Data Management Project
DBMS Comparison

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In this project, I will attempt to qualitatively compare two different data models and their associated technologies. Specifically, the comparison will include the Resource Description Framework and the Relational Model. It will be conducted in the following manner:

1. Choosing a dataset and an associated real-world scenario related to its use.

2. Creating two implementations of the dataset, based on the requirements outlined in the previous steps.

3. Importing the respective implementations and the dataset into a relational database and a triplestore.

4. Comparing various aspects of the two solutions, both practical and conceptual (e.g. query language, memory usage, query execution speed, model flexibility in representing the dataset.).

For this purpose, the chosen dataset, RDBMS and triplestore are:

- Dataset(s): The IMDb Non-Commercial Datasets, for their size, ease of access and simple approachability, which contains the full IMDb website with all its information regarding movies, actors, and their relations.

- RDBMS: PostgreSQL, being open-source, mature and on-par with current industry standards.

- RDF Store (triplestore): Apache Jena Fuseki, for the same reasons as Postgres.