

# Project Report: Online Retail Sales Database Design

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## 1. Introduction

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This project aims to design a relational database schema for an online retail store. The goal is to handle customer orders, product inventories, and payment transactions efficiently using normalization and SQL.

## 2. Abstract

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An e-commerce platform needs a scalable backend system to manage orders, track customers, and analyze sales. This project builds a normalized database with six interconnected tables and sample data using MySQL.

## 3. Tools Used

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- MySQL
- VS Code
- dbdiagram.io
- GitHub

## 4. Steps Involved

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- Identified entities and relationships (Customer, Product, Order, Payment).
- Designed ER Diagram and normalized it to 3NF.
- Wrote SQL scripts for table creation and data insertion.
- Developed SQL JOIN queries for common business reports.

## 5. Conclusion

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The project successfully demonstrates core database concepts such as normalization, entity relationship modeling, and complex querying. It is ready for integration with backend applications.