ACM 321 Project Report: Inventory Management System

# Team Information

* **Section:** [Section Number]
* **Team Name:** [Your Team Name]
* **Team Members:**
  + [Member 1 Name] - [Role/Responsibility]
  + [Member 2 Name] - [Role/Responsibility]
  + [Member 3 Name] - [Role/Responsibility]

# Project Overview

## Objective

[Briefly describe the purpose of your project and what it aims to achieve.]

## Store Type

[Specify the type of store your team chose and why.]

# Design and Architecture

## System Architecture

[Provide a high-level overview of the system design, such as a diagram or brief description.]

## Class Diagram

[Include the class diagram with key classes, inheritance relationships, and interfaces.]

## Database Schema

[Describe the database schema, including table structures and relationships. Attach a diagram if applicable.]

# Features and Functionality

## Key Features

[List the main features implemented in your application, e.g.: - Adding,

updating, and deleting inventory items. - Importing and exporting inventory data. - Managing supplier and sales information.]

## Customization

[Describe the customizations made for your chosen store type and their impact on design.]

# Application Walkthrough

## GUI Overview

[Provide screenshots of your GUI with brief descriptions of the functionality of each screen.]

## Sample Workflow

[Explain a sample use case scenario, e.g., how a user would add a new inventory item.]

# Object-Oriented Principles

## Use of Classes and Objects

[Discuss how you applied classes and objects in your project.]

## Inheritance and Polymorphism

[Describe examples of inheritance and polymorphism used in your project.]

## Interfaces and Abstract Classes

[Explain how interfaces and abstract classes are used in your implementation.]

# Database Integration

## Database Operations

[Explain the CRUD operations implemented in your project.]

## Sample Queries

[Provide examples of SQL queries used in your application.]

# File I/O

## Import/Export Functionality

[Describe the file formats used and how data import/export is implemented.]

## Error Handling

[Discuss how your application handles errors during file operations.]

# Challenges and Solutions

[Describe the challenges your team faced during the project and how you addressed them.]

# Future Improvements

[List potential improvements or additional features that could be added to the project.]

# Conclusion

[Summarize your experience working on the project and the skills your team developed.]

# Appendix

## User Manual

[Provide a detailed user manual, including installation instructions and usage guidelines.]

## References

[List any references, tools, or resources used during the project.]