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Scope Statement for the Final Project – Web Application for a Russian Café.

Section 1 Overview

Purpose: A web site for viewing the menu and ingredients, getting general and contact information about the Russian café, and placing orders for a later pick-up. This site is for the customers of the café to get more information and administration to manage and update the menu, promotions, as well as to analyze the sales.

Scope: The name of the site will be Russian Café. For the general public the site will present the contact information, the menu, and descriptions of the items on the menu. For the registered users the site will present options for placing the order for the specified time to pick-up the items. For the administrators, the site will provide the functionality to modify any of the general information, menu, descriptions, view users and their most purchased items, provide discounts and coupons to chosen groups of users.

Software products will organize and present the items for sale, facilitate purchasing, and secure all of the transactions between customers and the café.

Definitions, acronyms, abbreviations: SQLi – sequel injection attack, XSS – cross-site scripting attack, SSL – secure sockets layer.

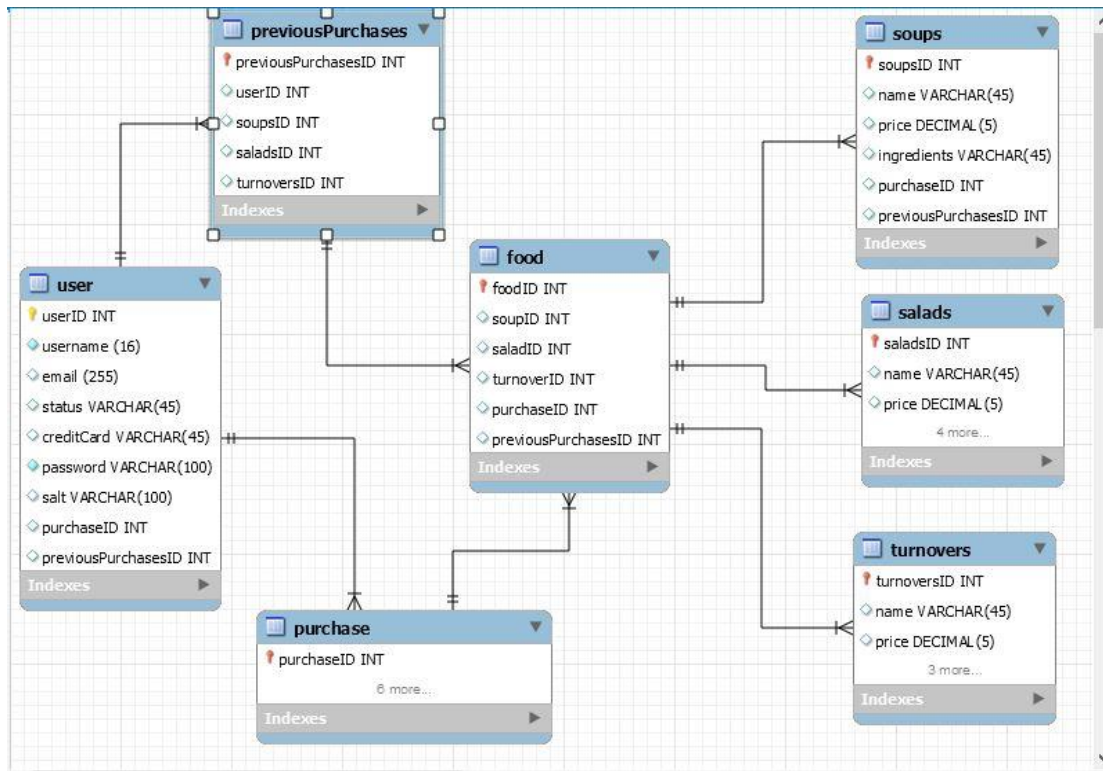
References: This website follows the slides and homework assignments for class.

Overview: This web application serves as a final project for the class and will serve as a basis for future projects.

Section 2

Product Perspective: The product will be standalone with the web application interacting between the user and the database.

Diagram of the database:



Interfaces will be similar for all the users of the application, with extra options for registered users and administrators.

Application can be run on any computer or laptop with supporting code. Database part of the project can be managed through the command line. The application code will use various cases for various tasks, sanitizing any data that was put in by any user. All of the sensitive information (passwords and credit card information) will be encrypted. All of the communication between the application and the database will be encrypted.

Product Function: to facilitate easy and safe interactions between the customers and the café.

User Characteristics: General public can see the main page with the menu, general information. They can click on the option to register with the site, view ingredients for each dish. Registered users can also choose the items to purchase, view the total price, choose the time for getting the items, pay for the order, view and apply their rewards. Administrators can update menu, ingredients, general information; view, create, delete users, modify their passwords.

Constraints:

- This application is not designed for mobile devices.
- Emphasis is placed upon the application's functionality and aesthetics can be added at a later time.

Assumptions: The product is using the self-signing certificate, which means that the user has to continue to the site, when prompted that the site is not trusted.

Section 3

3.1 Specific Requirements.

- Store food items, ingredients, and prices.
 - Store users, their credit card information, emails, passwords.
 - Store current and previous purchases.
 - Normalize all data.
 - Web interface that would provide an easy way to see the items, register/log into the site, order items.
 - Inputs for the website: username, password, food choice, credit card information.
- Outputs of the website: menu, general information, total price.
- Inputs for the database: query. Outputs of the database: result of the query: usernames, passwords, food items, purchases, etc.
 - Inputs of the Web application to database: query. Outputs of the database: result of the query: usernames, passwords, food items, purchases, etc.

3.2 Functional Requirements.

The system shall facilitate easy, secure, and informative interaction between users and the website. It will check inputs for SQLi, remove tags to prevent XSS attacks, check for integers and the size of the input to prevent unauthorized log in or buffer overflow attacks, require authentication for the tiered privileges, use SSL to establish secure communications between the server and the database.