

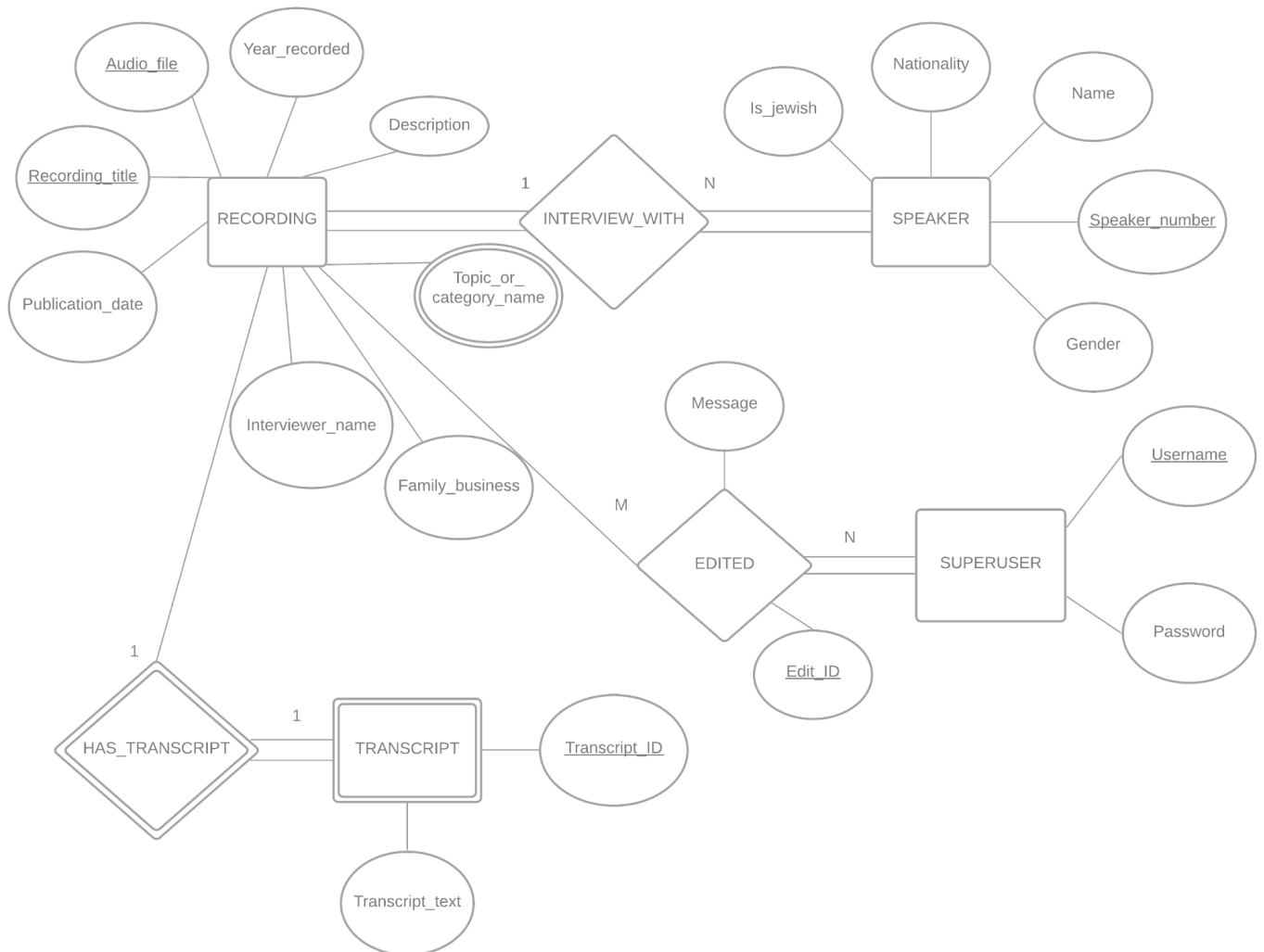
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CSC315-01

