# Requirements Analysis

**Digital Music Store**

COMP 421 – Database Systems

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## Introduction

### Purpose

This application will store the information and constrains required to sell and distribute music digitally through an online interface. Digital distribution is a great way to sell products which do not require a physical medium eliminates cost of production and ensures nothing will ever be out of stock.

With so much music from around the world it’s impossible for a store to physically carry them all. Even within a single store it’s often difficult to find something a client will truly enjoy. A database can be used to adapt recommendations based on the client’s previous purchases and song reviews.

### Scope and Special Requirements

The music being sold in the online database will cover music from all around the world, in various languages. The system will support trade regions to allow for differences in what music can be sold to customers in different countries.

We will focus on effective organization and categorization of the music, allowing customers to find music based on everything from artist name, language and genre to BPM, country of origin and song file format. A user will also be able to view the most popular songs being sold and filter them based on any criteria they wish. We will also have a recommender system which will find music similar to a customer’s purchases and reviews of songs.

### Terminology

BPM: Beats per minute, the speed of the song.

Rating: A customer’s review of a song from 1 to 5, 1 being the worst and 5 being the best.

Trade Region: A set of countries which dictate what songs are available and their pricing.

### Resources

None.

### Inspirations

Our database is based on the iTunes and Amazon digital music stores.

## Database Description

### Entities and Attributes

### Relationships

#### Relationships

### Functional Requirements

### Unique and Difficult Aspects (?)

### Constraints and Special Requirements – example in written assignment (unreleased)

# Entity Relationship Diagram

# Relations Based on E/R Diagram

## Relations

## Opportunities to Combine Redundancies