

Database Life-Cycle Project Phase 2 Deliverable

Relational Model

PersonalUser (**username**, name, snapscore, start_date)
Friends (**friendshipId**, username1, username2)
Story (**storyId**, duration, media, filterId, location, timeposted)
PersonalUserStory(**storyId**, username)
StoryView (**storyId**, username, opened)
Snap (**snapId**, duration, media, location, filterId, username)
SnapView(**snapId**, username, opened)
Business User (**username**, name, billing_account)
BusinessUserStory (**storyId**, username)
PhotoFilter (**finalId**, filterId, geold, media, ownerId)
Filter (**filterId**)
Geotag (**geold**, location)

Functional Dependencies

Assumptions:

- 'media' is a string of a url pointing to an image.
- 'location' is a string representing the latitude and longitude of the location.
- the Photofilter is defined by the combination of filterId and geotagId, and the combination of these would define the media of the Photofilter, as well as it's finalId, the primary key.
- an "ad" is represented by business user story

Users (BCNF)

username → name, snapscore, start_date

Friendships (BCNF)

friendshipID → username1, username2

Story (BCNF)

storyID → duration, media, filterId, location, timeposted

PersonalUserStory (BCNF)

storyId → username

StoryView (BCNF)

storyID, username (the recipient) → opened

Snap (BCNF)

snapId → duration, username, media, filterId, location

SnapView (BCNF)

snapId, username (the recipient) → opened

BusinessUser (BCNF)

username → name, billing account

BusinessUserStory (BCNF)

storyid → username

PhotoFilter (BCNF)

finalId → media, ownerId, filterId, geotagId

Filter (BCNF)

filterId

Geotag (BCNF)

geoid → location

Normalization: None of the functional dependencies needed to be normalized (see the normal forms above)

Note: We changed our physical model a small bit in Vertabelo, primarily to account for the difficulty in representing inheritance. Thus, our physical model is a bit different and does not explicitly have “inheritance”; however it accomplishes the same thing and the modifications were necessary to complete our queries.

Queries:

We changed some of our complex queries from what we had originally proposed in our user stories, because based on the way we ended up constructing our database, some queries were no longer complex.

Physical Model

