**Bangabandhu Sheikh Mujibur Rahman Science & Technology University, Gopalganj-8100**



**Project Report on**

**“Store Management System”**

**Jamil Rayhan**

Computer Science & Engineering

ID: 18CSE061

Session: 2018-19

Department of Computer Science & Engineering,

Bangabandhu Sheikh Mujibur Rahman Science and Technology University. Gopalganj, Bangladesh

**“Store Management System”**

Submitted to the Department of Computer Science and Engineering (CSE), in partial fulfillment to the requirements for the degree of First year second semester.

Submitted By

**Jamil Rayhan**

Computer Science & Engineering

ID: 18CSE061

Session: 2018-19

Supervised By

**Dr. Saleh Ahmed**

Associate Professor

Department of Computer Science and Engineering

Faculty of Engineering

Bangabandhu Sheikh Mujibur Rahman Science and Technology University,

Gopalganj – 8100

February, 2023

To,

**DR. SALEH AHMED**

Associate Professor,

Department of Computer Science and Engineering

Bangabandhu Sheikh Mujibur Rahman Science & Technology University

Gopalganj-8100

Subject: Submission of Project Paper on “**Store Management System**”

Dear Sir,

I am writing this letter to formally submit my project **Store Management System**. This project has been a challenging and rewarding experience for me and I am proud to present the final outcome.

I have put in a lot of hard work and effort to complete it successfully. I believe that the project meets all of the requirements that were set forth at the beginning of the project.

I have included a detailed report outlining the project process, including any challenges that we faced and how I overcame them.

I would like to thank you for the opportunity to work on this project. I am confident that the work I had done will meet your expectations. If there is anything else you need, please don’t hesitate to reach out.

Thank you for your time and consideration.

Sincerely,

**Jamil Rayhan**

Computer Science & Engineering

ID: **18CSE061**

Session: 2018-19

**CERTIFICATE OF COMPLETION**

Student’s Name: Jamil Rayhan

Student’s ID: 18CSE061

Project Title: **Store Management System**

I certify that this project “**Store Management System**” is the original work of the above-named candidates and has been done under my supervision. The work has never been submitted anywhere. It’s only submitted to Bangabandhu Sheikh Mujibur Rahman Science and Technology University. I am the undersigned, recommend that the project completed by the student listed above, in partial fulfillment of B.Sc. Engineering degree requirements, be accepted by the Department of Computer Science and Engineering, Bangabandhu Sheikh Mujibur Rahman Science and Technology University for deposit.

**Supervisor Approval\***

………………………………..

**DR. SALEH AHMED**

Associate Professor,

Department of Computer Science & Engineering

Bangabandhu Sheikh Mujibur Rahman Science & Technology University

Gopalganj-8100

**ACKNOWLEDGEMENT**

I would like to express my sincere gratitude to my supervisor **DR. SALEH AHMED**, Associate Professor, Department of Computer Science & Engineering, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj, Bangladesh. For providing us with invaluable guidance, comments, and suggestions throughout the course of the project.

I perceive this as a good opportunity for our career development.

I am very grateful to the great creator for letting me to complete the project.

Sincerely,

JamilRayhan

Computer Science & Engineering

ID: **18CSE061**

Session: 2018-19

**ABSTRACT**

This project presents a Departmental Store Management System that streamlines operations for improved efficiency and customer service. The system offers a user-friendly interface with essential functionalities, including calculating bills, adding goods, editing goods, displaying all items, searching for specific products, deleting goods, and exiting the system. By integrating these features, the system enhances inventory management, facilitates sales transactions, and provides a seamless shopping experience for customers.

The "Calculate Bill" function enables accurate and efficient billing processes, ensuring customers receive correct invoices. The "Add Goods" feature allows store personnel to easily input new items into the inventory system, while "Edit Goods" allows for easy updates and modifications to existing product information.

The "Display All" functionality provides a comprehensive overview of all fashion wear items available in the store, aiding in inventory management and improving customer assistance. The "Search" feature enables quick and precise product searches based on various criteria, facilitating efficient item retrieval.

The "Delete Goods" function allows for the removal of discontinued or obsolete fashion wear items from the system, ensuring accurate inventory records. Finally, the "Exit" option allows users to safely exit the system, maintaining data integrity and system security.

By implementing the Store Management System, stores can enhance their operational efficiency, improve inventory control, and provide a seamless shopping experience for customers. The system's user-friendly interface and integrated functionalities contribute to streamlined processes and optimized resource utilization, ultimately leading to improved store performance and customer satisfaction.

Table of Contents

[1. Introduction: 7](#_Toc140524193)

[1.1 Introduction: 7](#_Toc140524194)

[1.2 Motivation & Aims: 7](#_Toc140524195)

[1.3 Objectives: 8](#_Toc140524196)

[2. System Analysis: 9](#_Toc140524197)

[2.1 System Environment: 9](#_Toc140524198)

[2.2 Software Requirement Specification: 9](#_Toc140524199)

[3. System Design: 10](#_Toc140524200)

[3.1 Features of the Project: 10](#_Toc140524201)

[3.2 Data Flow Diagram: 11](#_Toc140524202)

# 1. Introduction:

## 1.1 Introduction:

The purpose of this project is to develop a Store Management System that aims to streamline and optimize the operations of a departmental store. In today's competitive retail industry, efficient management of inventory, sales, and customer data is crucial for ensuring smooth operations and providing an exceptional shopping experience. The Store Management System will serve as a comprehensive solution to address these challenges and improve overall store performance.

