# South Dakota School of Mines & Technology

# Database Management Systems, Spring 2022

CSC 484-M01

Course Project

Warehouse System Requirement Document

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**1. INTRODUCTION**

This document explains the requirements for the system to be created for CSC 484 Final Project. These requirements were created by Adam and Mathew.

All questions, and complaints, can be directed to this (these) individual(s).

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**2. BACKGROUND AND APPLICATION DOMAIN**

This application is going to be used for a warehouse management system. It could be used for managing products, orders, and other applicable information.

**3. USER AND USE CASES**

Some use cases could be:

1. Customer making a new order
2. Employee looks at all orders
3. Employee looks at available products
4. Employee fulfilling an order

**4. ENTITIES AND THE RELATED ATTRIBUTES**

The following is a list of relations and their attributes:

1. customers
   1. customerID - int
   2. firstName - string
   3. lastName - string
   4. email - string
   5. phoneNumber - int
   6. address - string
2. products
   1. productID - int
   2. productName - string
   3. productPrice - double
   4. productNumberRemaining - int
3. orders
   1. orderID - int
   2. customerID (who ordered)
   3. status - string
   4. employeeID (who fulfilled)
4. orderItems
   1. orderID
   2. productID (what product)
   3. numberOrdered - int
   4. numberFulfilled - int
5. employees
   1. employeeID - int
   2. firstName - string
   3. lastName - string
   4. position - string
   5. salary - double
   6. currentlyEmployed - boolean

**5. RELATIONSHIPS**

The customers table is a list of customers information. The orders table shows which customer placed the order, what the status of the order is, and which employee fulfilled the order. The orderItems table is a list of products in an order, how many were ordered, and how many were actually fulfilled. If the number ordered is more than the number available, the order specifies how many were fulfilled. The products table lists all products, and how many there are remaining. The employee table lists all current and former employees.

**6. EXPECTED QUERIES**

There are some potential queries that would be most common.

1. List all available products
2. List all incomplete orders
3. List all orders
4. List all products in an order
5. List all orders from a customer
6. List all orders fulfilled by an employee