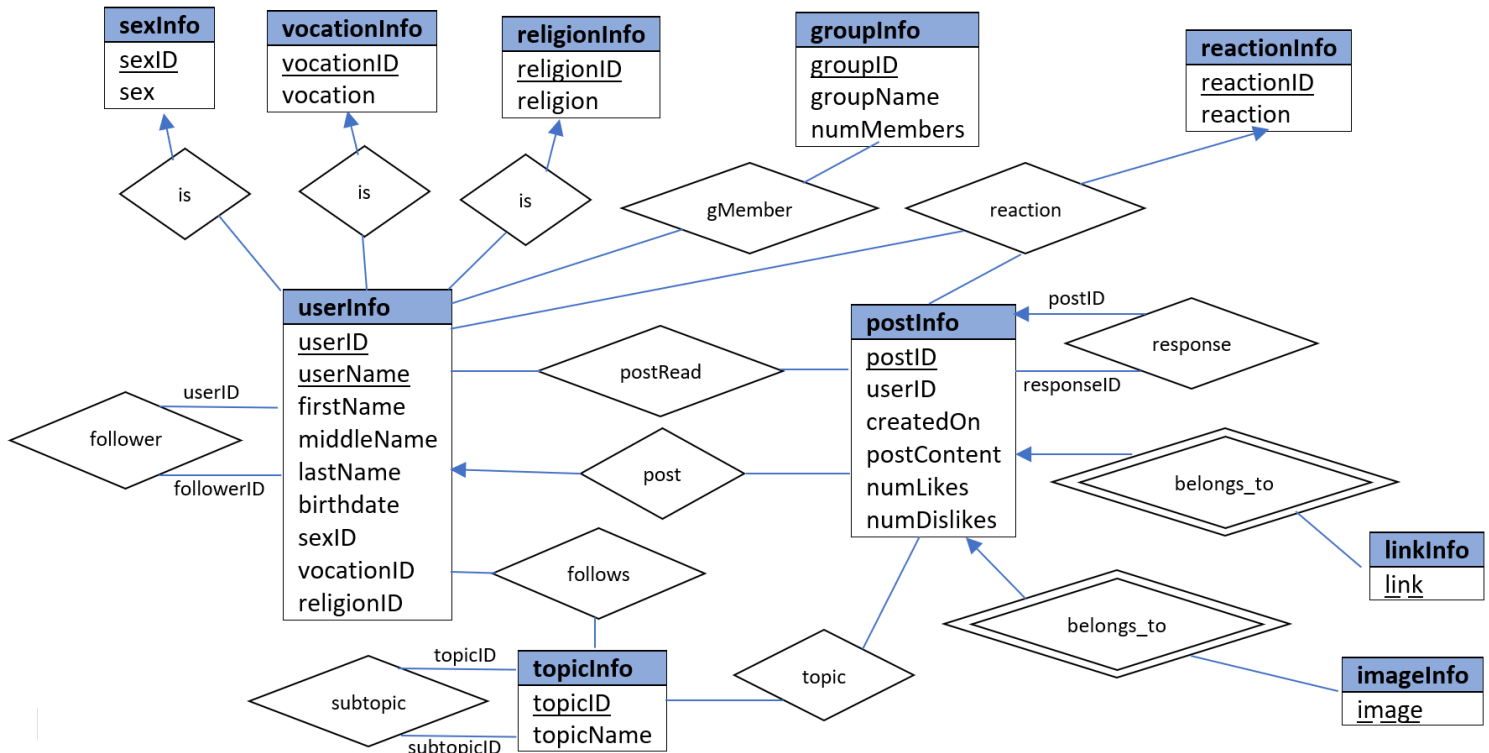


ECE356 Project - Social Network Entity-Relationship Model

This file is the deliverable for the first item of the project.



The above diagram is the entity-relationship model for the simple social network. All notational conventions are as per the posted lecture notes (part06 – ER Modeling).

The description of relationships are as follows:

userInfo and follower

- This is a **many-to-many** relationship, as a **user** can **follow** multiple **other users** and vice versa.

userInfo, sexInfo, vocationInfo, and religionInfo

- These are **one-to-many** relationships, as a **user** can only have **one sex**, **vocation**, and **religion** respectively.

userInfo, groupInfo, and gMember

- Entities **UserInfo** and **GroupInfo** are connected by relationship set **gMember**. This is a **many-to-many** relationship as a **user** can be a **member** in multiple **groups** and a **group** can have multiple **members**.

userInfo, postInfo, reactionInfo, and reaction

- Entities **userInfo**, **postInfo**, and **reactionInfo** are connected by relationship set **reaction**. This is a **ternary** relationship as a **user** can **react** to a **post** (like or dislike).

userInfo, postInfo, postRead, and post

- Entities **userInfo** and **postInfo** are connected by relationship set **postRead**. This is a **many-to-many** relationship as a **user** can **read** multiple **posts** and a **post** can be **read** by multiple **users**.
- Entities **userInfo** and **postInfo** are also connected by relationship set **post**. This is a **one-to-many** relationship since there is at most **one user** per **post**, but a **user** can have multiple **posts**.

postInfo and response

- This is a **one-to-many** relationship as a **post** can have multiple **responses** but a **response** only belongs to **one post**.

postInfo, linkInfo, and imageInfo

- These are **one-to-many** relationships as there is at most **one post** per **image** or **link**, but a **post** can have multiple **images** or **links**.

userInfo, topicInfo, and follows

- Entities **userInfo** and **topicInfo** are connected by relationship set **follows**. This is a **many-to-many** relationship as a **user** can **follow** multiple **topics** and a **topic** can be **followed** by multiple **users**.

topicInfo and subtopic

- This is a **many-to-many** relationship as a **topic** can have multiple **subtopics** and a **subtopic** can belong in multiple **topics**.

postInfo, topicInfo, and topic

- Entities **postInfo** and **topicInfo** are connected by relationship set **topic**. This is a **many-to-many** relationship as a **post** can have multiple **topics** and a **topic** can belong in multiple **posts**.