

Model for the practical exam

Create a database for a MiniFacebook system. The entities of interest to the problem domain are: *Users*, *Pages*, *Likes*, *Categories*, *Posts*, and *Comments*. Each user has a name, a current city and date of birth. A user can like multiple pages. The system stores the date of each like. A page has a name and a category, e.g., sports, movies, music, etc. A category also has a category description. Users write posts and comment on existing posts. A user's post has a date, text, and number of shares. A comment is anonymous, has a text, a date, and a flag indicating whether it's a top comment for the corresponding post.

- 1) Write an SQL script that creates the corresponding relational data model. (3p)
 - 2) Create a master – detail windows form that allows searching the posts for a given user. The form should have at least the following components: a grid (combo box or list box) to display the users, a grid for all the posts of the selected user, and a button for saving added / deleted / modified posts. It's up to you how to add / delete / change a post. (4p)
 - 3). Create a scenario that reproduces the non-repeatable reads concurrency issue, through stored procedures or standalone queries. Find a solution to solve / workaround this concurrency issue. (2p)
- (1p of)