Alex Raffone

4701 Phase II

1. The purpose of phase II of this project was to create a front end web browser in HTML and connect it to the MySQL database in order to create a user friendly and fully function DBMS. This project taught us many things about programming with SQL, HTML, and PHP in order to gain experience creating an API. Specifically within creating an API, creating a Login and registration screen was useful because this is a very common feature on computer applications and something I might be asked to do in the future depending on the desired career path. The customer and employee webpages involved linking different HTML pages together as well as utilizing GET and POST methods for taking input from the user and using it to query the database.
2. The main problem starting out for phase II is that neither of us had experience using PHP or creating an API. We were able to overcome this by doing plenty of research and practicing repeatedly until I understood how to create an API. Another issue was more logistical in that the team consisted of only two people where other teams had three or even four members. This made the workload more difficult than it could have been but I was able to split the duties fairly and I started a little earlier on the project than I normally would have to compensate for our missing teammate.
3. For the system architecture I had a homepage for the customer dashboard, a search page for products, a page to edit payment types, a page to order products, a shopping cart, and a shopping cart. I used PHP and HTML to connect to the database and took input from the user to query the database and then display it to the user.
4. The back-end of our system is written entirely in PHP and our functions that interact with the database include the customerSearch and the productSearch. Both of these functions act in similar ways. They both take in input with an HTML form and then use the POST method in PHP to search the database and display the output. The database can be reached with the following line of code: $db=mysql\_connect ('localhost', 'root', 'password'). From there I take the user input for product and use it to search the database with the following: $sql="SELECT \* FROM Products WHERE ProductName LIKE '%".$ProductName."%'"; I then incorporate a simple while loop to display all the results.
5. Our system includes most of the functionalities required however some of them are better than others. For example, I can search for products and customers very smoothly and display the matches. However, I struggled to incorporate the ability for the user to add to the tables in the database. Something I also did well was the login and registration screen. I have a very user friendly GUI that allows the user to create a username/password or login if they already have one. One area I could improve is the ability for the user to place orders. I have the ability to search for products but I are unable to create an order and actually have them pay for it. I also do not have the ability to log in with different credentials. For example, the different type of people that could be using our system are employees, customers or admins. I have no way to distinguish the privileges of these different types of users. Overall our system is very useful, it can do most of the things required in the project and the things it does do it does well, giving clear output and feedback to the user whenever an action is taken.