



BILKENT UNIVERSITY

CS 353

DATABASE SYSTEMS

Project Proposal

Social Media for Hosting Events

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1 APPLICATION OVERVIEW

The application system that we are offering is a social platform for any kind of event. People can enter the system by registering first. A user can form a group and invite people that share the same interests, or become part of an existing group. The founder of the group is assigned as the group leader. Additionally, every user has the option of sending messages and friend requests to other users.

Each user on the system is able to organize an event or participate in an event. The host of an event can choose to make it public or private, and can invite individual people or groups to attend. Users are also able to request invitations from the host for a particular event if it is public. Hosts have the right to ban a user from an event with a valid reason. After an event is over, participants can review the host and the event. Therefore, the rank of the host indicates how successful he/she is. After the event, participants can upload the photos they have taken and share them with other participants.

The user can specify his interests in the form of categories, so that the events with matching categories are displayed for him. Users can also search for events in a specific location and time.

2 DATABASE USAGE

Database is going to be used in order to collect, manage and store user and events information. The information stored related to users will include the address, contact information, friends list, categories the user is interested in, and all the messages that the user sends and receives. Storing the friends list and group information makes it possible to send invitations to a group of related people easily. Furthermore, the database will store all the events which the user has participated in or has hosted. For groups it will include the group name, group leader, the members' list and the common categories for all the members.

For every event the information stored includes the host information, creation date in the system, event name, location, time, categories, capacity, duration and the private/public option. For any banned user, the reason of the ban should also be given. After the event takes place, the reviews of the participants and a collection of photos uploaded by them is also stored so that all the participants can access them. Because each event has categories, users can search for events with different categories apart from searching by location and time only. By knowing user information such as location, age, past events and interests, the system may also be able to give relevant suggestions to the user.

3 REQUIREMENTS

- DURABILITY: The capacity of the database should support growing amounts of data as the number of events and users will increase substantially, and the information on past events and their reviews and pictures should always be available.
- CONSISTENCY and AVAILABILITY: The system should be reliable and consistent, which means that the information about the events should be accurate and updated immediately when changes are made, so that every user sees the same information. The system should also notify the user of any important change in event information.
- SECURITY: Our system requires security when dealing with private information. The system should require user account authentication by name and password. Information of the private events that a user is not invited to and information of groups he is not part of should not be visible to that user.

4 LIMITATIONS

In our system the event is organized by one host. Even though a group can co-host it, officially only one of them has the host privileges such as inviting or banning people, making the event private or public and making changes to the event.

In terms of inner system restrictions which are not shown in the diagram:

- the user should not be able to access the information of private events.
- the user should only attend events after he has received an invitation or his request is approved by the host.
- the user can review and access the photos of the event only if he participated in it.
- the host should only be able to ban users from the events hosted by him.
- if the capacity of an event is reached, the host cannot send other invitations and no additional user may join.
- a participant can submit only one review for each event he has participated in.
- upon account deletion, the reviews of that user, the photos they uploaded and the messages they have sent should persist, but all other information will be lost.
- categories are not predefined but can also be created on the fly by the user when entering his information or the host when creating an event. The search queries should give approximate results nonetheless.

Website: <https://endimerkuri.github.io/database/>

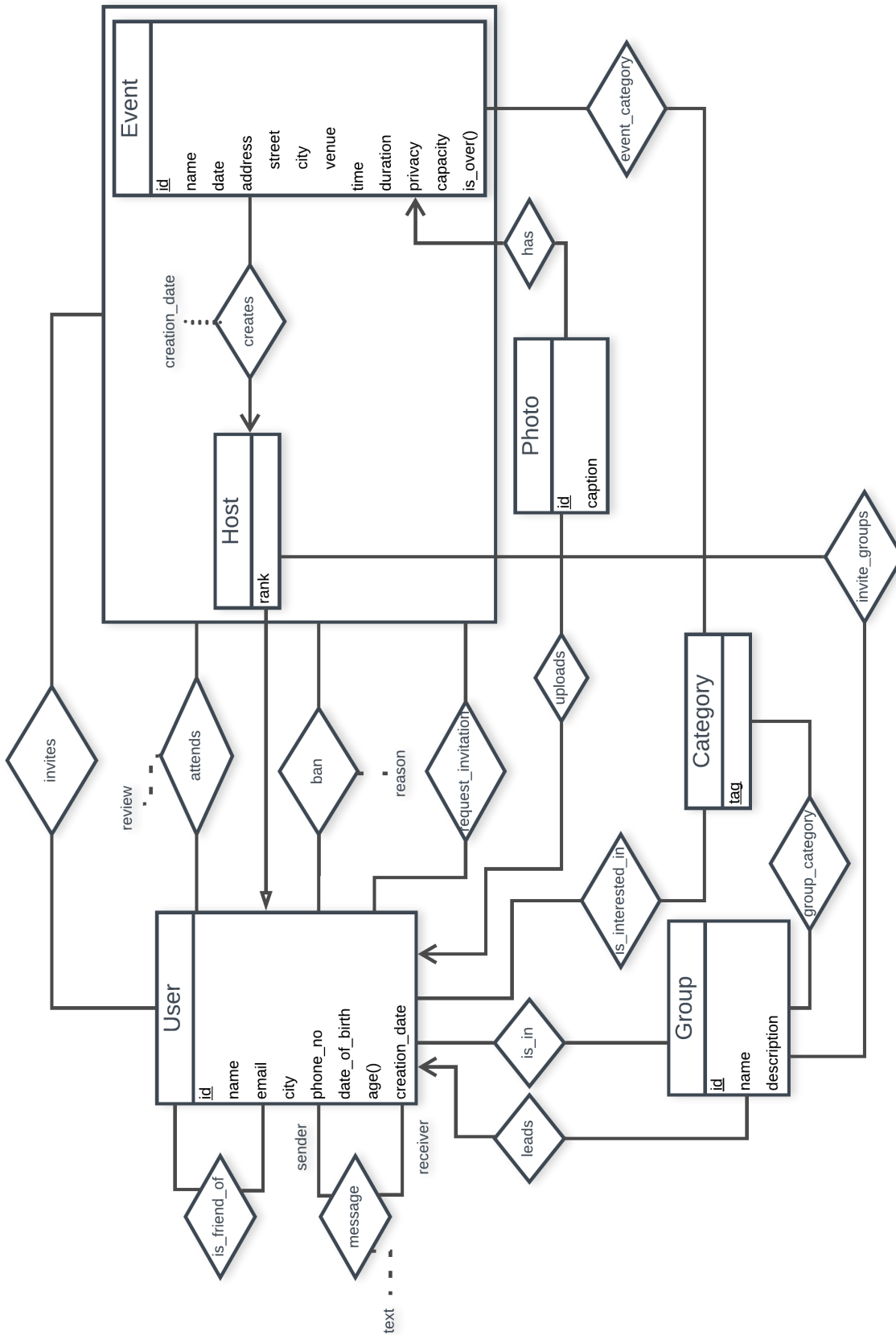


Figure 1: E/R diagram made with LucidChart