**Summary**

This homework was created for a company called iCAGES (integrated CAncer GEnome System) Corporation. The goal of company is to sell cancer gene/genome/transcriptome/epigenome sequencing service to cancer patients. It can be accessed at: <http://cs-server.usc.edu:11111/CodeIgniter/index.php/welcome>

**Account**

Customer:

Username: [coco90417@gmail.com](mailto:coco90417@gmail.com) Password: 3333

**Databases**

Table 1. Product

|  |  |  |
| --- | --- | --- |
| Name | Type | Size |
| productid | int | 11 |
| productcategoryid | int | 11 |
| productname | varchar | 80 |
| productdescription | varchar | 2000 |
| productprice | int | 11 |

Table 2. ProductCategory

|  |  |  |
| --- | --- | --- |
| Name | Type | Size |
| productcategoryid | int | 11 |
| productcategoryname | varchar | 80 |
| productcategorydescription | varchar | 2000 |

Table 3. Customers

|  |  |  |
| --- | --- | --- |
| Name | Type | Size |
| customerid | int | 11 |
| username | varchar | 2000 |
| password | varchar | 80 |
| firstname | varchar | 80 |
| lastname | varchar | 80 |
| billaddress | varchar | 2000 |
| shipaddress | varchar | 2000 |
| creditcard | BIGINT | 19 |
| security | int | 10 |
| expirationdate | date |  |

Table 4. Orders

|  |  |  |
| --- | --- | --- |
| Name | Type | Size |
| orderid | int | 11 |
| orderdate | date |  |
| ordertotal | BIGINT | 20 |
| customerid | BIGINT | 20 |
| paid | varchar | 10 |

Table 5. OrderItems

|  |  |  |
| --- | --- | --- |
| Name | Type | Size |
| orderitemsid | int | 11 |
| orderdate | BIGINT | 19 |
| count | BIGINT | 19 |
| productid | BIGINT | 19 |

**How it works**

For this assignment, I implemented the customer side of a website for iCAGES. <http://cs-server.usc.edu:11111/CodeIgniter/index.php/welcome> is the home page of the site. Users can login and sign up in this website, and this is controlled by login function in the user controller. The home page lists only the current special sales items, this is rendered through model which queries the database. When logged in, users can modify their own profile and view their order history, which is realized through user controller and model.

At the top are the links to different product categories that the user can browse through and purchase items. Navigation between different pages is realized through user controller as well and the rendering of different product in different product categories is rendered through model which queries databases given specific input information.

Moreover, shopping cart is maintained using cart controller, which uses items model to query database for items users ordered and makes sure that users can delete, update their orders.

Finally, checkout is also enabled in cart controller, which enables users to check out their orders and have confirmation emails send to them.