METU, Department Of Computer Engineering
Graduation Project
Proposal Form

(Please read carefully, and follow the instructions to prepare the project proposal form.)

(Instructions to fill in this form are given in italic fonts and in parentheses.)

(To provide an input for a section of the form, delete the instruction and provide your input in place of the deleted instruction. In the final form that you will submit, there shouldn't be any instructions left over, including this section of the form.)

(If you feel that a particular instruction is not relevant to your project proposal, please use a proper explanation for this, rather than ignoring the instruction.)

(The final form should not exceed 4 pages, excluding this page and including the References section. Please use Arial, Normal, 10pt fonts and single line spacing.)

Important Notes

A project could be proposed by (i) a student group, (ii) a company, or (iii) a faculty member of the department by filling in this form and submitting it to 49x-proposal@ceng.metu.edu.tr by e-mail. For a project proposal, there might be a sponsoring company supporting the project and providing some form(s) of resources for the project.

If your proposal might contain a patentable idea or any type of intellectual property, please first make sure to follow appropriate steps (apply for a patent, etc.) before sending your idea to us. Once this form is received from you, the instructor(s) and the department has no responsibility regarding to intellectual properties of your project/idea.

All sources and documentation developed for this course are assumed to be public domain (GPL, CC or similar license) by default. If you need any exception for license and disclosure of project work, please specify this in detail in IP section of the form.

Please note that source codes, documents and issue tracking should be kept in department servers. No restrictions can be requested for limiting faculty and assistants access to student work.

Project Information

Title

Foodfeed (Subject to change)

Target

Public [ ]   Restricted [✓]

(If you would like to restrict your project idea to one or more groups, please mark "Restricted" and state the group or groups eligible for the project.)

Proposer Information

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IP (Intellectual Property) Information

There is currently no agreed intellectual property information for this project.

Project Description and Background Information

Description

Our project is designed to make people share their foods according to their locations by using Web and Android applications. Users who want to buy or take foods will have recommendations by our system according to their transaction history and they can search food by using their location. Detailed aspects of our project will be explained in the other topics below. Now, we explain our basic usage scenarios.

*-**Sign up and login:** Users can sign up or login to the system by using their Facebook or mail accounts. Users will have their own profiles which has to consist of user's description, comments from other users if they have any and order history. According to user's rating, they will have ranks and badges which show their skills and trustworthiness.*

*-**Food feed:** After users login to the system, a timeline which shows the recent food stories will be shown to the each user according to locations, their custom filters and recommendations. Users can choose whatever they want and can see the details of the meal and cook. After the user decides to buy or take the meal, user can either order the meal or contact the cook by sending a direct message.*

*-**Sharing their foods:** Each user can share their cooked meal by adding photo, category and description of food and the price of the meal depends on users' demands. User has to choose the time interval for selling the food. After this time interval, the details of the food will disappear from food feed.*

Similar Products/Projects

According to our research, there are some similar projects with our idea but not in Turkey and they do not satisfy our real purpose and lack some core features that we will explain later.

-LeftOverSwap

-FoodSharing.de

We have been influenced by some similar projects which are:

-Blablacar, Uber (Car sharing projects)

-Airbnb (A project for renting room or apartment)

-Couchsurfing (A project for providing free accommodation)

-Letgo (A project for selling second hand items)

Justification of the proposal

Purpose of our project is giving a new opportunity to people for sharing their food online with or without fee.

By this project, we provide people a chance to utilize their extra food instead of being these foods wasted. In addition, this project aims to supply home-made and healthy food to people who does not have time or resource to have a meal. Last but not least, it is an opportunity for people who does not have an official income but would like to earn some money by sharing their home-made food.

Nowadays, most of the restaurants offer expensive and/or unhealthy food. Our project aims to give people cheap, creative, various and home-made food and another job opportunity for unemployed people.

