

Revolution To-Go

-- Project Report

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URLs:

For administrators:

Please use the following credentials to log in.

Username: csc461

Password: milestone4

http://betaweb.csug.rochester.edu/~hma21/admin_login.html

For customers:

<http://betaweb.csug.rochester.edu/~hma21/index.php>

Project Description

The online food ordering system has grown fast in recent years, especially during the global pandemic. The goal of our project is to build our own database and web interfaces for a local restaurant (or imagine that we own a restaurant) to run a successful food ordering system.

The project involves designing & creating database with MySQL, creating web interfaces with HTML and connecting the interfaces with server database with PHP.

The database contains 5 relations to store data of administrators, menu items, menu categories, orders, and additional information of the orders. We have two sets of web interfaces: one for administrators and one for users (customers).

After login, administrators are allowed to search, add (add an order and then add dishes), delete, update, and view order information (use the “view order includes” link for additional information). Administrators can also search, add, delete, update, and view (including viewing categories) items currently in the menu. Moreover, they can add usernames and passwords for new administrators and view all the credentials.

For customers, we are showing our fancy web for customers to know about the restaurant’s basic information, for instance, popular dishes, chefs (initially, we three), and contact information. Moreover, we use PHP to link the pages to our database so that customers can see every dish by its category on our website. The most important function, placing a pickup order from the website is also implemented. Customers could simply place an order by typing in their phone number, choosing the estimated pickup time, and adding the dishes they like. We built the phone number limited to this certain format like “123-456-7890”, and also the time for pickup should not be earlier than the order time.

Summary

Through this project, we have learned about the theoretical design of a database schema (from proposal to ER-diagram, then to normalized relations), creating a database on a server with SQL statements, and building web interfaces & interactions with the database using HTML and PHP. The most challenging, but also the most fun part was implementing web interfaces and all kinds of interactions with our database. We had to do it from scratch and we spent a long time doing online research on HTML and PHP since none of us have had

previous experience. We made it at last and the websites for both administrators and customers were fully functional. It was fun and satisfying playing with the website and interacting with our database.

There were some differences between our first version and final version of the database schema. We added a relation storing login credentials of administrators. Moreover, we deleted the relation for customers and decided to move the customers' information (phone number) into the orders relation, since unfortunately, we were unable to implement the signup and login process for customers due to limited time and limited HTML/PHP knowledge, but we have tried to make the customer page as fancy as possible.

All in all, we are delighted to see our fully functional websites and interactions with the underlying database.

Future Works

By visiting both administrator and customer websites that we had developed, we can see that the administrator website has strong functionality with all interaction with our database. What we could improve is to combine add order and add dishes so that we could place an order and create both records in two tables -- `orders` and `order_includes`.

For the customer website, there is a lot that we could improve. The website right now is good-looking with basic functionality. If there is another semester, we would add an account section to allow customers to have their own account. With an account, customers could also view their own orders and cancel their orders (need to add a `deleted_orders` table to transfer from active order to canceled orders). Besides, customers can add dishes in their cart, without knowing the dish ID. An interactive web interface could have pictures of the dishes and a "+" sign for customers to add them into their cart (temporary table for `cart` needed here).

Reference

Grubhub page of Revolution Karaoke Asian Cuisine,

https://www.grubhub.com/restaurant/revolution-karaoke-asian-cusine-382-jefferson-rd-rochester/376012?classicAffiliateId=%2Fr%2Fw%2F62822%2F&utm_source=www.karaokefood.com&utm_medium=OOL&utm_campaign=order%20online&utm_content=376012

“Create Simple Login Page with PHP and MySQL” by Yogesh Singh,

<https://makitweb.com/create-simple-login-page-with-php-and-mysql/>

HTML Framework for Customer Pages

<https://code-projects.org/online-restaurant-using-html-css/>

Phone Number validation

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/tel>

Add Dish button tutorial

<https://cloud.tencent.com/developer/article/1706403>

Timestamp Validation

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input/datetime-local>