Event Based Social Network

The Cereal Killers

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1. Problem Definition and Background Information

Our project is to create a social network that mainly focuses on all kinds of events that occurs around. These events may be birthday parties, some kind of promotion of a company or a particular non-commercial group, and even simple meetings like friends getting together will be included in our end-product. By using our product, people can search and find events by category, distance to the user or how many friends/people attending that event currently if the privacy settings of that particular event are set to public of course.

We aim to publish and make available our application worldwide. People can use it wherever and whenever they want as long as they are connected to the internet. People who are interested in searching events or want to ensure that more people know about their events are welcomed to use our product.

There are a couple of similar event sharing applications on the web, however, our product differs and has additional features among them. For example, Plancast^[1] claims that "Our product helps you find out about events and other social activities ahead of time so you don't miss out on them. You also can use Plancast to plan an event and promote it with our professional event marketing tools." However, they seem to be not successful enough. We need to turn their shortcomings into advantages. We look through these examples and try to make our product more comprehensive and useful. Another example of event sharing applications is Eventseeker^[2]. Actually, they are more successful than the prior example. However, we think they have a lack of friend interactions and map integration.

We aim to create a product that is going to spread rapidly and assertive in the social network industry. As it is mentioned already, our end-product will be a social network that

focuses mainly on events. It will display current and upcoming events on map. Users are also able to search events with the ability of applying various filters such as category, date, location; which/how many friends are going to participate in that event etc. The indispensable feature of a social network, friendships, will also be provided of course. Users will be able to import friends from other social networks. They can also left a comment to the events that they participate in. Of course, our product can be used for promoting purposes. However, it will be limited for the free accounts. We also plan to bring set of rules for creating events in order to prevent spamming. We think of a level and experience based competition among users. Spam and bad events result in a decrease on the experience the user has. That idea not only encourages users to create useful events but also increases the attention to our application.

2. Significance of the Problem and Motivation

Building a social networking application is not algorithmically challenging. Therefore it might seem easy to implement, but there are lots of programming work to do. For instance, there will be server-side coding and client-side coding to implement. Moreover our project will have different parts (mobile & web parts), therefore it will be more challenging and there will be more work to do. Furthermore, since our project is an entrepreneurial project, it is important to come up with new and unique ideas, implement them accordingly.

We would like to realize this product because nobody implemented it before like the way we want to do. There are some similar examples but they focus on different aspects of eventbased social networking. In other words, there is an absence of event-based social networking application nowadays. We want to realize our project idea because it is unique at its area and we think that people will use our social network like other social networks that is used widely today. We have also considered other public project ideas, but we wanted to create a product that is absolutely ours and unique.

There are no satisfactory products at event-based social networking today because this concept is fresh at the market. Of course there are some new examples, but none of them fulfilled their aim. We might see better products at incoming years but the main reason of this problem is this concept is too new and there is no complete product at the market.

Some of the products that try to implement a successful event-based social networking lack mobile applications. Therefore they do not have enough audience and dynamism. Few of them focus on only selling tickets; hence, they are not used like a real social network. Furthermore, some products at the market now have mobile applications but their focus is wrong. The producers of those products implemented their network too simple, therefore their

product is not colorful. Users expect different aspects from social networks. Only really few of them fulfill these requests but as it is written above, they have some flaws.

If we manage to realize our project successfully, daily users will have another social networking application that can be used every day. Since our event-based social network will be integrated with other networks, it will be really easy to use and the users of this application will have fun with it. One of the main aims of this application is to let users participate in all events they want. Social networks like Facebook, Twitter and Foursquare focus different aspects, not events. The users cannot view and catch on daily events with these networks. With the product we want to implement, users will be able to know every event around. Besides, users will be able to create, share and promote events. Furthermore they will be able to see their friends' participations on different events. For us, the producers of this project, we will use it like every other user. We will see concerts, parties and sports matches nearby; we will participate at meetings, unions; we will discover events related to education and academics and we will create all events and share with the ones we like to.

We want to use this product commercially if it succeeds its aim and if it acquires enough users and attention. Firstly we will try our best to implement this project. Secondly we will listen to all advices from our faculty members and try to fix our mistakes. Furthermore we will try to get professional help from experienced programmers & engineers. We will also make lots of research on the internet and analyze other examples. Finally we want to apply for project competitions (Tubitak, etc) and commercial competitions (Teknogirisim, etc).

3. Draft Project Plan

This project is a location-based application that encourages people to leave marks about events which they have attended. Through the action of "check-in", people can explore the events around them, and also interact with people who have been or are currently there. For client-application we are going to use cross-platform mobile application development technologies like HTML5. Users will use application on their Android, iOS, WP8 devices. They can check-in in events which are near them. We are going to collect users' location data via GPS or internet connection and show the nearest events on map using Google Maps API. Events will be added by users. Events data will be kept on our database.

