Bilkent University

Department of Computer Engineering

CS 353 Term Project

Group 17

Eventually

Project Proposal

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Contents

1. Introduction

This document is intended to explain and give a brief description for the “Eventually” project that is being developed as a term project for the “Database Systems” course.

Document will describe the development process and requirements of the project in brief details in the respective and specific subsections. These subsections are Description, Requirements, Limitations and System Diagram which will be describing respective parts in detail.

Description part will be describing the project’s intentions, goals and motivation behind the development of the project. Database needs and its usage will be described in this section in brief details. More details, requirements, constraints and limitations will be described in the preceding subsections.

Requirements part will be described in 3 subsections: Functional and Non-functional requirements and Constraints. Functional requirements will be describing the main features that a user will be interacting while using the website and goals to achieve in this department. Non-functional requirements will be describing the developer’s point of view and intentions and a list of responsibilities to be taken for the project in this department. Finally, constraints will be giving information about the technologies that are aimed to be used in the development process of the project.

Limitations part will consider the project’s limitations as well as limitations of a user, event host, groups, messaging, invitations and other important parts of the project.

System diagram, specifically, an Entity Relationship (E-R) diagram is going to be attached to give a technical description of the database in terms of entities and relationships, cardinalities, attributes to able the reader understand the usage of database in technical terms.

2. Description

Eventually is a web-based social platform for hosting events. Main goal of the project is to develop a platform that users may create and manage and attend events. Eventually is going to be used by its registered users to create and attend to the certain events.

Users can add other users to their friends list. Friends may message/chat between themselves and invite each other to certain events. Any user may create and manage an event. An event may have 1 or more hosts which is to be determined in the event creation stage and can be changed during event's lifetime.

Users may join certain groups that connects users of certain interest and create and manage events in this manner. These groups will be created by the users of the website. Groups will have admins and members. A group can be private or public and this information is determined in the group creation stage and can be changed during its lifetime as many times as needed. If an event is to be hosted by a group, only admins of the group may host an event as a representative of the group, then the event hosts will be chosen from the members in the event creation stage.

Events can be public or private which is determined in the event creation stage and can be changed during its lifetime. Public events will be visible to the all users of the website. Private events will not be visible to the all users except for the users that are invited exclusively by the hosts. Events will have a description section that a host fills to give a brief description about the event. In addition, event's location, date and time, city, category, privacy status (public or private) and host information should be added.

Events will be visible to the users in the dashboard which is personalized for every user. Private events that the user is not invited won't be shown in the dashboard. Dashboard will show a list of events that are picked specifically for the user's interests. In other words, dashboard will show

events that user will attend to, events that a user was invited by a friend or an event host or events that a group has created that the user is a member of. This list can be filtered to list the events in a range of orders. List can be filtered to show the events in a chronological order; closest event to be hosted is shown first or user may choose which cities or categories are to be shown.

Website will allow its users to search the events. A general search will only include some keywords that are typed by the user and show results that match the keywords. A search with no keywords will result in all public events list. A more specific search may show the results that are filtered in terms of chosen cities, date and categories and match the keywords. Users may also search for other users and groups with the help of keywords. Users may explore certain events by choosing a category.

Users will have a rating that is to be determined by the hosts of the events that the user has attended.

2.1 Database Usage

As the website will have many users, groups and events, a database is crucial to store these data. User's groups, messages, friends list, favorite categories, chosen cities, event that the user hosts or is to be attended, rating and information such as profile picture, name and credentials should be stored in the database. As it is mentioned above, dashboard will be personalized for each user in terms of their interests, favorite categories and cities, and this information is to be stored and used to create and populate such a dashboard.

Events also are to be stored in the database with the given information such as location, date and time, description, hosts, attendants list, privacy status and category to retrieve when necessary.

Groups will be stored with the information about its members, admins, events and privacy status.

3. Requirements

3.1 Functional Requirements

The database will have 4 end-user types: group's admins, event hosts, friends, and regular users. They will get different hierarchical permissions for functionalities of the database for the event creation, updates, deletion, attendance or invitation. However, any end-user can be characterized as several end-user types simultaneously.

3.1.1 Group Admins

- Group Admins are the users who have either created a group or assigned to be an admin by another group admin.
- Group Admins can assign any participant to be an event host of the group's events.
- Group Admins can change the group's description.
- Group Admins can change the group's privacy status from private to public or vice-versa.
- Group Admins can assign other users to be group admins.
- Group Admins can review members of the group.
- Group Admins can remove the group and/or members of it.

3.1.2 Event Hosts

- Event hosts are the ones who have created an event or assigned to be a host/co-host by another event host.
- Event host can be an individual user, a couple of users (co-hosts) or a group (if an event is hosted by a group, event host(s) will be chosen from the members by admin(s) and will represent the group as a whole).
- Individual event hosts can invite their friends to their events, public or private.
- Individual event hosts can change the event's description.
- Individual event hosts can change the event's privacy status from private to public or vice-versa.
- Individual event hosts can assign other people to be co-hosts.
- Individual event hosts can review event attendants.
- Individual event hosts can remove the event.
- Event hosts may rate the attendants.

3.1.3 Friend

- Friend is the friend of a specific user which is an event host, group admin or a regular user.
- Friend can access to private events and groups that they have been invited to.
- Friend can invite their other friends to private events and groups that they have joined already.
- Friends can send and receive messages from other friends and users.

3.1.4 Regular user

- Regular user is an individual user that is not a friend of the event host or a group admin.
- Regular users can join to public events and groups.

