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LIS 161 - PEREZ

#### I. Introduction

The E-Kiosk project is a website that offers an online food service on the Internet. It is meant to simulate the physical food service experience brought by the kiosks around the UP Diliman Campus.

### II. Programming Language

The website is made in the Flask web framework with the help of the Jinja template engine and Werkzeug WSGI toolkit. It runs on both Python programming (major component) and HTML language (minor component).

#### III. Database Functions

The website utilizes the SQLite database management system to handle user data storage, and access other important data used in the website. The website uses 'data.py', to connect to and access the database.

Inside ('data.py'):

```
import sqlite3

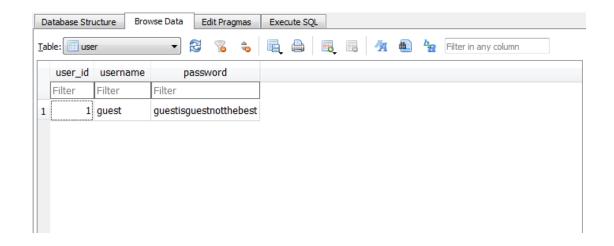
db_path = 'pb.db'

def connect_db(path):
    conn = sqlite3.connect(path)
    #converts tuples to dictionary
    conn.row_factory = sqlite3.Row
    return (conn, conn.cursor())
```

connect\_db(path) connects to the database and converts the tuple into dictionary.

```
def select_dict_user():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM user'
    results = cur.execute(query,).fetchall()
    return results
```

select dict user() grabs everything in the user table. The username column is unique.



```
def read_user_by_id(user_id):
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM user WHERE user_id=?'
    results = cur.execute(query, (user_id,)).fetchone()
    conn.close()
    return results
```

read\_user\_by\_id(user\_id) uses user\_id from the user table to return specific values.

insert\_user\_into\_user(login\_data) takes the user login and password input, which is defined inside the login\_data dictionary, given by the user and puts them inside the user table.

```
def update_user_in_cart(user_data):
    conn, cur = connect_db(db_path)
    query = 'UPDATE cart SET user_id=?, user=? WHERE

cart_id=?'
    values = (
        user_data['user_id'],
        user_data['user'],
        user_data['cart_id'],
    )
    cur.execute(query,values)
    conn.commit()
    conn.close()
```

update\_user\_in\_cart(user\_data) takes the login data of the user (username and user\_id), defined under the user\_data dictionary, and changes the current user's name and id that is stored along with the cart.

```
def delete_user_from_user(username):
    conn, cur = connect_db(db_path)
    query = 'DELETE FROM user WHERE username=?'
    cur.execute(query, (username,))
    conn.commit()
    conn.close()
```

delete\_user\_from\_user(username) deletes the user from the user table by using their username as key.

```
def select_dict_meals():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM meals'
    results = cur.execute(query,).fetchall()
    return results
```

select\_dict\_meals() grabs everything in the meals table.

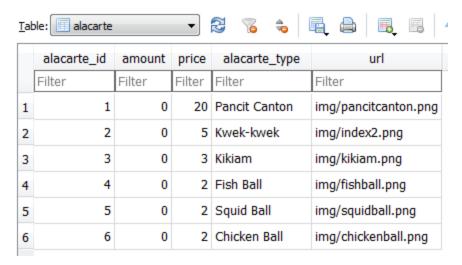
<u>T</u> ab	ole: meal:	S	<b>→</b> 😂 🔏 🖡	
	meals_id	meals_type	url	
	Filter	Filter	Filter	
1	3	combomeals	img/combomeals.png	
2	4	alacarte	img/alacarte.png	
3	5	drinks	img/drinks.png	

```
def read_meals_by_type(meals_type):
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM meals WHERE meals_type=?'
    results = cur.execute(query, (meals_type,)).fetchone()
    conn.close()
    return results
```

read\_meals\_by\_type(meals\_type) uses meals\_type from the meals table to return specific values.

```
def select_dict_alacarte_type():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM alacarte'
    results = cur.execute(query,).fetchall()
    return results
```

select dict alacarte type() grabs everything in the alacarte table.

