Uniwersytet im. Adama Mickiewicza w Poznaniu Wydział Matematyki i Informatyki



Online Music Shop

STUDENT'S NAME

Leading classes: prof. UAM dr hab. Marek Wisła

Database Description:

Primary Purpose: a music selling company wants to keep track of its sale of music tracks and also need to manage a data related to this sale. Company needs to store the artist they have in relationship with company their name and songs sung by them which the company is selling in track and also a label number.

Basic Requirements: Each artist has its unique ID and name, each song has its title and play time, and a record label will be with it. Need to keep record of track that which song is sung by which artist and all the sales of their tracks should be record.

Description: as the company needs to store the basic information of artist, song sung by him and in which tracks he sang songs and all sales data of the tracks, so there is table Artists to store Artist information, Songs to store a song information, Record Label to define standards type of labels Tracks to keep information about tracks and transactions table is a dynamic table keeping record of each sale of track.

Report Description: There are total of 5 reports that will show the following.

- What are the total track sales for each artist?
- What are the total track sales for artist 'Maroon 5'?
- Best-of" tracks for each Artist
- Songs and their tracks with total units of Sold
- Top 5 Songs that has sold most

Table Description:

Table tblArtists:

Column	Description	Data Type	Empty	Standard	Link
			Value	Value	
ArtistID	Row Identifier	int	No	Varies	
ArtistName	Name of the Artist	Varchar(100)	No		

Table Record Label:

Column	Description	Data Type	Empty Value	Standard Value	Link
LabelID	Row Identifier	int	No	Varies	
LabelName	Name of the Record Label	Varchar(100)	No		

Table tblSongs:

Column	Description	Data Type	Empty	Standard	Link
			Value	Value	
SongID	Row Identifier	int	No	Varies	
SongTitle	Name of the Song	Varchar(100)	No		
PlayTime	Minutes or Hours The play	Time	No		
-	time of Sonf				

Table tblTracks:

Column	Description	Data	Empty	Standard Value	Link
		Type	Value		
TrackID	Row Identifier	int	No	Auto	
				Incremented	
ArtistID	The Artist ID	int	No		FK
SongID	ID of the Song	int	No		FK
LabelID	ID of the record Label	int	No		FK
TrackSales	How many times this track sold	int	No		

Table tblTransaction:

Column	Description	Data	Empty	Standard Value	Link
		Type	Value		
TransactionID	Row Identifier	int	No	Auto	
				Incremented	
TrackID	The Track ID	int	No		FK
Transaction Date	Date if Transaction	Date	No		
UnitSold	Number of units Sold in this	int	No		
	track				

Table tblCustomers

Column	Description	Data Type	Empty	Standard	Link
			Value	Value	
CustID	Row Identifier	int	No	Auto	
				Incremented	
CustName	The Customer Name	Varchar (50)	No		
Address	Address of Customer	Varchar (50)	No		
PhonenNumber	Customer Phone Number	Varchar (20)	No		
City	City in which Customer	Varchar (50)	No		
	Lives				

Table tblReviews

Column	Description	Data Type	Empty	Standard	Link
			Value	Value	
ReviewID	Row Identifier	int	No	Auto	
				Incremented	
Description	Comments about song	Varchar (100)	No		
Raitng	Score near to customer	int	No		
TrackID	The Track ID	int	No		FK
CustID	The Customer ID	int	No		FK

Reports:

Report 1: What are the total track sales for each artist?

SHOW: ArtistID,

ArtistName,

Total Track Sales for the artist AS TotalTrackSales

	ArtistID	ArtistName	TotalTrackSales
•	1	Lady Gaga	1
	2	Phil Collins	3
	3	Maroon 5	2
	4	Elvis Presley	23
	5	The Beatles	18
	6	Paul McCartney	7
	7	John Lennon	9
	8	Frank Sinatra	6
	9	James Brown	0
	10	Taylor Swift	8

Report 2: A "Best-of" track for a given artist is a track that sells more copies than the average track sales for that artist. What are the "Best-of" tracks for each Artist?

SHOW: Artist ID,

Artist Name

Song Title

Track Sales

	ArtistID	ArtistName	SongTitle	TrackSales
•	7	John Lennon	I Wanna Hold Your Hand	6
	5	The Beatles	I Wanna Hold Your Hand	6
	11	Beyance	Please Please Me	9
	5	The Beatles	Please Please Me	7
	5	The Beatles	Hard Day's Night	5
	4	Elvis Presley	Hound Dog	8
	4	Elvis Presley	Poker Face	9
	19	Sam Smith	Another Day in Paradise	11

Report 3: What are the total track sales for artist 'Maroon 5'?

SHOW: ArtistID,

ArtistName,

Total Track Sales for the artist AS TotalTrackSales

SQL:

	ArtistID	ArtistName	TotalTrackSales
•	3	Maroon 5	2

Report 4: Show songs and their tracks with total units of Sold?

 $SHOW:\ Song Title,$

TrackSales,

UnitSold

	SongTitle	TrackSales	UnitsSold
•	Hard Day's Night	1	5
	Hound Dog	2	3
	Poker Face	9	16
	Starting Over	7	9
	I Wanna Hold Your Hand	6	9
	Band on the Run	0	19
	Please Please Me	9	13
	All You Need is Love	0	12
	My Way	4	4

Report 5: Track Rated 4 or More than 4 by a Customer

SQL:

	TrackID	ArtistID	SongID	LabelID	TrackSales	ReviewID	Description	TrackID	CustID	Rating
•	6	6	104	1004	7	1	Fabulas Song	6	2	5
	6	6	104	1004	7	2	Good Enough to hear	6	2	4
	6	6	104	1004	7	3	Outstanding	6	2	5