

Matthew O'Connor Project Schema Design

My project design would be to create a database that represents the popular music streaming service known as Spotify. The project would not represent all of Spotify(as that would be an enormous undertaking), but it would aim to capture some basic functionality. The goal would be to have a User, and the User has friends and Playlists, and Playlists have songs. Some queries that could be run would be seeing who is friends with who, and who has made what Playlist.

The first entity is the User. A User has a primary key which is their password. This is the primary key because I do not plan on allowing Users to have the same name, so User names will be unique. The User then also has a password, and up to 5 friends. I decided to keep the number of friends small to make the project more manageable. The next entity is a Playlist. A Playlists primary key is the combination of its title along with the username of the User who created it. A User cannot create multiple playlists with the exact same name, but other Users can create a Playlist with the same name of another Users Playlist. A Playlist holds multiple Song titles and artists, and is a grouping of songs created by a user. Finally, we have Songs. Songs are just that, songs. They contain data about their length, title, release date, etc.

User

Username	Password	Friend_One	Friend_Two	Friend_Three	Friend_Four	Friend_Five
L335h4xor	h4x	xxN0scopex x	MLGg4mer	null	null	null
Bob	password	Mary	jack	alice27	Frank5	amy
Homer	Donuts	Marge	Lisa	Bart	Maggie	Null
Spock	LiveLongand Prosper	Kirk	Bones	Scotty	Null	Null

Username	Playlist Title	Artist/Title1	Artist/title2	Artist/Title3	Artist/Title 4	Artist/Title5
Frank	Jams	YellowSubmarine/Beatles	Jesus of suburbia /Green Day	LostKitten /Metric	Null	Null
Matt	Cool Stuff	Blood / In This Moment	Unbreakable Heart / Three Days Grace	Paralyzer / Finger eleven	Null	Null
Some guy	playlist1	Song1/artist1	Song2/artist2	null	null	null

Note: In the actual database the song and artist rows will be separate, it was just a lot to list out so I condensed it.

Song_Title	Artist	Album	Genre	Year	Length(seconds)
Cool jams	Jam bros	All the jams	Blues	1997	300
White Rabbit	Egypt Central	White Rabbit	Rock	2011	217