- Regular users can send and receive messages from any other user.
- Regular users can invite any people to public events and groups.

3.2 Non-functional requirements

3.2.1 Authentication and Security

The system should put several requirements for password and username of the user in order to increase the security.

3.2.2 User-friendliness

The user interface of the system should be clear and easy to follow for any desired operations that a user wants to process.

3.2.3 Quick response time

The system should work in real time manner, so it should respond to each process or requirements of users in less than a half of the second. It means, it should respond as fast as possible.

3.2.4 Accurate Data Distribution

During the data process from a user to the database and vice-versa, all responds and serves should be accomplished without any loss.

3.2.5 Capacity

Capacity of the database should be large enough to store data of lots of users, events, groups, messages since it will serve as a social network service that would contain a large number of users.

3.3 Constraints (Pseudo Requirements)

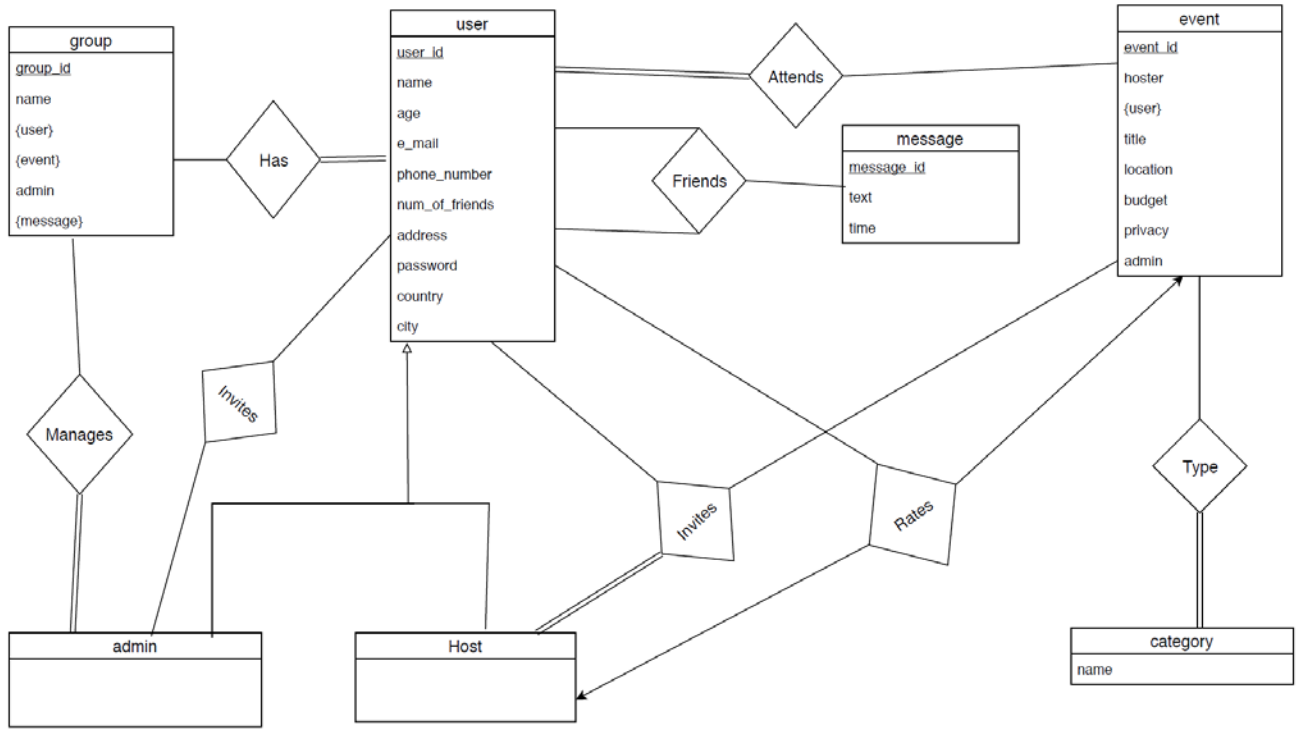
- MySQL will be used for the database part of the project.
- HTML, CSS, JavaScript, jQuery, Bootstrap will be used for the front-end development part of the website of the project.
- PHP will be used for the back-end development part of the website of the project.

- GitHub will be used in the development process for the source control.

4. Limitations

- Regular users cannot join to private groups and events.
- No group member can change settings, information, privacy status of the group except for the group admins.
- No event attendant can change settings, information, privacy status of the event except for the event hosts.
- Regular users and friends in the group or event cannot remove them or their members.
- Regular users and friends cannot assign other users or friends admin or event host to the group or event.
- Regular users and friends cannot review status of the group or event attendants.

5. System Diagram



6. Conclusion

The project is going to be a social platform developed specifically for hosting and attending events. The motivation behind the project is to achieve the goal of developing such a system that eases the process of event hosting and attendance. The project will be heavily dependent on database because of its dynamic behavior.

This proposal is aimed to give information about the project such as the goal of the project, requirements, description and limitations of the project. The proposal explains the priorities and responsibilities to be taken to successfully develop the project and achieve the determined goals. Development process will be heavily dependent on the requirements, limitations, constraints explained in this document.

7. Website

Project is being developed with the Git source control technology. Project's status can be checked at the attached GitHub repository.

- https://github.com/zxyctn/Eventually

Project website will be updated as it progresses. Final project will be available on the attached project website.

- http://samet.demir.ug.bilkent.edu.tr