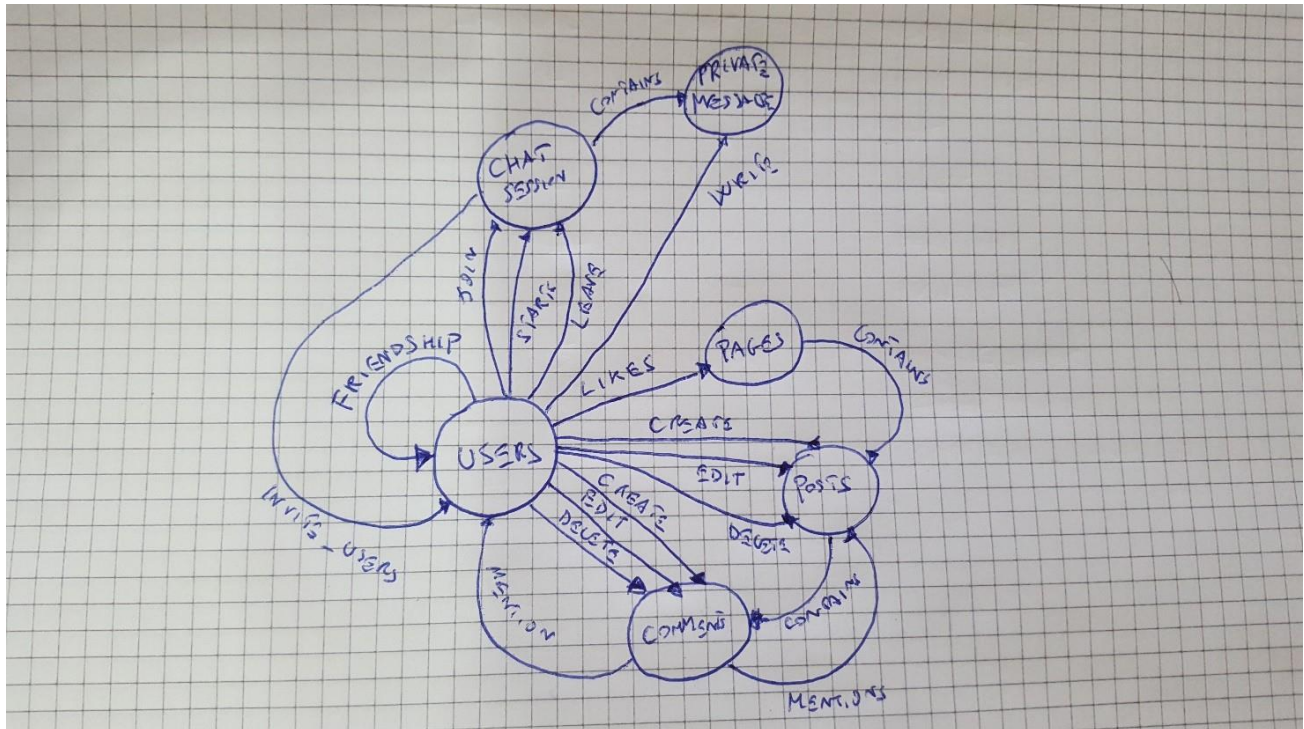


# Graphs in Every Day Life Assignment

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I thought a simple Social Network with a basic functionality such as create posts, comments them, ask friendship, chat and likes pages. Below the lists of nodes and edges.

A Social Network like this could provide tons of questions and answers, for example:

- **Who are the influencer of the network?** Users with lots of friends and Pages with lots of likes are the best candidates to be defined as such. A useful metric is Degree of Centrality.
- **What are the trending topic/posts?** We can retrieve the trending topic based on the numbers of interactions such comments and likes and compute TF-IDF for each returned comment.
- **What are the most active Users?** Users (or Pages) with N likes or comments X day (maybe 10?) is very active!
- **What are the suggested Users for each User?** We should find the closest non-friend neighbors and suggest to each user respectively.

| ID | NODE             |
|----|------------------|
| 1  | Users            |
| 2  | Pages            |
| 3  | Posts            |
| 4  | Comments         |
| 5  | Chat Sessions    |
| 6  | Private Messages |

| SRC_ID | DST_ID | EDGE_TYPE (E) |
|--------|--------|---------------|
| 1      | 1      | Friendships   |
| 1      | 2      | Likes         |
| 1      | 3      | Creates       |
| 1      | 3      | Edits         |
| 1      | 3      | Deletes       |
| 1      | 4      | Creates       |
| 1      | 4      | Edits         |
| 1      | 4      | Deletes       |
| 1      | 4      | Likes         |
| 1      | 5      | Starts        |
| 1      | 5      | Leaves        |
| 1      | 5      | Joins         |
| 1      | 6      | Writes        |
| 2      | 3      | Creates       |
| 2      | 3      | Edits         |
| 2      | 3      | Deletes       |
| 2      | 4      | Creates       |
| 2      | 4      | Edits         |
| 2      | 4      | Deletes       |
| 4      | 1      | Mentions      |
| 4      | 2      | Mentions      |
| 5      | 1      | Invite        |
| 5      | 6      | Contains      |
| 2      | 3      | Contains      |
| 3      | 4      | Contains      |