developed in such a way that it ***may*** fail once in a year.

### **MTTR**

*Even if the system fails, the system will be recovered back up within an hour or less.*

### **Accuracy**

*The accuracy of the system is limited by the accuracy of the speed at which the employees of the library and users of the library use the system.*

### **Access Reliability**

*The system shall provide 100% access reliability.*

## Performance

*Performance is defined as the degree to which a device or system fulfills its specification.*

### **Response Time**

*The information is refreshed every two minutes. The system shall respond to the customer in not less than two seconds from the time of the order placement. The system shall be allowed to take more time when doing large processing jobs.*

### **Administrator/Customer Response**

*The system shall take as less time as possible to provide service to the customer or the administrator.*

### **Throughput**

The number of transactions is directly dependent on the number of users, the users may be the managers and customers of the store.

### **Capacity**

*The system is capable of handling 250 users at a time.*

### **Resource Utilization**

*The resources are modified according the user requirements and also according to the musical instruments requested by the users.*

## Security

*Security assures that all data inside the system or its part will be protected against malware attacks or unauthorized access.*

### **Data Transfer**

*The system shall use secure sockets in all transactions that include any confidential customer information.*

*The system shall automatically log out all customers after a period of inactivity.*

*The system shall confirm all transactions with the customer’s web browser.*

*The system shall not leave any cookies on the customer’s computer containing the user’s password.*

*The system shall not leave any cookies on the customer’s computer containing any of the user’s confidential information.*

### **Data Storage**

*The customer’s web browser shall never display a customer’s password. It shall always be echoed with special characters representing typed characters.*

*The customer’s web browser shall never display a customer’s credit card number after retrieving from the database. It shall always be shown with just the last 4 digits of the credit card number.*

*The system’s back-end servers shall never display a customer’s password. The customer’s password may be reset but never shown.*

*The system’s back-end servers shall only be accessible to authenticated administrators.*

*The system’s back-end databases shall be encrypted.*

## Supportability

Supportability is defined as the ability of the system to be supported by the resources required for specific maintenance tasks.

### **Internet Protocols**

*The system shall be comply with the TCP/IP protocol standards and shall be designed accordingly.*

### **Billing System Data Compatibility**

*The member balance amount that will be calculated and sent to the billing system shall be compatible with the data types and design constraints of the billing system.*

### **Maintenance**

*The maintenance of the system shall be done as per the maintenance contract.*

## Usability

*Usability is defined as the ease with which a user can learn to operate, prepare inputs for, and interpret outputs of the system.*

*The system shall allow the users to access the system from the Internet using HTML or it’s derivative technologies. The system uses a web browser as an interface.*

*Since all users are familiar with the general usage of browsers, no specific training is required.*

*The system is user friendly and self-explanatory.*

# Design Constraints

[This section needs to indicate any design constraints on the system being built. Design constraints represent design decisions that have been mandated and must be adhered to. Examples include software languages, software process requirements, prescribed use of developmental tools, architectural and design constraints, purchased components, class libraries, and so on.]

[add here about java, swing, html, sql server]