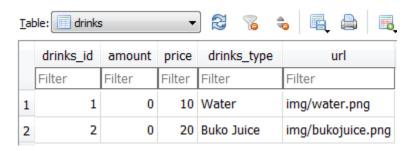


```
def read_alacarte_by_id (alacarte_id):
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM alacarte WHERE alacarte_id=?'
    results = cur.execute(query, (alacarte_id,)).fetchone()
    conn.close()
    return results
```

read\_alacarte\_by\_id(alacarte\_id) uses alacarte\_id from the alacarte table to return specific values.

```
def select_dict_drinks_type():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM drinks'
    results = cur.execute(query,).fetchall()
    return results
```

select dict drinks type() grabs everything in the drinks table.



```
def read_drinks_by_id(drinks_id):
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM drinks WHERE drinks_id=?'
    results = cur.execute(query, (drinks_id,)).fetchone()
    conn.close()
    return results
```

read\_drinks\_by\_id(drinks\_id) uses drinks\_id from the drinks table to return specific values.

```
def select_dict_flavors():
    conn, cur = connect_db(db_path)
```

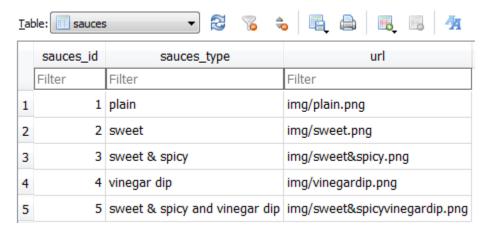
```
query = 'SELECT * FROM flavors'
results = cur.execute(query, ()).fetchall()
conn.close()
return results
```

select\_dict\_flavors () grabs everything in the flavors table.

Table: ¶ flavors ▼				
	flavors_id	flavors_type	url	
	Filter	Filter	Filter	
1	1	classic	img/classic.png	
2	2	calamansi	img/calamansi.png	
3	3	chili-mansi	img/chilimansi.png	
4	4	sweet & spicy	img/pcsweet&spicy.png	
5	5	hot-chili	img/hotchili.png	

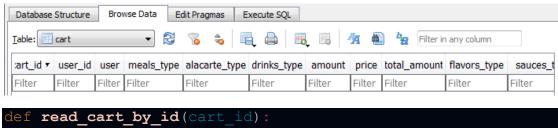
```
def select_dict_sauces():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM sauces'
    results = cur.execute(query, ()).fetchall()
    conn.close()
    return results
```

select\_dict\_sauces () grabs everything in the sauces table.



```
def select_dict_cart():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM cart'
    results = cur.execute(query, ()).fetchall()
    conn.close()
    return results
```

select\_dict\_cart () grabs everything in the cart table.



```
def read_cart_by_id(cart_id):
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM cart WHERE cart_id=?'
    results = cur.execute(query, (cart_id,)).fetchone()
    conn.close()
    return results
```

read\_cart\_by\_id(cart\_id) uses cart\_id from the cart table to return specific values.

insert\_cart\_into\_cart(cart\_data) takes the user data, which is defined inside the cart\_data dictionary, given by the user and puts them inside the cart table.

```
def delete_cart_from_cart(cart_id):
    conn, cur = connect_db(db_path)
    query = 'DELETE FROM cart WHERE cart_id=?'
    cur.execute(query, (cart_id,))
    conn.commit()
    conn.close()
```

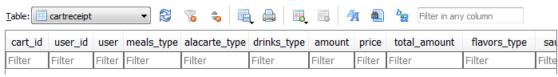
delete\_cart\_from\_cart(cart\_id) deletes a row from the cart table by using their cart\_id as key.

```
def update_cart(cart_data):
    conn, cur = connect_db(db_path)
```

update\_cart(cart\_data) takes the data of the user, defined under the cart\_data dictionary, and changes the current cart's data by using cart\_id to specify the row needed to change.

```
def select_dict_cartreceipt():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM cartreceipt'
    results = cur.execute(query, ()).fetchall()
    conn.close()
    return results
```

select\_dict\_cartreceipt() grabs everything in the cartreceipt table. The cartreceipt table is a duplicate of the cart table.



```
cur.execute(query, values)
conn.commit()
conn.close()
```

insert\_cart\_into\_cartreceipt(cart\_data) takes the user data, which is defined inside the cart data dictionary, given by the user and puts them inside the cartreceipt table.

