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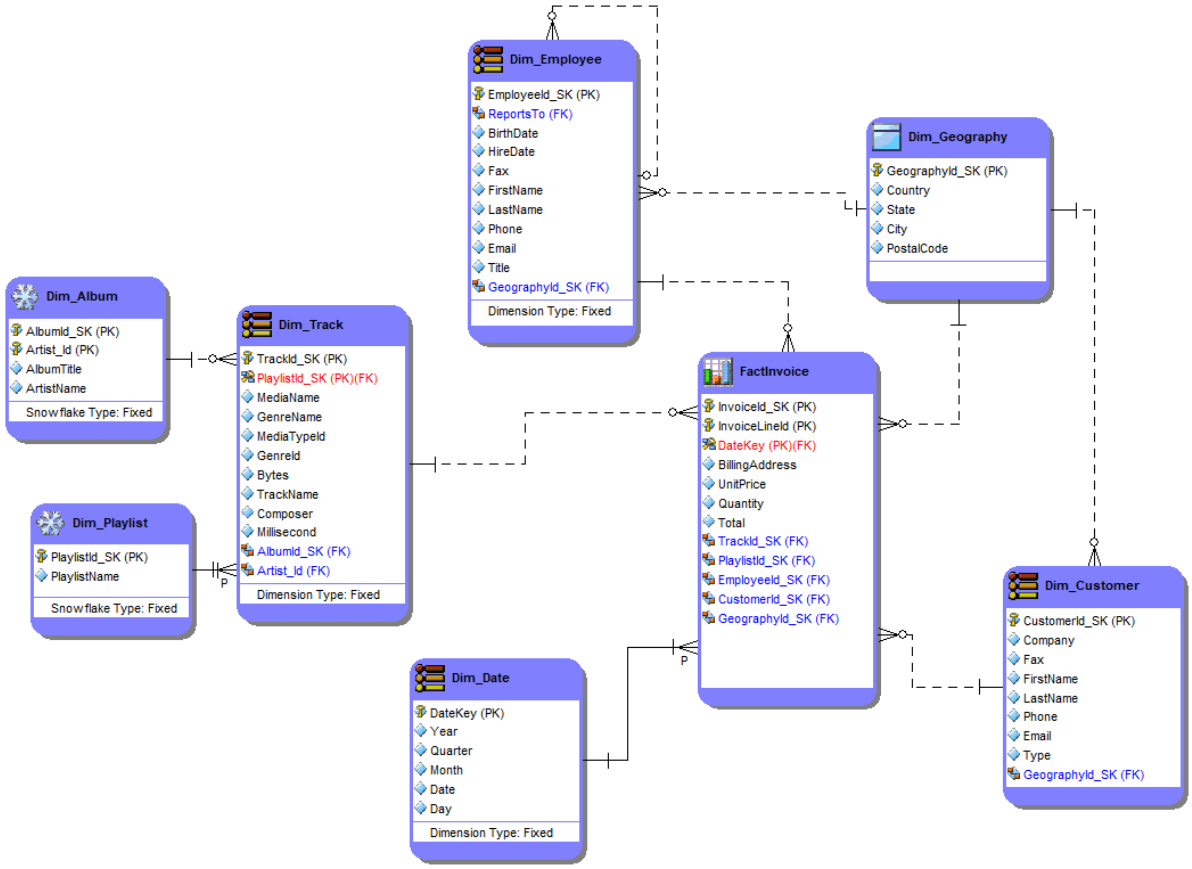
Assignment: Chinook - Create Dimensional Model

Convert ER Model to Dimensional Model



o **List fact(s) & dimensions**

Facts:

1. FactInvoice

Dimensions:

1. Dim_Album
2. Dim_Customer
3. Dim_Date
4. Dim_Employee
5. Dim_Geography
6. Dim_Playlist
7. Dim_Track

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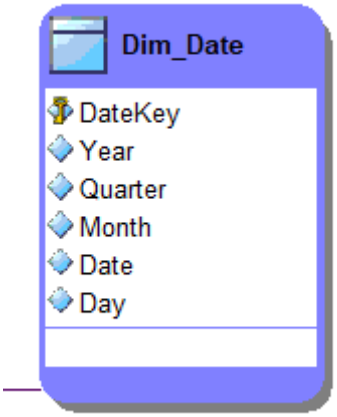
o What tables will be combined?

