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CS322 – Project documentation

FOOD ORDERING APPLICATION

PROGRAM WALKTROUGH

· Login screen

Upon opening the app, the user is greeted with the following window:

Upon entering credentials and logging in or registering the next window will appear. If the user does not have an account, he will need to register by clicking the register button, after doing this another textbox will appear where they would be able to enter their email address. In the top left of the window is the:

· Admin window

This is where you would perform all your CRUD actions. Like adding, editing, or removing a restaurant from the database, or adding a new food item to a desired restaurant. Currently editing and deleting food items isn't implemented due to time constraints but that will come with the next version. Example of the admin window in use:

· Restorants window
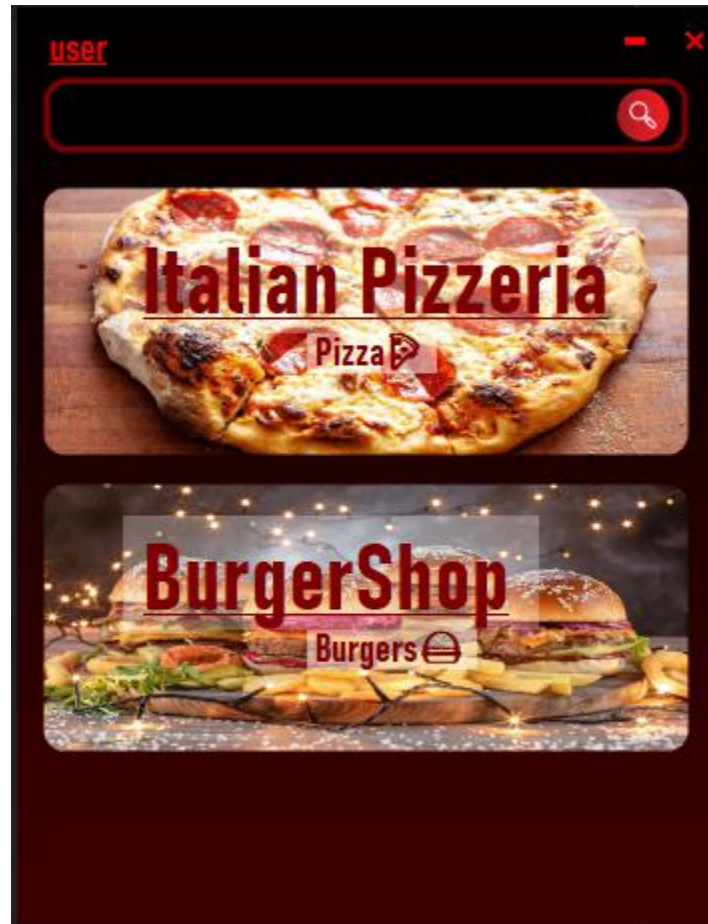
After successfully logging in the user is presented with the list of restaurants. On top of the window is an **unimplemented** search function, where the user can search for his wanted restaurants. In the top left of the screen is the user's username, once clicked a new window will open displaying all past purchases made by the user. Example:

· Restaurant menu window

After picking a restaurant, the user is shown the menu window. Using the mouse scroll wheel, the user can search through the restaurants given choices. After clicking the '+' icon he will add the item to the cart and the order button appears. The user can add as many items as they want.

· Order window

After clicking the place order button, the user is shown the final window in the process. Here he can see which, how many and from what restaurant are the picked items. The user can also remove items form the cart by clicking the '-' icon. There are also 2 choices, pay method and mail receipt. Both do not have much implementation. The next version of the app will include an actual mail receipt being sent to the user's e-mail address.
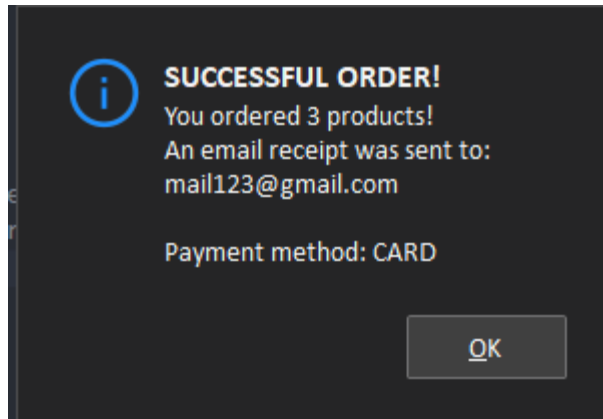
TECHNICAL OVERVIEW

The program is divided into 3 parts.
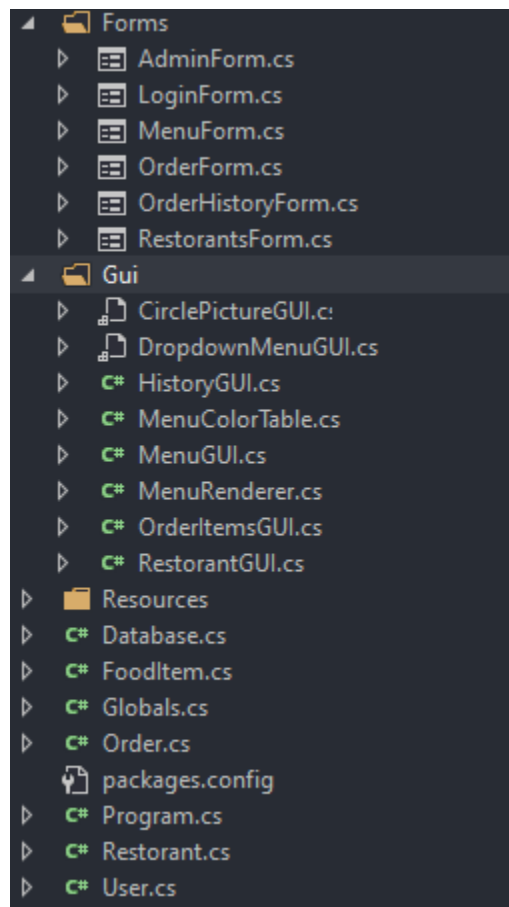
- The first part are the Forms. All the form files are placed in the Forms folder. Inside every form class is the needed implementation that could not be achieved through the properties window in Microsoft Visual Studio.

- The next are the GUI classes. These classes are used for drawing custom made controls (ex: RestaurantGUI draws an overview of the given restaurant.):

Every GUI class works using a simple pattern. On top are the needed variables for the control to work and be drawn. Then comes the constructor where all the controls are drawn positioned and given functionality. The way these classes are used is simple: upon loading a form, for example RestaurantsForm the program will go through all the Restaurants in the Database and call the RestaurantGUI constructor for each element. To make this work a simple trick is used, we initialize a static HEIGHT property with the starting height of the component and at the end of the constructor we add the height of the control to HEIGHT to draw the next control under.

- The last part is the classes used for working with the database and some miscellaneous ones like Globals.cs where we store needed variables that can be seen throughout the whole program.

DATABASE

In this program the database of choice is MySQL. We connect to phpMyAdmin using XAMPP where we have full control of the database. The things that we keep in the beforementioned are: users, orders, restaurants, and food items. The Database.cs class includes all the needed functions when working with the database.

Next version will bring:

· Map integration – users will have to pick their address on a map, and after that the route from the restaurant address and the user's home will be drawn. This will be implemented using the GMap C# library;

· Search functionality – users will be able to search for their desired restaurants in the restaurants view window;

· E-mail receipt – if chosen an email will be sent to the user after a successful order;

· Finished up admin window;

· Items in the menu window are sorted by type.

· Restrict admin window with a password