## 1.2 Motivation & Aims:

The motivation behind developing this Store Management System is to overcome the limitations and inefficiencies associated with manual store management processes. Traditional methods of managing inventory, sales, and customer data often lead to errors, delays, and difficulties in data retrieval. This project seeks to leverage technology to automate and streamline these processes, resulting in improved accuracy, efficiency, and customer satisfaction.

The primary aim of the Store Management System is to provide an integrated platform that effectively manages inventory, tracks sales, and facilitates seamless customer interactions. By automating various tasks, such as calculating bills, adding and editing goods, and generating reports, the system aims to enhance operational efficiency, reduce manual errors, and save valuable time for store personnel.

## 1.3 Objectives:

The specific objectives of the Store Management System project include:

1. Designing and developing a user-friendly interface that enables easy navigation and efficient access to essential functionalities.
2. Implementing robust inventory management features to accurately track stock levels, manage supplier information, and facilitate smooth stock replenishment.
3. Incorporating sales tracking capabilities, including point-of-sale functionality, transaction processing, and sales analysis, to monitor and analyze sales performance in real-time.
4. Designing a comprehensive search functionality that allows users to quickly locate specific products based on various criteria, improving item retrieval and customer assistance.
5. Implementing data management features to capture and store customer information, enabling personalized marketing campaigns and enhanced customer relationship management.
6. Conducting thorough testing and evaluation to ensure the system's functionality, usability, and reliability.

By achieving these objectives, the Store Management System aims to provide a reliable and efficient solution for departmental stores to manage their operations effectively, optimize resource utilization, and ultimately enhance customer satisfaction.

# 2. System Analysis:

The system analysis phase of the Store Management System project involves assessing the current system environment and defining the software requirements for the development of the new system. This phase helps in understanding the existing challenges and identifying the functionalities and features needed to address them effectively.

## 2.1 System Environment:

The system environment encompasses the hardware and software components required to support the Store Management System. This includes the computers, servers, operating systems, and network infrastructure necessary for system deployment. Additionally, any specific software dependencies or compatibility requirements need to be identified to ensure seamless integration and optimal system performance.

## 2.2 Software Requirement Specification:

The Software Requirement Specification (SRS) document outlines the detailed functional and non-functional requirements of the Store Management System. It serves as a blueprint for system development and guides the design and implementation process. The SRS document includes the following components:

1. Functional Requirements: This section describes the specific functionalities and features of the Store Management System. It includes requirements related to inventory management, sales tracking, customer management, reporting, and user management. Each requirement is defined with clear input-output behavior and expected outcomes.
2. Non-functional Requirements: Non-functional requirements focus on the system's performance, usability, security, and scalability aspects. This includes requirements related to system response time, user interface design, data security measures, system reliability, and the ability to handle a large volume of data.
3. User Interface Design: The SRS document also includes the user interface design specifications, outlining the layout, navigation, and visual elements of the system. This ensures a user-friendly and intuitive interface that promotes ease of use and efficient task completion for store personnel.
4. System Constraints: Any specific limitations or constraints that need to be considered during system development and deployment are documented in this section. This may include budgetary constraints, hardware limitations, or specific regulatory requirements that the system must adhere to.

The system analysis phase provides a solid foundation for the development of the Store Management System by identifying the system environment and defining the detailed software requirements. This analysis helps in aligning the project objectives with the needs of the departmental store, ensuring that the developed system effectively addresses the existing challenges and provides the desired functionalities. If there is any specific information or additional details you would like to provide about the project, please let me know.

# 3. System Design:

## 3.1 Features of the Project:

The Store Management System encompasses various features designed to streamline departmental store operations and enhance efficiency. Some of the key features of the project include:

1. Calculate Bill: This feature enables accurate and efficient billing processes, allowing store personnel to calculate bills for customers based on their purchases. It automates the calculation of prices, discounts, and taxes, ensuring customers receive correct and detailed invoices.
2. Add Goods: The Add Goods feature allows store personnel to easily input new products into the inventory system. It includes functionalities for entering product details such as name, description, price, quantity, and supplier information. This feature facilitates the seamless addition of new goods to the store's inventory.
3. Edit Goods: The Edit Goods feature provides the ability to modify and update existing product information. It allows store personnel to make changes to product details such as price, quantity, description, or supplier information. This feature ensures that the inventory records remain accurate and up-to-date.
4. Display All: The Display All feature provides a comprehensive view of all the goods available in the store's inventory. It allows store personnel to easily browse through the product list, view their details, and access relevant information. This feature aids in inventory management and assists store personnel in providing accurate information to customers.
5. Search: The Search feature enables store personnel to quickly search for specific products based on various criteria. It allows them to search by product name, category, price range, or any other relevant attribute. This feature enhances the efficiency of item retrieval, making it easier to locate specific goods for customers.
6. Delete Goods: The Delete Goods feature allows store personnel to remove discontinued or obsolete goods from the inventory system. It ensures that the inventory records are updated and accurate, preventing any confusion or unnecessary clutter in the system.

## 3.2 Data Flow Diagram:

The Data Flow Diagram (DFD) represents the flow of data within the Store Management System. It visually illustrates the processes, data inputs, data outputs, and data storage involved in the system. The DFD helps in understanding the overall data flow and interactions between different components of the system.

The DFD for the Store Management System will depict the flow of data from inputs such as product details, customer information, and billing information, to processes such as calculating bills, adding or editing goods, and generating reports, and finally to outputs such as invoices, inventory reports, and customer receipts. It will also show the data storage entities where data is stored, such as the inventory database, customer database, and transaction records.

The DFD aids in visualizing the system's data flow and ensures that all necessary data inputs and outputs are accounted for in the design and implementation of the system.

If there is any specific information or additional details you would like to provide about the project's features or the Data Flow Diagram, please let me know.