insert\_final\_into\_finalcart(finalcart\_data) takes the user data, which is defined inside the finalcart\_data dictionary, given by the user and puts them inside the finalcart table.

```
def read_finalcart_by_id(finalcart_id):
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM finalcart WHERE finalcart_id=?'
    results = cur.execute(query,
    (finalcart_id,)).fetchone()
    conn.close()
    return results
```

read\_finalcart\_by\_id(finalcart\_id) uses finalcart\_id from the finalcart table to return specific values.

```
def select_dict_finalcart():
    conn, cur = connect_db(db_path)
    query = 'SELECT * FROM finalcart'
    results = cur.execute(query, ()).fetchall()
    conn.close()
    return results
```

select\_dict\_finalcart() grabs everything in the finalcart table.



#### IV. Website Functions

## i. Navigation Functions



## 1. Navigation Bar

A navigation bar ('nav.html') is utilized in the website to make it easier for the user to access various parts of the website. The different sections in the nav bar lead to different parts of the website.

Home ('index.html') leads to the frontpage of the website. Menu ('basemenu.html') leads to the entire menu catalog featured in the website. Kiosks ('order.html') leads to the featured kiosks webpage. Cart ('cart.html') leads to the webpage that shows that items in the user's cart. And About ('about.html') leads to the webpage giving brief information about the website.



Register ('register.html') leads to the account registration webpage. And Login ('login.html') leads to the account login webpage. When a user is logged in, Register

becomes Profile ('profile.html') and leads to the currently logged in user's profile. Furthermore, the Login becomes a Logout when a user is also logged in the website.



#### 2. Menu Side Bar

Inside Menu('basemenu.html'), a sidebar ('menusidebar.html'), is utilized to make navigation in-between each meal type easier. On the Menu leads to Menu ('menusidebar.html'), Combo meals lead to Combo meals, A la Carte leads to A la Carte and Drinks lead to Drinks.

## ii. Meal ordering functions

1. Home (index()), ('index.html')

```
@app.route('/')
def index():
    return render_template('index.html')
```

ORDER A MEAL LOGIN







Home is the homepage of the website and has several buttons and images that lead to other parts of the website. The first button 'Order a meal' ('basemenu.html'), directs the user to the menu page.

The second button 'Login' ('login.html'), directs the user to the account login page. When a user is already logged in to the website, the login button disappears.





The images below direct the user to the different meal types offered by the website that they can order. From left to right, the first image directs the user to 'Combo Meals',

```
<form action="/menu/combomeals">
<button class="btn-img" style="width:100%">
<figure><img src="static/img/index1.png" /></figure>
</button>
</form>
<div class="text">SULIT COMBO MEALS</div>
```

the second image directs the user to 'A la Carte' ('alacartemeals.html'),

```
<form action="/menu/alacarte">
<button class="btn-img" style="width:100%">
<figure><img src="static/img/index2.png"></figure>
</button>
</form>
<div class="text">TASTY A LA CARTE</div>
```

and the third image directs the user to 'Drinks' ('drinks.html').

```
<form action="/menu/drinks">
<button class="btn-img" style="width:100%">
<figure><img src="static/img/index3.png"></figure>
</button>
</form>
<div class="text">REFRESHING BEVERAGES</div>
```

2. Menu (basemenu()), ('basemenu.html') and (menu(meals\_type)), ('menu.html')

```
@app.route('/menu')
def basemenu():
    meals = select_dict_meals()
    return render_template('basemenu.html', meals=meals)
```

```
@app.route('/menu/<meals_type>/')
def menu(meals_type):
    meals = read_meals_by_type(meals_type,)
    alacartesdict = select_dict_alacarte_type()
    drinksdict = select_dict_drinks_type()
    return
render_template('menu.html',meals_type=meals_type,meals=meals, alacartesdict=alacartesdict,drinksdict=drinksdict)
```









