

# Database Design - Bike Rental

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# 1 Requirements

## 2 Conceptual Design

### 2.1 Requirements Analysis

### 2.2 Glossary of Terms

### 2.3 Conceptual Schema Construction

## 3 Logical Design

### 3.1 Conceptual Schema Performance Analysis

#### 3.1.1 Volume Table

#### 3.1.2 Operations Set

#### 3.1.3 Access Tables

### 3.2 E-R Model Restructuring

#### 3.2.1 Redundancy Elimination

#### 3.2.2 Generalization Elimination

#### 3.2.3 Composite Attributes Removal

#### 3.2.4 Primary Identifiers Selection

#### 3.2.5 Final Restructuring Result

### 3.3 Translation to Relational Model

## 4 Physical Design

### 4.1 Table Creation and Population

### 4.2 Triggers

### 4.3 Queries

### 4.4 Procedures and Functions

### 4.5 Views