

## **CS 353**

# Database Systems Project Proposal

**Project Name: Daily Food** 

## Group 1

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### 1. Introduction

In this report, we describe our project which is Collaborative Hypertext Dictionary. As a Hypertext Dictionary we decided to make a food recipe sharing website called "Daily Food". In our website users can be members, share and read recipes which are separated into categories, search for recipes, follow and send messages to other users, rate and comment on recipes. Users can search for recipes by their categories using the search bar.

In this proposal we will describe the project in detail, explain how we will be using a database, describe the functional, non-functional and pseudo requirements as well as limitations. In the last part of the report we will show our subsystems via an E-R Diagram.

## 2. Project Description

"Daily Food" is a web based application which will allow users to share and find new food recipes. Food recipes will be categorized into 4 main categories which are "Appetizer", "Main Course", "Dessert", "Beverage". These 4 will also be categorized into sub-categories. For example, "Main Course" can be sub-categorized into "Meat" and "Chicken".

#### 2.1. Users and Accounts

Every member and admin will have an account, moreover members must have an account in order to use the properties such as sharing recipes, following other members and sending them messages. Each account must have a username, e-mail and password to be able to register to the website. However, non-member users can read other's

recipes without logging in but they cannot use any other property of the website.

Admins on the other hand will have an account where he/she will have authority to delete and modify topics and contents.

## 2.2. Membership Abilities

Users can interact between each other by rating their recipes. Highest rated recipes will appear in the Main Page as "Recipe of the Day". Also, users can follow others to see other'ss recipes in their Main Page, if that followed user added a new recipe recently.

Users can also comment on other user's recipe which will appear in the comment section below that recipe which will be public and every other user will be able to read those comments. If user wants to communicate with the recipe owner they can send private messages.

With this application we aim to encourage sharing recipes and getting inspired by reading different recipes. Users will be eager to make their own delicious food!

### 2.3. Why the Database will be Needed for this Project

A recipe sharing systems is a vast array of information which includes accounts of users, shared recipes, topics, sub-sections, comments, followed users, messages and so on. Database will be needed to stay away from inconsistency and confusion. For this purpose we drew an E-R Diagram which will be useful for implementation of the project. The relations in this project is important because users can communicate with each other and share their recipes with others. Showing this relations is a convenience of a Database System, and also with the help of this Database System the information will be stored properly so that it will not get lost.

## 2.4. How the Database will be Used for this Project

With the help of the SQL language we will implement query operations. We defined our attributes belonging to the entities and relations with the help of E-R Diagram. Our entities are:

- Account
  - Writer
  - o Admin
- Topics
  - Appetizers
  - Main Course
  - Desserts
  - Beverages
- Context
- Comments

Details of the entities will be described in detail in the E-R Diagram. We can manage all data regarding food recipes in a Database System. We can update Database to create new entities and attributes. Apart from the updates and query operations this database application will handle data entries.

## 3. Requirements

### 3.1. Functional Requirements

#### 3.1.1. Member

- > Members should be able to login to their account.
- > Members should be able to modify their personal information.

- > Members should be able to search for the recipe topics.
- Members should be able to rate recipes.
- Members should be able to comment on recipes.
- Members should be able to label contents.
- Members should be able to follow other members.
- Members should be able to send messages to other members.
- Members should be able to share recipes.
- Members should be able to see the daily feed of recipes in the main page.
- Members should be able to see other's comments under the recipes.
- Members should be able to logout from their accounts.

#### 3.1.2. Admin

- Admins should be able to login to their accounts.
- Admins should be able to have a specification called admin-rate that specifies their abilities.
- Admins should be able to edit the recipes.
- Admins should be able to delete the recipes.
- Admins should be able to delete comments.
- Admins should be able to search for the recipe topics.
- Admins should be able to see the daily feed in the main page.
- Admins should be able to change the daily feed in the main page.
- Admins should be able to delete the daily feed in the main page.
- Admins should be able to ban members if their admin-rate if above a certain level.

Admins should be able to logout from their accounts.

### 3.2. Non-functional Requirements

#### 3.2.1. User Friendliness

- The system should be easy to use for the users with the user-friendly interface
- The system will provide accessibility to user via the search button.

#### 3.2.2. Quick Response Time & Scalability

Since there will be searching through recipes, sharing posts, comments and messages; the system should be fast enough to handle all of these abilities.

#### 3.2.3. Account Security

- Users can only access to their accounts with entering their passwords correctly.
- Access permissions can be modified only by the system admins.

#### 3.2.4. Capacity

Since the system consists of a variety of information, it should store a big amount of data to hold recipes, account information, topics, context, comments and so forth.

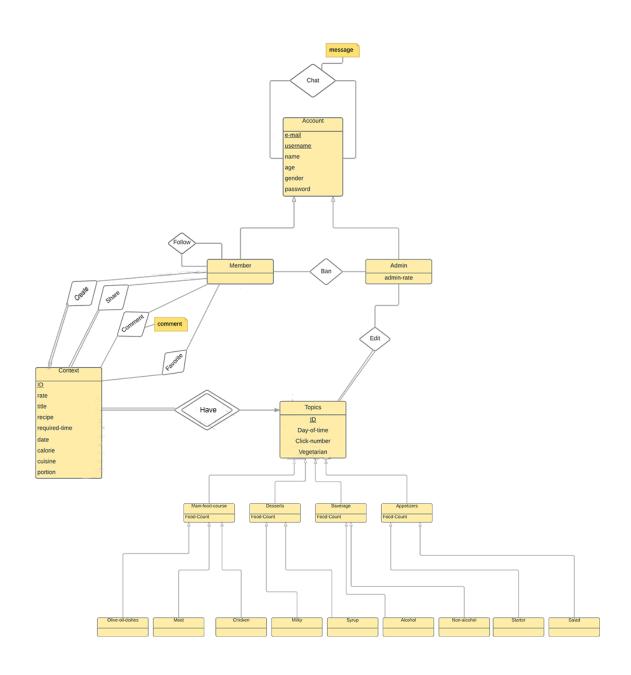
#### 3.3.Pseudo Requirements

- MySQL will be used for database.
- PHP will be used for back-end development.
- > HTML, CSS and Javascript will be used for the web page.

#### 4. Limitations

- Members should not be able to change or delete other members comments.
- Members should not be able to see admin profiles.
- Admins should not be able to ban members if that admins rate is below a specific level.

> Admins should not be able to comments on recipes.



- Admins should not be able to follow other members.
- Admins should not be able to create topics.
- Members should not be able to reach their accounts without logging in.

## 5. Entity Relationship Diagram

## 6. Conclusion

"Daily Food" is a Collaborative Hypertext Dictionary which is used by members of the website to share their own recipes and learn new recipes from other users. In our website there will be a wide range of recipes due to the nature of Collaborative Hypertext Dictionary anyone can become a member of the website and share their recipes. This project aims to encourage users to contribute their recipes with the world.

In the first part of this report we described the aim of the project and explained how and why database will be important in this website application project. After the description, we tried to determine the requirements of the project as follows: functional requirements, non-functional requirement and pseudo requirements. After those, we declared the limitations in the system. For the last part, we provided an Entity Relationship Diagram to clarify our system.

## 7. Website

https://github.com/kubraguzel/CS353---Database-Systems-Project