Group Project 1: Part 1

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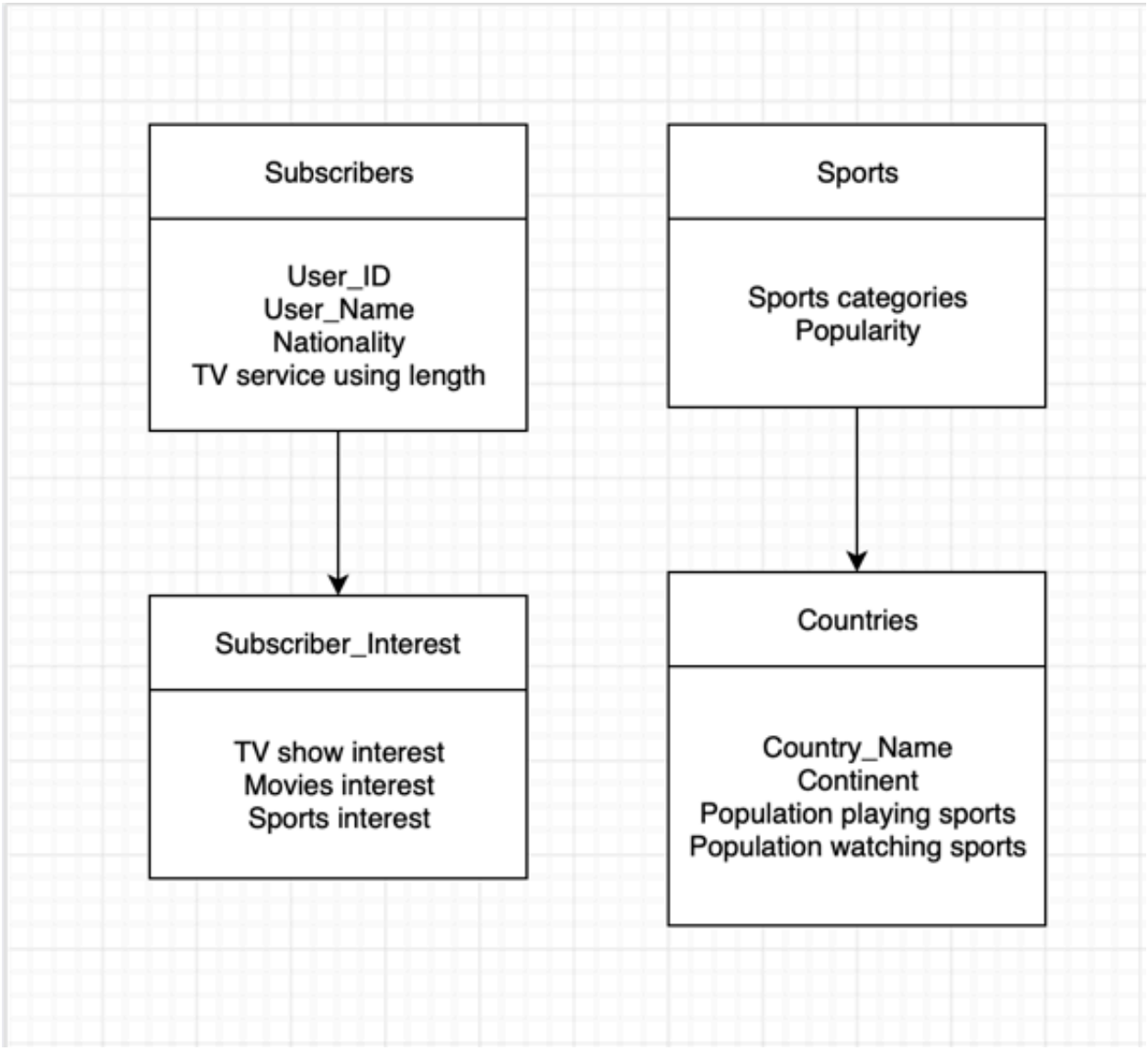
Three ideas for a database:

