**Group members :**

* 6210045375
* 6210045260
* 6110545431
* 6110545503
* 6110545511
* 6110545562

**Topic of your KB :**

Suggestion of music that is suitable with the user (Age, language, musical genre, country, gender, fan, histories, …)

**URLs of knowledge sources as references for developing KB :**

<http://millionsongdataset.com/tasteprofile/>

**List of questions that your KB must be able to answer :**

* What is the most listened genre in (country) ?
* Who is the most famous artist in (country) ?
* What is the average age of people that listen (artist) ?
* Which gender listen the most to (genre) ?
* What is the most listened genre in the world ? (complex rule)
* What genre people of (age) years listen the most to in (country) ?
* Which artist is similar to (FanArtist) ?
* What kind of music you are supposed to listen the most ? (based on histories)
* In (country), is the most listened track recorded in (countrylanguage) ?
* What is the most listened music in (country) ?

**KB detail :**

* **Predicate :**

FanOf(x,y) means x is fan of y

Genre(x,y) means the artist x plays genre y

CountryLanguage(x,y) means the language of country x is y

MostListenedTrack(x,y) means the most listened track of x is y

MostListenedTrackC(x,y) means the most listened track in country x is y

MostListenedGenre(x,y) means the most listened genre of x is y

MostListenedGenreC(x,y) means the most listened genre in country x is y

MostListenedArtist(x,y) means the most listened artist of x is y

MostListenedArtistC(x,y) means the most listened artist in country x is y

SimilarTo(x,y) means artist x is similar to artist y

AgeOfListener(x,y) means the age of the listener of artist x is y

GenderOfListener(x,y) means the gender of the major part of listener of artist x is y

ArtistTrack(x,y) means the track which was composed by artist x is y

ListenerCountry(x,y) means the country in which lives listener x is y

ListenerBirthDate (x,y) means the birth date of listener x is y

* **Rules :**

MostListenedArtist(x,y) → FanOf(x,y) If the most listened artist of x is y, x is fan of y

SimilarTo(x,y) ↔ Genre(x,z)∩Genre(y,z) If artists x and y play genre z, x is similar to y

* **Functions :**

A function will take the birth date of listener x and returns his age.

**Facts :**

List of artists (<artist\_name>, <artist\_language>)

List of listener (<listener\_name>, <listener\_age>, <listener\_gender>)

List of countries (<countries\_name>)

List of language (<language>)

List of genre (<genre\_name>)

List of track (<track\_name>, <track\_genre>, <track\_language>)