End-product will be a cross-platform mobile application. Once users register the application, they will see nearest events on map, featured or sponsored events on list and friends' activities. Users also can see their friends' user profiles or events' profiles.

Users will be able to register to the application manually or via Facebook and some other social networks. Users will be able to mark the events they will attend, check-in to the nearest events and create new events. Event creators or attendees will have badges based on their activities and statistics. All activities and data will be stored on our server.

Distribution of the Major Tasks

We have separated our project into four major tasks namely Database, Server-side controller, Model classes and Views (Web-site and mobile applications). The distribution of the major tasks given below:

| | Database | Server-side Controller | Model Classes | Views |
|--------------------|----------|---------------------------|---------------|-------|
| K. Çağın Gülşen | Х | | | X |
| Y. Barış ULU | Х | | | Х |
| Mert ERGUN | | X | X | X |
| E. Kerem GÖKHAN | | X | | X |

Use-case Diagram:



In our product, there exists one type of an actor which is a simply user. The user, who is a fundamental character in our system, will be able to use basic functionalities which are demonstrated above. The basic explanations of these functionalities are showed below.

Register: A user is capable of register manually in our system with some essential information like name, e-mail, gender, etc. On the other hand, the user can register via Facebook or some other popular social networks. Registration is one the most important parts in our system because the user is not allowed to do other functionalities such as adding friend, creating event, commenting on event, etc.

Login: A user is capable of login our system after that completing registration successfully. In order to use our features inside the system, the user must login.

Add Friend: A user, who was already logged-in, is capable of adding friends into own friend list which is used for sharing events with friends, searching events of friends and commenting on event. The contribution of existence of friendship provides reality on the system. Therefore, a system which has reality is always usable and popular.

Create Event: A user, who was already logged-in, is capable of creating events into system which is visible or invisible for other users. It means that some users can create visible events which everybody can attend and some users, who don't want the attendance of unknowns, can create invisible events.

Join Event: A user, who was already logged-in, is capable of joining events already created in the system. Therefore, whoever joining any event in the system can contribute to indecisive friends. In addition to that, a user joining an event can contribute to information of that statistically.

Share Event: A user, who was already logged-in, is capable of sharing events already created in the system. Therefore, whoever creating or joining any event in the system can contribute to indecisive friends by sharing that event with friends.

Search Event: A user, who was already logged-in, is capable of searching events already created in the system. There can be some criteria for searching like in some city, in some region, in near of user, etc. Therefore, a user can increase own ability on controlling the system.

Comment on Event: A user, who was already logged-in, is capable of comment on events that s/he has already participated in. The comments provide reliability for event and creator of it. In addition to that, some participated events can be widely disparaged by participants.

Promote Event: A user, who was already logged-in, is capable of promoting on events that s/he has already created in the system. The user gains the ability of finding participants for own event by promotion.

Component Diagram:



In our system, we can divide into three basic components which are shown below. These are User Interface, Business Logic and Database.

User Interface: It is top-most module of our system. The main function of the interface is to translate tasks and results to something the user can understand. In User Interface package we have basically two modules which are View and Controller.

• View: The View can be separated into three main modules according to usage. Indeed, all of these have almost same features. The View renders a presentation of modeled data. We are planning to use HTML5 technology for client application.

• **Controller:** The Controller handles requests from users. It is responsible for rendering back a response with the aid of Model module. Controllers can be seen as managers taking care that all needed resources for completing a task are delegated to the correct workers. We are planning to use Java programming language for this module.

Business Logic: It is the transition module of our system. The Business Logic coordinates the application, processes commands, makes logical decision and evaluations, and performs calculations. It also moves and processes data between the modules, User Interface and Database, in our system.

• **Model:** The Model represents the part of our application that implements the business logic. It is responsible for retrieving data and converting it into meaningful concepts for our application. This includes processing, validating, associating or other

tasks related to handling data. We are planning to use Java programming language for this module.

Database: It is the lowest module in our system. Here information is stored and retrieved from a database. The information is then passed back to the Business Logic for processing, and then eventually back to the user. We are planning to use MySQL for database package.



Deployment Diagram:

Our deployment diagram consists of some nodes which are Database Server, PC, Tablet PC and Smart Phone. <u>DB Server</u>, which is located at lowest level of system, provides database services to clients. All data manipulations operations performed in this node, Database Server. Transaction module inside Database package will be running on DB server. <u>PC, Tablet PC and Smart Phones</u> are the located at most top level of system and these are the client related nodes. We are going to use Controller and View modules inside the User Interface package will be running inside these client related nodes.

4. Support

We will have no support.

5. References

- [1] http://plancast.com/about
- [2] http://eventseeker.com/