

# Review Report For Models

## **Component Diagram:**

For the component diagram, it consists of all elements of our website. Starting with the website “Orange Tech”, we have the following, Authorization, User Interface, Authentication and Admin. The authorization is connected through the payment, so when the customer goes to their checkout, and they pay, their payment will then be authorized.

The User Interface consists of pages such as Cart, Contact, About, Sign Up/ Sign In, and Products. The Cart page is where products picked by the customer go. The Contact page is where the customer can write their name, email, and write a question or concern. The About page shows how our website works. The Sign Up/ Sign in page which are connected through authentication allow a customer to sign in, where their emails and passwords will be authenticated. The Products page is where our entire catalog of products is shown.

There are also the databases which are controlled by the Admin. The Admin will have control of different databases for Products, for User Information, and for Deals.

## **Front End Sequence Diagram:**

The Front End Sequence Diagram shows a detailed view of the customers action on our website. First of all, they will be able to look through a catalog of products and add them to their cart. Upon adding items, the item will be removed from the stock. Once they are ready and proceed to checkout, they will get an alert asking to sign up or sign in and they will be taken to the sign up page. After signing up or signing in, they will be able to view their available deals. Once they selected a valid deal or declined it, they will be able to input their payment details and shipping address. Their payment will then be authorized through the bank and once it has been verified, their order will be completed and they will get a receipt and delivery details.

## **Back End Database Sequence Diagram:**

The Back End Database Sequence Diagram shows a detailed view of the backend of our website. After an admin makes a change on the product database, the website will automatically be updated with the change.

Also, in any case the customer needs to update/change their info, they will have to contact the admin, who can go into the database and change their info.

The admin will also be able to edit deals whenever a deal expires or needs a change.

### **State Diagram of Cart:**

The State Diagram of the Cart shows how the Cart functions. The Cart will originally be in an empty state, but when a customer adds a product, the Cart will be in a full state, where the price can be viewed. There will also be a checkout available in this state. Once proceeding to checkout, the payment will be available and there will also be an apply discount option, where the price after discount can be viewed again. The Cart will go back to the empty state once all items have been removed from the cart.

### **Class Diagram:**

The Class Diagram shows the connection between the Authentication, Cart, Products and Contact page. First, the customer needs to be signed in to checkout, so they must be authenticated. Then the customer can add products to the cart by browsing the products page. In the products page, the admin can update the stock, update the price, add a new product, remove a product and update the descriptions. After browsing the products, the customer can add it to the cart, from which they can add or remove products, get a discount if they are signed in, check the total price and finally checkout. When the customer completes their purchase the purchase history will be saved inside the database, which can be accessed through authentication. Lastly, if the customer wishes to contact the admins, they may use the contact page to resolve their issues.