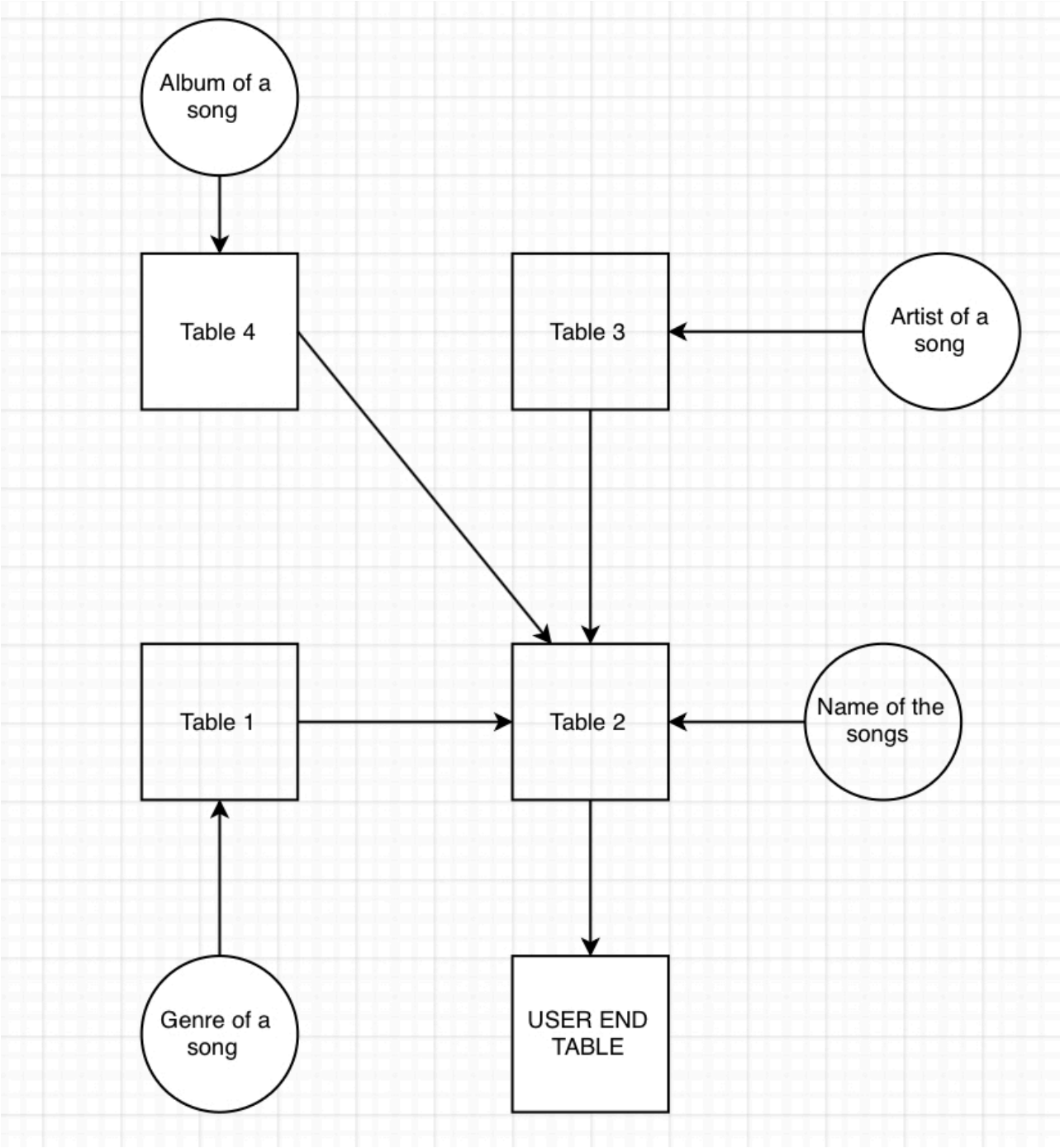
Sports: Sports are popular around the world. Playing sports is a great way to communicate with people and good for personal health, and professional sports games are also entertaining to watch. People in different countries have various interest in sports games. For instance, football is the most popular sport to watch in the United States, followed by baseball and basketball. However, most countries in South America, Europe and Asia, soccer is no doubt more popular than any other sport. Different sports are played all over the world as hobbies, careers or as a part of fitness regimes. Some sports have grown to attract billions of fans. As a result, sports became a massive business. For example I am a soccer fan, and I'm always interested in watching European soccer games, so I set up TV cables and paid channels like Bein Sports, Skysports, ESPN just for watching soccer games. However, nowadays TV cable service is not convenient compared to online websites or apps on smartphones. It is always hard to catch up a game away home.
Online tv service developed excessively and is gradually replacing the traditional cable service in recent years. Suppose one of the online tv service, for example, Netflix, HBO or Apple TV+, wants to introduce a sports league game and then localize it for the subscribers to watch, then there are some database pre-analysis. The company should purchase the broadcasting right of the league. Then the company will need advertise for this new sports event. All this procedures require strong financial strength. So companies have to consider how much they should spend on the purchase and advertisement. Therefore, a data analysis for the popularity of a certain sport in certain countries is needed.

