

# Mockup Project

**Part 1** Database and Queries

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## **Resume**

I rapporten undersøges hvordan man kan implementere en database i PostgreSQL og lave simple forespørgelser efter ønsket data.

## **Abstract**

In this report we'll see how you can implement a database in PostgreSQL and construct simple SQL queries to get desired data.

## Preface

This is a voluntarily project on the second semester of computer science in the course DM576 Database design. The report is short and concise only documenting key decisions since we dedicated only a few hours to the project as a whole.

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# 1 Introduction

The goal of this project is get hands-on experience setting up a database in PostgreSQL and looking up data in it. Furthermore the purpose is about to get feedback. The report reflects and documents the work carried out by us (Denis and Søren) in the project.

## 1.1 Formulation of the problem

Create a database and insert data, then query the data.

## 1.2 Requirements

The database should be deployed in PostgreSQL with appropriate commands to create the tables, by taking into account and enforcing all the integrity constants.

About 5-10 records in each table.

The schema to be implemented is as follows:

```
PRODUCT(ProductID, CategoryID, ProductName, Description)
PRODUCT_CATEGORY(CategoryID, Name, Description)
SUPPLIER(SupplierVAT, SupplierName, Address, Phone, Email)
SUPPLY(InvoiceID, SupplierVAT, Date)
PRODUCT_SUPPLY(InvoiceID, ProductID, Quantity, Value)
SALE(SaleID, Date)
SALE_OF_PRODUCT(SaleID, ProductID, Quantity, Value)
PRODUCT_RETURN(SaleID, ProductID, Date, Quantity)
STOCK(ProductID, Quantity)
```

## 1.3 Scope

There is not much to this project. Just create the database, and discuss the methods of retrieving the data the assignment requires.

## **2 Database implementation**

In this section we'll go through the reasoning behind our implementation of the database. Integrity constraints are discussed but what data have been chosen for the database entries.

### **2.1 Integrity constraints**

### **2.2 Record data**

## 3 Queries

### 3.1

### 3.2