Computer Shop Management System Supplementary Specification

Revision History

Date	Version	Description	Author
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Supplementary Specification

1. Introduction

Buying or viewing the available computer at Computer Shop is currently done manually where the customers have to go to the shop to check the available computers. This may become a waste of time if the customer's desired computer is unavailable at the shop. And it is inconvenient for the customers from remote areas to buy computers. In addition, the employees of Computer Shop may find difficulty in managing the computer in the shop.

Therefore, we have decided to establish a Computer Shop Management System. This system would be used by customers of shop to check the availability of the computer and buy the computers, and by the employees to sell the computers and update the databases. The purpose of this document is to analyze and elaborate on the high-level needs and features of the Computer Shop Management System. It focuses on the capabilities and facilities provided by a bookstore.

1.1 Purpose

The purpose of Supplementary Specification document is to describe the external behavior of the Computer Management System. Requirements Specification defines and describes the operations, interfaces, performance, and quality assurance requirements of the Computer Shop Management System. The document also describes the nonfunctional requirements such as the user interfaces. It also describes the design constraints that are to be considered when the system is to be designed, and other factors necessary to provide a complete and comprehensive description of the requirements for the software. The Supplementary Specification captures the complete software requirements for the system, or a portion of the system. Requirements described in this document are derived from the Vision Document prepared for the Computer Shop Management System.

1.2 Scope

The Supplementary Specification captures all the requirements in a single document. The Computer Shop Management System that is to be developed provides the customers and the employees of the shop with computers information, online shopping of computers and many other facilities.

1.3 Definitions, Acronyms, and Abbreviations

- KLOC - Thousands of lines of code

1.4 Overview

The Supplementary Specification will provide a detailed description of the Computer Shop Management System. This document will provide the outline of the requirements, overview of the characteristics and constraints of the system.

2. Functionality

The Computer Shop Management System is also supported on mobile devices.

3. Usability

- The system uses a web browser as an interface. The customers and bookstore employees access the system via a web browser of Internet-connected devices

- Estimated time for each operation is fast in ideal condition, sometimes depends on the Internet speed.
- No particular training is required for the users.
- The system is user-friendly.

4. Reliability
4.1 Availability
The system is 100% of time available.
4.2 Mean Time Between Failures (MTBF)
The system is allowed to be out of order at most once a year.
4.3 Mean Time To Repair (MTTR)
The system is allowed to be out of operation within a couple of hours after it has failed.
4.4 Accuracy
The system is 100% of accuracy.
4.5 Maximum bugs or defect rate
1 bug/KLOC
4.6 Information Security
The system provides 100% information security
5. Performance
5.1 Response time for a transaction
Fast. Maximum 3 seconds.
5.2 Throughput
Depends on the number of users
5.3 Capacity
The system is capable of dealing with 500 users at a time.
5.4 Resource use
Memory of involved devices
6. Supportability
6.1 Internet Protocols
TCP/IP protocol
6.2 Information Security
The system is secured.
6.3 Billing System Compatibility
Computer Shop Management System is compatible with billing system.
6.4 Maintenance
Minimum once a month.
7. Design Constraints
7.1 Software Language Used
HTML, CSS, JavaScript, Node.js, PostgreSQL.
7.2 Development Tools
Notepad++, IntelliJ IDEA.

8. Online User Documentation and Help System Requirements
Users can consult the User Manual.
9. Purchased Components

Not required. **Class Libraries and Frameworks** Bootstrap, AngularJS.

10. Interfaces

10.1 User Interfaces

The interface of the system is implemented based on existing web browsers.

10.2 Hardware Interfaces

Local Area Network (LAN) will be used for collecting data from the users and also for updating the Computer shop's catalog.

10.3 Software Interfaces

Firewall and other network security solutions will be applied to prevent unauthorized access to the system.

10.4 Communications Interfaces

The Computer Shop Management System will be connected to the Internet.

11. Licensing Requirements

License belongs to computer shop who purchased the Computer Shop Management System from Group …. - class 4C15 HANU and agreed on the maintenance contract.

12. Legal, Copyright, and Other Notices

2017 Copyright to Group … – class 4C15 HANU. All rights reserved.

13. Applicable Standards

ISO/IEC 27001 - Information Technology Management.