

## ST2BDAF : Tutorial 1

### E-R Diagrams

#### Exercise overview :

We want to create a social network like "Facebook" where the users can connect to each other and share information. Each user is identified by a nickname and a password. It keeps their name, email, phone, date of birth, gender, and country and city of residence. Also the date of users registration to the social network and the date of closing its account is stored, if any.

Users can be linked to each other. Each user can be "engaged" with another, and can be "friend" with other users as needed. In both cases you want to keep the start date of the link.

Each user can create one or more pages, private or public, on which he can write publications. Each publication contains a title, a date, a text and has a number of "likes". In addition, users can gather in groups, which are defined as user pages on where all group members can post publications.

Users can actually "love" the pages of other users or publications. They can also respond to a publication by a new publication, but only on the public pages, their own page and those of their friends.

Finally, we want the users 'friend', 'engaged' or member of the same group can discuss with each other in a private chat. Each message in a chat is a text sent on a specific date by a user to one or more others.

#### Questions:

1. Propose a model of entity / relationship to model this behavior.
2. Give the corresponding relational model.
3. Explain and justify your choices.