Contributions, Innovation and Originality Aspects of the Project

Main contributions of our project are avoiding food wasting and providing home-made food to people fast and cheap. It will have a live timeline to follow recent available meals nearby the user. While planning to project, we want to increase cooperation. By the way, users are free to ask for fee in return of sharing their meal so that they can have a chance to contribute their home budget.

*In addition, with gamification techniques, this project will be a playful portal for cooperation and contribution. Users can gain some points and badges about cookery (such as "Masterchef", "Gourmet" etc.) which will make this experience more fun and qualified. **According to users' gains, there will be top ten lists for each week or each month which shows the most "Masterchef" sellers or most "Gourmet" eaters. Since our main purpose is providing cheap food, there will be limitation of food price for sellers according to their points and badges.***

Users can also choose their titles according to their meal preferences, like "Italian Chef", "Italian Gourmet". However, they can not be random choice categories because they also need to collect enough points or badges to assign themselves as a professional of that cuisine.

***In addition, there will be recommendation system which shows you possible menu choices according to user's first meal choice. For example, if user chooses "Rice" as an first meal, system shows that there are matching side dishes, like "Dessert" or "Chicken food". While using this feature, system should concern the location of other meals according to user's location and their choices' location. This feature may be provided by pop-up screens. Notification system can be also used which send a notification to the user from his/her favorite cook as soon as that cook publish his/her meal.** We also provide a search page which includes both basic and advanced search. Users will have an opportunity to find the meal according to keywords or categories they selected. Search page will also show recommended meal menus based on user's taste with photos of matching meals.*

Moreover, some similar applications provide people to share some ingredients of meal. We only aim to share warm home-made food quickly.

It is known that there are some similar projects, however these are our leading features that differs us from them.

Technical Aspects of the Project

*We are planning to develop Android application and Web application. We will have a database to save users and meals. There will be web and mobile services in order to provide functionality between user interface and database. For location services, we are planning to use Google Maps API. We will develop an algorithm for gamification and recommendation by using game theory. **For money transaction, we will use Braintree v.zero for accepting payments and PayPal Payout API for our payouts. Applications with similar functionality use these technologies for payments and billing. For our graphical interfaces, we will use Google Material Design Concepts (Palette Perfect etc.) for Android mobile app and JQuery/Bootstrap for web frontend. If we can find a sponsor for our application, we would like to work with a graphic designer because we are aware of the fact that well designed user interface is crucial for these kind of applications which use gamification. It will improve the engagement of our users to this application. If we can publish our application to Google Play Store earlier, with help of Google Analytics, we can turn customer insights into action.***

(Provide some technical elaboration of the project -not as detailed as an SRS or an SDD, but detailed enough to visualize the technical aspects of the finished project as closely as possible.)

Targeted Output, Targeted User/Domain Profile

There will be a timeline to show recent foods that can be filtered according to selected location.
Each user will have its own profile page that includes personal information, comments from other users and their order story. Users can login by using their Facebook or via e-mail.
*Our targeted users are mostly students, single people and housewives but anyone that needs home-made meal time to time is welcomed. **In order to encourage people, meetings can be arranged with municipalities to make this project trustful for housewives etc.***
Users are free to choose if their accounts will be private or public to make them feel secure. It is an opportunity to the housewives who want to sell their meals to their neighbours or vicinity only.
We believe that first; application will be used locally in Ankara. However, it has a potential to spread all over Turkey and then all over the world.

Project Development Environment

For Web application and interface, we are planning to use HTML, CSS and Javascript. In addition, we are planning to use Django framework coupled with a MySQL and Python database for our backend development.
For Android application, we are planning to use Java.
There is no hardware usage in this project.
The tools that we will use are: Android Studio.

External Support

We may use some basic open source libraries to assist our project.
We may consult Industrial Design students for design and esthetical aspects.

References

https://www.blablacar.com.tr/
https://www.uber.com/
https://www.airbnb.com/
http://leftoverswap.com/
https://www.couchsurfing.com/
https://foodsharing.de/
http://tr.letgo.com/tr