DBMS LAB

ENTITY RELATIONSHIP MODEL

Scenario

Music player (Spotify)

Tables

- Song
- User
- Favorites
- Artist
- Album
- Composer
- Theme

STEP 1 -ENTITY IDENTIFICATION

S.NO	ENTITY NAME	DESCRIPTION	TYPE
1	Song	A music audio	Roles
2	User	A person listening to the songs	Roles
3	Favorite	A song which is liked by the user	Events
4	Artist	A person who sang the song	Roles
5	Theme	A group of songs put together under a theme	Events
6	Composer	A person who composes the music	Roles
7	Album	A movie to which the song belongs to	Events

STEP 2 -RELATIONSHIP IDENTIFICATION

#	SONG	USER	FAVORITE	ARTIST	THEME	COMPOSER	ALBUM
SONG		Listened by	Added to	Sung by	Grouped into	Composed by	Belongs to
USER	Listens to		Adds to				
FAVORITE	Consists of	Added by					
ARTIST	Sings						
THEME	Groups						
COMPOSER	Composes						
ALBUM	Consists of						

STEP 3 -MAPPING CARDINALITY

LEFT ENTITY L	RIGHT ENTITY R	L - > R RELATIONSHIP	L - > R CARDINALITY	R -> L RELATIONSHIP	R - > L CARDINALITY
Song	User	One Song last listened by One User	1 -> 1	One User listened to One Song in the last	1 ->1
User	Favorites	One User adds Zero/Many songs to Favorites	1 -> M	Zero/Many songs added to Favorites by One User	M -> 1
Song	Artist	One Song sung by One/Many Artist	1 -> M	One Artist sings One/Many Songs	1 -> M
Song	Composer	One Song is composed by One/Many Composer	1 -> M	One Composer composes One/Many Songs	1 -> M
Song	Album	One Song belongs to One & Only Album	1 -> 1	One album consists of 1/Many Songs	1 -> M
Song	Theme	One Song grouped into one/Many Themes	1 -> M	One Theme consists of 1/Many Songs	1 -> M

STEP 4 -DEFINE PRIMARY KEY AND OTHER ATTRIBUTE

S.NO	ENTITY NAME	KEY	OTHER ATTRIBUTES
1	Song	Song Id	Song Name , Duration , Language , Album Id
2	User	User Id	User name , Mobile number , Email , Country , State , City ,
3	Favorite	Song Id , User Id	Duration
4	Artist	Artist Id	Artist Name , Artist Description
5	Theme	Theme Id	Theme Name , Language , Genre , No of Songs
6	Composer	Composer Id	Composer Name , Composer Description
7	Album	Album Id	Album Name , No of Songs