The tables Artist, MediaType, Playlist and Genre only has Primary Keys and their names. Hence, they can be combined with the tables which were referenced by the keys resulting into combining the Playlist table with PlaylistTrack, MediaType and Genre tables with the Dim_Track and Artist with the Dim_Album.

o Create date/calendar dimension



o Create tables with surrogate SKs, NKs & FKs
o Determine table attributes

Table	Column Name	Keys
Dim_Album	**AlbumId_SK**	**PK, SK**
	Artist_Id	
	AlbumTitle	
	ArtistName	
Dim_Playlist	**PlaylistId_SK**	**PK, SK**
	PlaylistName	
Din_Track	**TrackId_SK**	**PK, SK**
	PlaylistId_SK	**PK, FK**
	MediaName	
	GenreName	
	MediaTypeId	
	GenreId	
	Bytes	
	TrackName	
	Composer	

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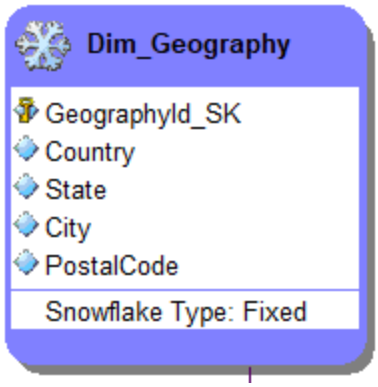
	Millisecond	
	AlbumId_SK	**FK**
	Artist_Id	**FK**
Dim_Date	**DateKey**	**PK**
	Year	
	Quarter	
	Month	
	Date	
	Day	
Dim_Employee	**EmployeeId_SK**	**PK**
	ReportsTo	**FK**
	BirthDate	
	HireDate	
	Fax	
	FirstName	
	LastName	
	Phone	
	Email	
	GeographyId_SK	**FK**
Dim_Geography	**GeographyId_SK**	**PK, SK**
	Country	
	State	
	City	
	PostalCode	
Dim_Customer	**CustomerId_SK**	**PK, SK**
	Company	
	Fax	
	FirstName	
	LastName	
	Phone	
	Email	
	GeographyId_SK	**FK**
FactInvoice	**InvoiceId_SK**	**PK, SK**
	InvoiceLineId	**PK**
	DateKey	**PK, FK**
	BillingAddress	
	UnitPrice	
	Quantity	

	Total	
	TrackId_SK	**FK**
	PlaylistId_SK	**FK**
	EmployeeId_SK	**FK**
	CustomerId_SK	**FK**
	GeographyId_SK	**FK**

o Create geography table



o Map source table(s) to target table

The target table is the FactInvoice Table since all the dimensions are connected to the FactInvoice Table and has all the summarized data that can be aggregated to get us the values. The Source tables are all the dimensions from where all the values are passed to the Fact Table.