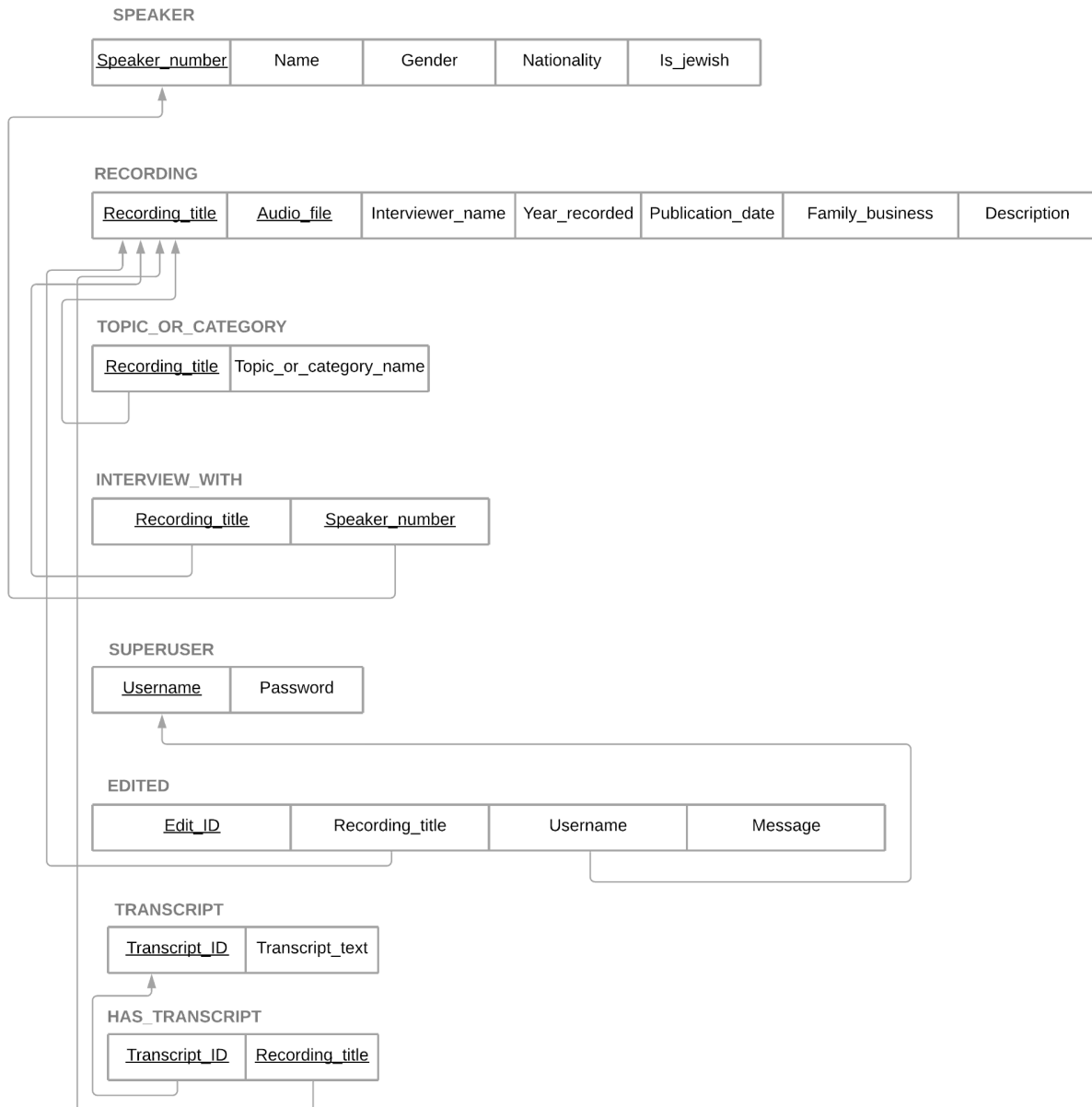
Stage III: Database Model

Link to Project Repository: <https://github.com/TCNJ-degoodj/stage-iii-group-2>

ER Diagram:



ER Diagram Mapping to Relational Schema:



Calculating the Average Amount of Searches Per Day:

The total number of views for all the recordings combined was 2,215 (from adding up the views of each recording on the Trentoniana site). The collection of the recordings itself had been up for roughly 1,389 days (the site states that the collection of recordings was published on May 23, 2017), meaning that the average amount of searches per day was $2,215 / 1,389$, or 1.59 searches per day.

Approximating the Number of Records (Initial Database Size)

There are currently 74 recordings on the site. This means there will be 74 tuples for the RECORDING relation. If we assume that each recording has on average 2 speakers, that means there will be $74 * 2$ tuples for the SPEAKER relation (148 tuples). This also means there will be 148 tuples for the INTERVIEW_WITH relationship. If there are 2 topics per recording, there will be 148 tuples for the Topic_or_category relation. If we assume that there are 5-10 super-users who can essentially edit/insert/delete recordings, then we can approximate that there would be 8 tuples for the SUPERUSER relation. We can assume that a super-user would be able to edit/insert/delete every recording, so there would be $74 * 8$ tuples for the EDITED relationship. If we assume that there are 24 recordings with transcripts, then that there would be 24 tuples in the TRANSCRIPT relation and 24 tuples for the HAS_TRANSCRIPT relationship.

So to approximate the number of records, $74 + 148 + 148 + 148 + 8 + 592 + 24 + 24 = 1166$ records.

Types of Searches:

- Metadata - The data of our data will be searched through.
- Text contents - Any text in the site will be searched through, including any transcripts and descriptions.
- Limit options - On the site, there will be filters available for the user to utilize to narrow down the search. They can filter by topic/category, nationality, gender, and more.