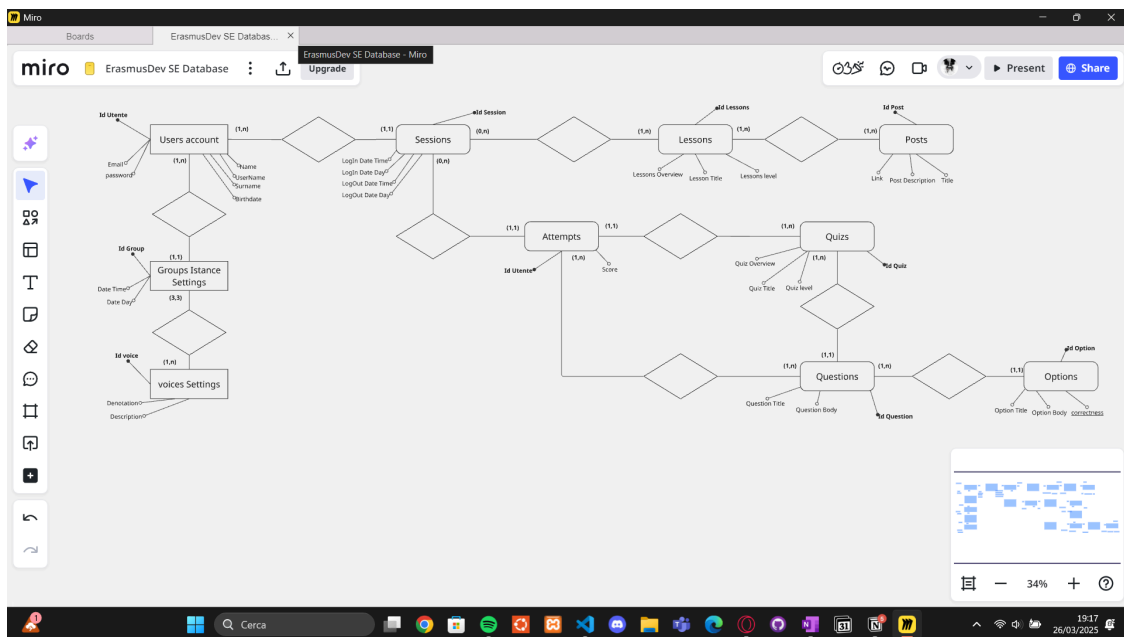# Database Analisys

WorkSpace Link

https://miro.com/app/board/uXjVILeiG4E=/?share_link_id=36394514037

Classes Description ad Analisis

User:

An user ownes an account with his statistics and settings. So for each user setting it is related to a single user , but a single user can be associated to more than one settings group.

Notice that the only valid settings group will be the last one.

Session

Every time a single user logs in the application, a session will be created to identify which activities the user have been performed.

Activities could be Quiz or Lessons:

- Lessons: it is straightly connected to a single session, if a user starts a lessons, this will be marked as done (finding a joint is enogh to identify that feature).

  It is not mandatory do lectures, a single lecture could be related to more than one session .

- Quiz attemps: A quiz attempt will be registerd only if the user will send the results to the database.

  It is not mandatory do Quiz, a single attempt is related to only one session .

Lessons

A lessons is made of posts. A single lessons is presented with its title and overwiew about the topic.

Each lessons is marked by a "level" that means how muh that lecture could be hard for a user.

Levels(Beginner,Intermediate,Advanced).

Posts

This entity collects information about title description(text of the post) and an optional source link.

Reading Rules: One post could be associated to one lesson but a single lessons cold be related to many posts

Attempts

Each time a user try to pass a quiz , a new istance of the entity "attempts" will be created.

That entity gather information about , which quiz topic it is selected , the question presented and score awarded by the questions.

Reading Rules:

- A single quiz could be associated to many attempts but a single attempt it is related to one quiz.

- A single question could be associated to many attempt and a single attempt could be related to many questions.

Quizs

Quiz are made to test the user's comprehension. Quiz represent a set of question , even if just few of them will be subjected to the user (in a random way).

Each quiz is marked by a "level" that means how muh that lecture could be hard for a user.

Levels(Beginner,Intermediate,Advanced).

Reading Rules: a single question is related to only one quiz but a single quiz is made of many question.

Questions

Question inquiry to the user information studied during the course.

Every question should have a Title and Question Body .

For each question there will be options.

Reading Rules: a single option is related to only one question but a single question is made of many option.

Options

Option are the possible to answere to a question:

Every question should have: Title, Option body and if it is the correct answere.

Question, Limits & Problems:

▼ Post

- Would be possible add more that one link ? (so make links a separated entities): No, just one link for the source of the post.

▼ Quiz

- There is no relation between lessons and quizs, you cannot know by the database only if that quiz is made for that lessons or not.

- does the % of right answare change for each question? should it be an attribute?

This section is for waste information and not updated feature, ignore that

Settings Voice & Group Istance:

Settings voice are already decided , an user account can be link to a group of setting that describes his preference .

Reading Rules: more than one setting voice can be related to more that one settings group; the same for the setting group and the setting voice.