Carti Hotel Management System

Supplementary Business Specification

Version 1.0

Revision History

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Supplementary Business Specification

# Introduction

This document will outline and explain the non-functional requirements for the Carti Hotel Management System. As a key part of the Business Modeling Process (BMP), it serves as the foundational framework for developing the system requirements specification.

## Purpose

The Supplementary Business Specification for Carti Hotel Management complements the main business specifications by providing detailed insights into specific aspects of managing Carti Hotel. This document enhances the understanding of business requirements, objectives, and constraints, offering a more comprehensive view of the hotel management system within the context of Carti.

## Scope

This scope defines the specific application of the Supplementary Specification, intended for use in the development of the Carti Hotel Management System. The development activities will be carried out by the FIT Company development team.

## Definitions, Acronyms, and Abbreviations

CHMS – Carti Hotel Management System

## References

None.

## Overview

The remainder of this document will cover aspects related to Behavior, Usability, Reliability, Performance, and Scaling Issues. The Behavior section will outline the organization's broad objectives that are not linked to a specific business use case. The Usability section will address requirements that impact the user-friendliness as perceived by a business actor. The Reliability section will define specifications related to the organization's reliability from a business actor’s perspective. The Performance section will detail the system’s performance characteristics. Finally, the Scaling Issues section will identify anticipated changes in the organization's size and outline any relevant limitations or precautions needed to accommodate these changes.

# Behavior

The application is designed to accommodate users with varying levels of technological expertise, making it accessible to both tech-savvy individuals and those less familiar with technology. To enhance the user experience, the presentation of room information is prioritized, featuring a sufficient number of high-quality images and detailed descriptions of each accommodation. Additionally, the booking and payment processes are streamlined for simplicity, ensuring a seamless and easy navigation experience for customers. The goal is to create a user-friendly interface that caters to a diverse audience, offering a straightforward journey from exploring room options to completing the booking and payment process.

# Usability

Regarding usability, the software must meet the following criteria:

* Training Time:
  + No specialized training is required for customers.
  + Minimal training is necessary for power users, including administrators and receptionists.
* User Interface:
  + Compliance with Windows and Mac OS: The user interface must be compatible with Windows operating systems (Windows 7, 8, 9, 10, and 11) and seamlessly integrate with the MAC OS environment.
  + Design for Ease of Use: The user interface should feature a modern, simplified, and aesthetically pleasing layout. The design must prioritize ease of use, allowing users to easily navigate between different elements within the interface.

In summary, the software’s usability requirements focus on creating a user-friendly system where customers can use it without specialized training, and power users need only minimal training. The user interface should be compatible with both Windows and Mac OS environments, featuring a contemporary design that emphasizes simplicity, aesthetics, and ease of navigation.

# Reliability

In terms of reliability, the software must meet the following criteria:

* Continuous Accessibility: The HHMS must be accessible 24/7, every day of the week.
* Downtime: Downtime must be kept below 10%.
* Security: Robust security measures must be implemented to protect all data and information.
* Mean Time Between Failures (MTBF): The system must achieve a mean time between failures of over 400 hours.

# Performance

## Response Time

The Carti Hotel Management System (CHMS) must efficiently complete at least 70% of all transactions within a maximum time frame of 3 minutes. This highlights the need for quick responsiveness in processing user requests and system transactions.

## Capacity

The CHMS must demonstrate robust capacity by supporting the concurrent use of up to 500 users. This ensures that the system can efficiently handle a large number of users simultaneously, maintaining a smooth and responsive experience even during peak usage periods.

## Resource Usage

Effective system operation requires that only one administrator can access and operate the CHMS at any given time. Additionally, the system should be hosted on a server with at least 8GB of RAM and 250GB of storage. These specifications are vital for maintaining optimal performance, ensuring the system is properly resourced to handle administrative tasks and store essential data without compromising efficiency.

# Scaling Issues

As the number of customers and courses grows, the database must scale in both size and complexity to meet these demands. New servers will be required to support the increasing operational load. Additionally, to improve operational efficiency, new features will be introduced to assist with administrative tasks and expand database functionality. These features will be developed from the ground up to align with both operational needs and business objectives.