# Showcase of entities

Et billede, der indeholder skærmbillede

Automatisk genereret beskrivelse

**User:**

The User entity contains an ID, personal information, who the user follows, who is following the user and which circles the user subscribes to.

**Circles:**

The Circles entity holds an ID, all users subscribed to it and which posts has been made in that circle

**Post:**

The post entity contains an ID, name of the author, time and date, privacy setting and which circles the post is viewable.

**Comment:**

The Comment entity holds a ID, name of Author, time and date, the content of the comment.

# Program description

The social network program is based on a MongoDB running within a docker container. The navigation of the program is via a terminal and the program can be executed by the *dotnet build* command, followed by the *dotnet run* command.

At program startup, the terminal asks if the database should be seeded with sample data. This will create the database and all the collections within the database. This should only be done the first time running the program.

When the program is running, the terminal window will guide the user in navigation the program.

# Social network implementation

When implementing the social network, according to our schema, we have faced some issues that have resulted in that the query and create functions not are fully implemented. The major issue is that we have not found a way to filter a list with elements from other list as conditions.

**Show wall function**

We have succeeded in creating the function so that is shows post from a given user which the given guest either follows or if the posts are public. If the guest is blocked by the user, no posts are shown.

We have not succeeded to show comments to the post or posts form circles that the user and guest are members off, due to the filter list by list issue we are facing.

**Show feed function**

We have succeeded in creating the function so all posts by the user and public posts from other users.

We have not succeeded to show comments to these posts, followers posts and circle posts due to the filter list by list issue we are facing.

**Create post function**

We have succeeded in creating the function that makes it possible to create a new post at store the post in the database. It is not possible at the moment to connect post to a circle because of a type conversion issues we have been unable to solve before the hand-in deadline.

**Create comment function**

We have succeeded in creating the function that makes it possible to create a new comment, but at the moment it is not possible to connect the comment to a post due to the same type conversion issue form the create post function.

# Problems with schema and collections

The main problem with our schema is that it is hard to keep the number of queries to the database at a minimum, and thereby minimizing the number of documents needed for the queries. We have not been able to implement a more optimized schema for the database to minimize the number of queries needed before the hand-in deadline.

# Conclusion

Working with NoSQL has given us the impression that NoSQL is more intuitive compared to MsSQL, because of the freedom of not handling with relations.

Even so, this assignment has proven to be a huge challenge for us, where many of the functions are missing some of their functionalities. We have the idea of how some of the missing functionalities can be implemented but have not succeeded in solving them. This is mainly because of the time we have available for the assignment because of a highly time consuming and prioritized bachelor project, close to its due date. Another reason is that the C# language is totally new to us, making basics syntax quite time consuming.