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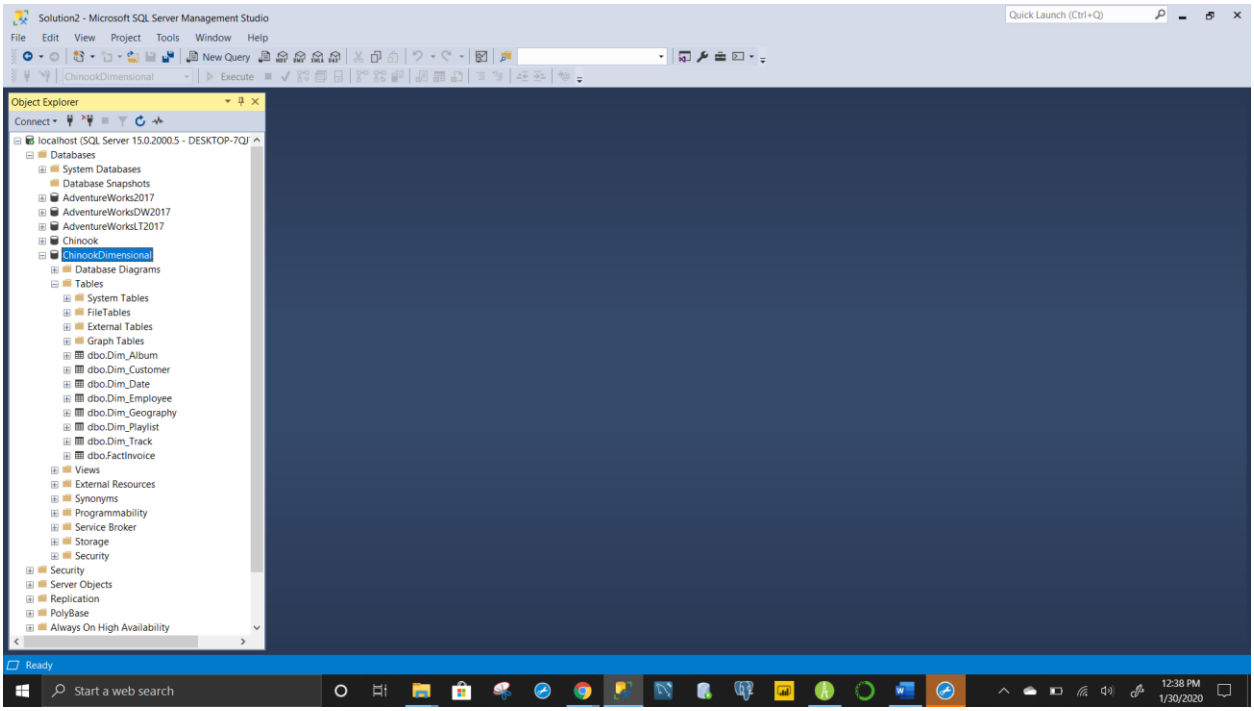
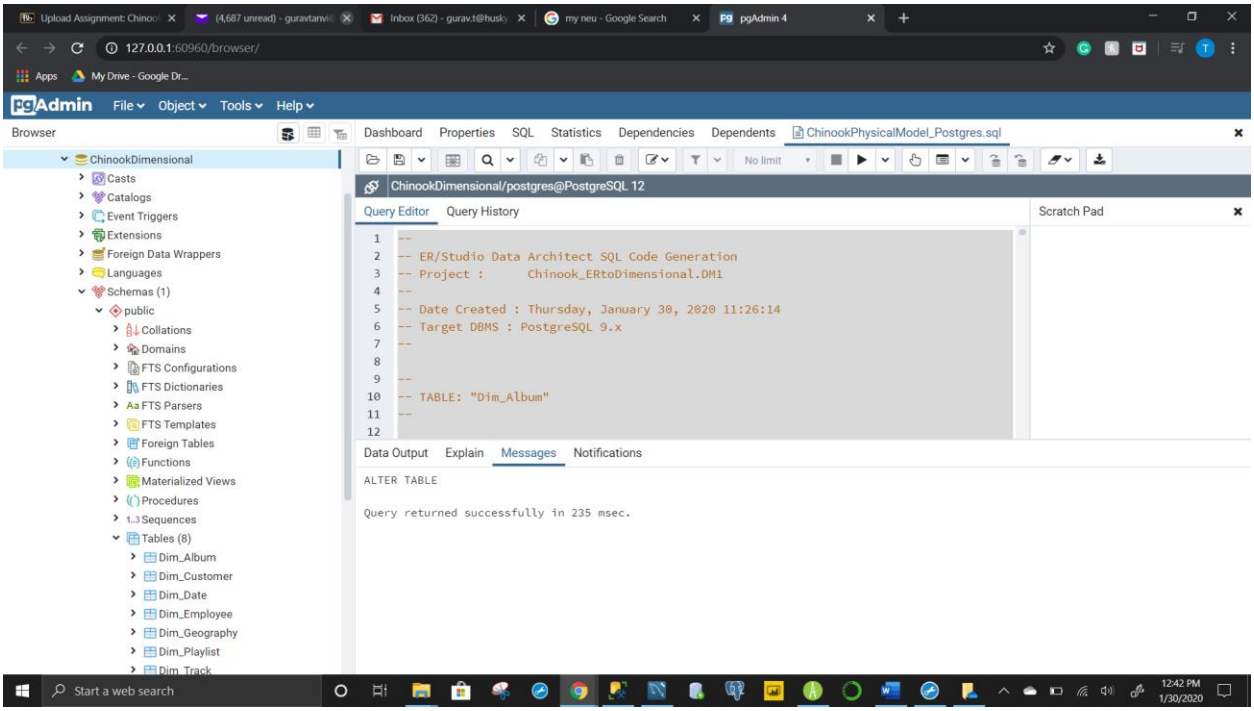
Database Creation on Oracle, MS SQL Server, MySQL and PostgreSQL





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