- End User would be the audience or subscriber
- Entities would be counties, sports, interest, and popularity
- Attributes would be The United States, France, China or football, soccer, tennis.


Subscribers
User_ID
User_Name
Nationality
TV service using length
Sports
Sports categories
Popularity
Subscriber_Interest
TV show interest
Movies interest
Sports interest
Countries
Country_Name
Continent
Population playing sports
Population watching sports

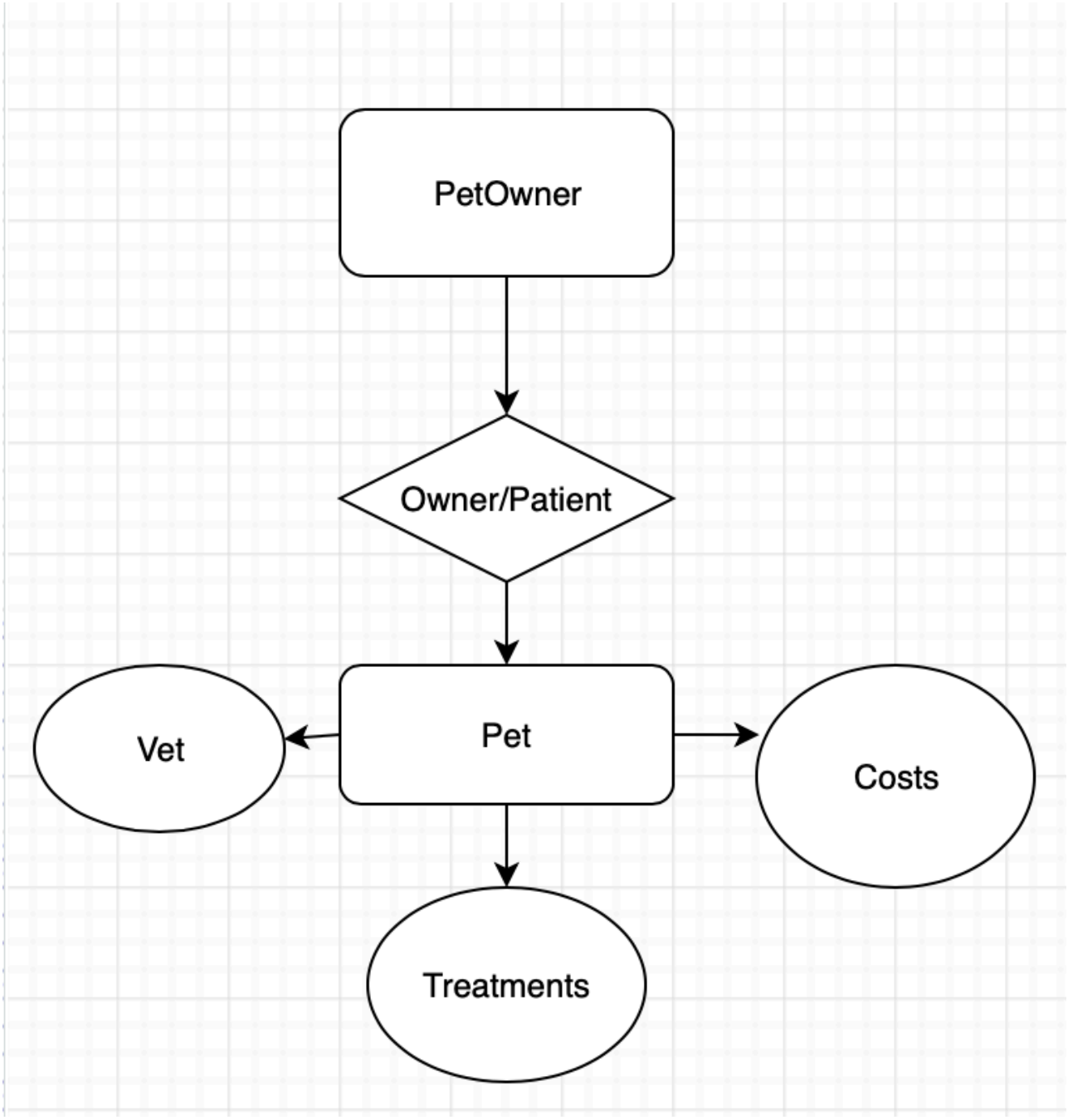
Music: This database will basically contain the songs of a user, showing the end user table (Which contains the most listened songs and is linked to the other tables) , the genre of the songs, the name of the songs the artist of the songs, and the album of a song. The idea is borrowed from another businesses like Apple Music or Spotify. This idea is unique because the data tables will be linked in a way where there will be less errors in the categorization of songs. I think that this idea will be great because it will be easy to use, and this will be the main advantage because people will use it everyday. Also, this idea has the potential to add more tables like song length, ratings, similar songs, etc.

