

# CS-322 Introduction to Database Systems

## Project Deliverable #1

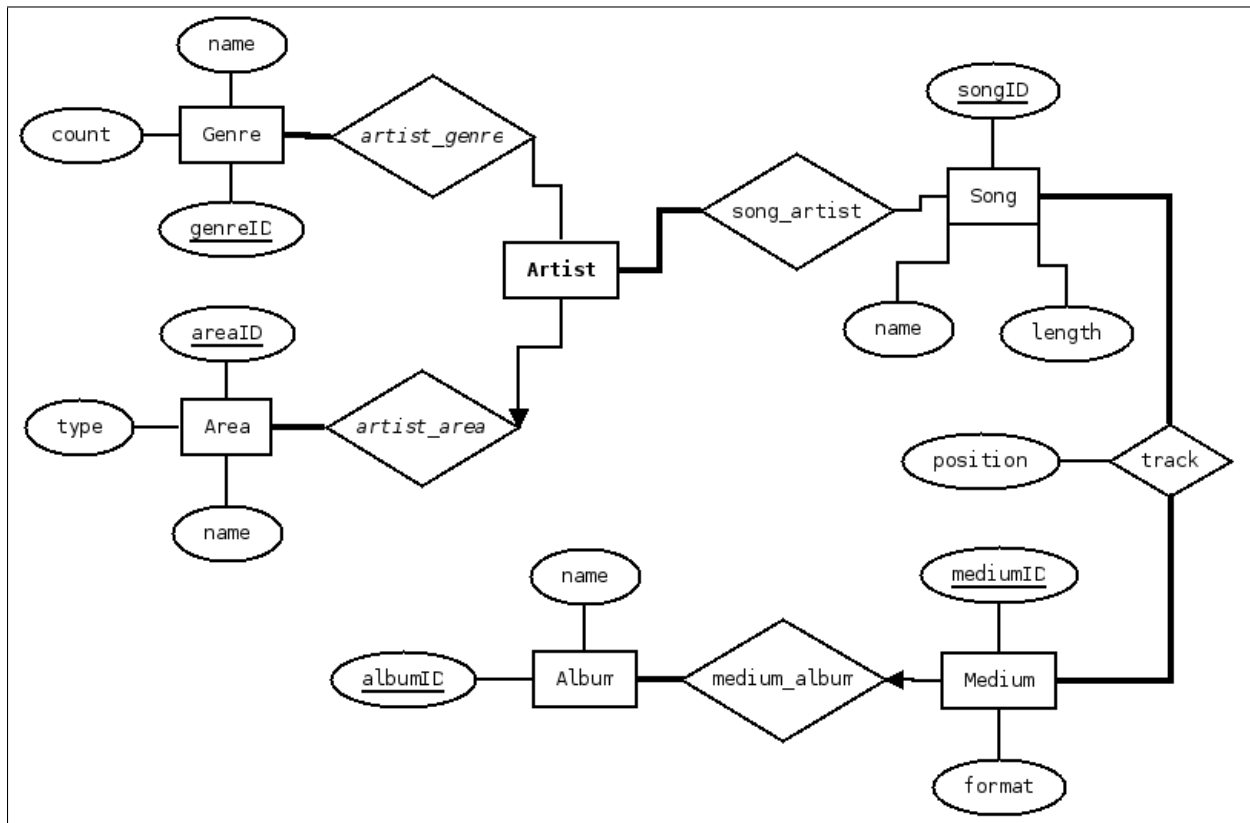
Due on Sunday, March 23<sup>rd</sup>, 2014

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ÉCOLE POLYTECHNIQUE  
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## ER modeling



```

CREATE TABLE Areas (
  areaID CHAR(20),
  name CHAR(40),
  type CHAR(20),
  PRIMARY KEY (areaID) )

CREATE TABLE Genres (
  genreID CHAR(20),
  name CHAR(40),
  type CHAR(20),
  count INTEGER,
  PRIMARY KEY (genreID) )

CREATE TABLE Artists (
  artistID CHAR(20),
  name CHAR(40),
  type CHAR(20),
  areaID CHAR(20),
  PRIMARY KEY (artistID),
  FOREIGN KEY (areaID) REFERENCES Areas )

CREATE TABLE Songs (
  songID CHAR(20),
  name CHAR(40),

```

```
25  length INTEGER,  
    PRIMARY KEY (songID) )  
  
CREATE TABLE Albums (  
30  albumID CHAR(20),  
    name CHAR(40),  
    PRIMARY KEY (albumID) )  
  
CREATE TABLE Mediums (  
35  mediumID CHAR(20),  
    name CHAR(40),  
    format CHAR(20),  
    albumID CHAR(20),  
    PRIMARY KEY (mediumID),  
    FOREIGN KEY (albumID) REFERENCES Albums )
```

SQL script for entities table creation

```
CREATE TABLE Artist_genre (  
    artistID CHAR(20) NOT NULL,  
    genreID CHAR(40),  
    PRIMARY KEY (artistID, genreID),  
5    FOREIGN KEY (artistID) REFERENCES Artists,  
    FOREIGN KEY (genreID) REFERENCES Genres )  
  
CREATE TABLE Song_artist (  
10  songID CHAR(40) NOT NULL,  
    artistID CHAR(20),  
    PRIMARY KEY (songID, artistID),  
    FOREIGN KEY (songID) REFERENCES Songs ,  
    FOREIGN KEY (artistID) REFERENCES Artists )  
  
15 CREATE TABLE Tracks (  
    songID CHAR(40),  
    mediumID CHAR(20),  
    position INTEGER,  
    PRIMARY KEY (songID, mediumID),  
20  FOREIGN KEY (songID) REFERENCES Songs ,  
    FOREIGN KEY (mediumID) REFERENCES Mediums )
```

SQL script for relations table creation