UNIVERSIDAD DE LAS FUERZAS ARMADAS

ESPE

**Object-oriented programming**

**NRC: 9642**

**Binnacle N° 2**

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**Binnacle - Overall Description - EVSU\_Store**

**Date:** 15/07/2023

**Subject:** EVSU\_Store Overall Description Meeting

**Location:** Amaguaña

**2. Overall Description**

Today's meeting was focused on outlining the overall description of the EVSU\_Store software application. The goal of this software is to streamline and enhance the efficiency of EVSU STORE by automating essential administrative tasks, including inventory management, sales tracking, purchase history recording, customer information management, and hardware supplier recommendation.

**2.1 Product Perspective**

EVSU\_Store is envisioned as a standalone software application that will be exclusively developed to manage the operations of EVSU STORE. By automating key administrative tasks, the software aims to improve store efficiency and productivity, enabling the staff to focus on providing better customer service.

**2.2 Product Functions**

During the meeting, the primary functions of the software were defined as follows:

Inventory Management: The software will enable the store personnel to track and manage the store's hardware components inventory efficiently.

Sales Tracking: It will record and process customer purchases and orders, providing valuable insights into sales performance.

Purchase History Recording: The software will maintain a historical record of all past purchases, facilitating the identification of customer preferences and trends.

Customer Information Management: The system will store and manage customer details to enhance personalized customer service.

Supplier Recommendation: EVSU\_Store will provide recommendations for suitable hardware component suppliers to streamline the procurement process.

Component Organization: Hardware components will be organized based on compatibility, simplifying the assembly of complete personal computers.

**2.3 User Characteristics**

The participants agreed that the main users of the software would be the store manager and the sales staff. As such, the software will be designed with a user-friendly interface, considering that these users possess basic computer skills and have knowledge of the hardware components sold in the store.

**2.4 Constraints**

The team discussed various constraints that the software must adhere to, including:

Compatibility: The software must be compatible with both Windows and Linux operating systems to cater to different user environments.

Programming Language: It was decided that the software will be developed in the Java programming language, ensuring an object-oriented approach to the development.

Database Choice: The software will use a non-MySQL database, with MongoDB being selected as an alternative to manage the data.

Security Requirements: To protect sensitive data, such as user personal information and payment details, strong encryption will be employed during transmission and storage. Additionally, robust authentication mechanisms, such as strong passwords and two-factor authentication, will be implemented to verify user identities.

**2.5 Assumptions and Dependencies**

During the meeting, several assumptions and dependencies were identified:

Access to Computers: It is assumed that all personnel will have access to a computer with the necessary specifications to run the software effectively.

Database Dependency: The software's functionality will depend on the availability and proper functioning of the MongoDB database. Initially, text files will be used to simulate the database to obtain information from the console.

**2.6 Apportioning of Requirements**

The team decided to divide the software's functionalities into modules to facilitate development and maintenance. These modules will include:

Inventory Management

Sales Tracking

Purchase History Recording

Customer Information Management

Supplier Recommendation

Payment System

Online Store (tentative)

API Integration for Personalized Text Generation (tentative)

Each participant was assigned to oversee the requirements gathering for specific modules, and the next meeting is scheduled for [Insert Next Meeting Date] to review the gathered requirements and discuss the progress made on the development plan.