- Table 1: This table will be used for the genre of the songs stored in the database. This table will be linked to the song name table. The main constrain is that could be songs that doesn't have a specific genre.
- Table 2: This table will contain name of the song. It will simply contain the name of the song and it will be linked to the end user table. This will be the main way the user searches for a song. There will be no constrains because every song have name.
- Table 3: This table will used for the artist of a song. This table will be linked to the song name because there might be different artists in an album. Also, an important constrain is there are little know artists and that could lead to a song without an artist.
- Table 4: This will contain the album name. This table will be linked to the song name table. This table will be very useful for the user because it will help to user to find more songs that are in the same album. Also, this will avoid confusion because a song can be named the same name but they are in different albums. For example: if you are looking for "come together" by the Beatles the are two albums that have that song the first one is "1" (which is the remastered album) and the second one is "Abby Road" (which is the original album from the Beatles). Another constrain is there are singles (when a one song is released without an album).
- Table 5: This will be the end user table. From here the user will be able to search for songs. Also, this will include the most listened songs. The attributes of this tables will be the other four tables because the other tables will contain all of the information of a song.


Album of a song
Table 4
Table 3
Artist of a song
Table 1
Table 2
Name of the songs
Genre of a song
USER END TABLE

Vet Office: Veterinary clinics may not be seen as businesses however they interact with their patients and their pets in a similar manner. Although this may not be a unique business idea, it still is a potential candidate to have a database that is oriented towards the end user. Having a database that can show a relationship between the pet, pet owner (customer), veterinarian, treatments, and costs could be very useful. This is not limited to the entities above and could also even include future treatment dates, and more. A typical business interaction would basically be for the end user to receive data regarding the entities (cost, veterinarian, treatment) for their pet. The goal for this project would be to create a database that can easily match up the patient to all of their needed records. What would make this idea unique is the fact that the pet owner could also view trends in the pet's health and see an overall record of the associated costs overtime. The end user could also potentially be the veterinarian as they can utilize the database to see trends on the pet's health overtime as well and potential use it to study trends within the animals that they have treated. However, since we are approaching this as a business outlook, the end user would have to ideally be the pet owner.

- End user would be the pet owner that has a one to one entity relationship with the pet
- Entities would be the treatments, costs associated with treatments, and the vetrinarian assigned to the pet
- Attributes would be the Names, Pet Information, etc.


PetOwner
Owner/Patient
Vet
Pet
Costs
Treatments