Menu is the part of the website that features the items that the website offers to the users. basemenu() accesses the meal table in the database by defining select\_dict\_meals as meals. On ('basemenu.html'), the three images are links to the meals contained in each meal type. Combo meals meal type lead to the combo meals (not yet implemented and written as maintenance). Inside ('basemenu.html'):







## Inside ('menu.html'):

# COMBO MEALS

MAINTENANCE

A la carte meal type leads to the a la carte meals. Inside ('basemenu.html'):







## Inside ('menu.html'):

```
{% elif meals['meals type'] == 'alacarte' %}
    <h2 style="...">
        <input class="hidden" value="{{ meals type }}"</pre>
readonly>À LA CARTE</h2>
    {% for alacartemeals in alacartesdict %}
        <form action="{{
       <div class="col-sm-3">
            <div class="w3-container">
                <div class="w3-card-4"</pre>
style="width:100%">
                     <div class="w3-container pnktext">
                     <button class="btn-11" type="submit"</pre>
name="alacarte" style="width:100%;text-align:left;">
                         <img src="{{ url for('static',</pre>
filename=alacartemeals.url) }}" style="width:100%;">
                         <h5 style="margin-
left:20px;">{{ alacartemeals.alacarte type }}</h5>
                     </button>
                         </form>
                     </div>
                 </div>
```

```
</div>
</div>
{% endfor %}
```

## À LA CARTE



And Drinks meal type leads to the drinks. Inside ('basemenu.html'):







## Inside ('menu.html'):

```
{% elif meals['meals type'] == 'drinks' %}
    <h2 style="...">
        <input class="hidden" value="{{ meals type }}"</pre>
readonly>DRINKS</h1>
    {% for drinks in drinksdict %}
    <form action="{ {
        <div class="col-sm-3">
            <div class="w3-container">
                 <div class="w3-card-4"</pre>
style="width:100%">
                     <div class="w3-container w3-left-</pre>
align pnktext">
                     <button class="btn-11" type="submit"</pre>
name="drinks" style="width:100%; text-align:left;">
                         <img src="{{ url for('static',</pre>
filename=drinks.url) }}" style="width:100%">
                         <h5 style="margin-
left:20px;">{{ drinks.drinks type }}</h5>
                     </button>
                     </div>
                 </div>
            </div>
        </div>
    {% endfor %}
{% endif %}
```

## DRINKS

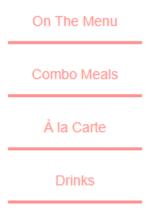




Each meal in the meal type leads to their respective meal web pages.

```
@app.route('/menu/<meals_type>/')
def menu(meals_type):
    meals = read_meals_by_type(meals_type,)
    alacartesdict = select_dict_alacarte_type()
    drinksdict = select_dict_drinks_type()
    return
render_template('menu.html',meals_type=meals_type,meals=meals,
alacartesdict=alacartesdict,drinksdict=drinksdict)
```

Menu, its meal types and each individual meal/drink inside it has a sidebar ('menusidebar.html'), that makes it easier to navigate in-between each meal type.



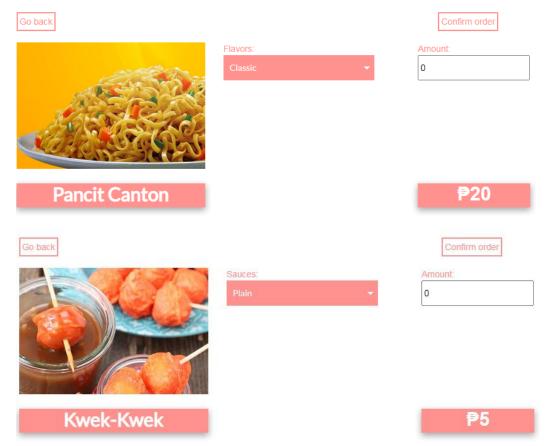
On the Menu leads to Menu ('menusidebar.html'), Combo meals lead to the Combo meals, A la Carte leads to the A la Carte meals and Drinks lead to the Drinks.

3. A la Carte Meals ( alacartes(alacarte\_id, alacarte\_type) ), ('alacartemeals.html')
@app.route ('/menu/alacarte/<int:alacarte\_id>/<alacarte\_type>/')

```
def alacartes (alacarte_id, alacarte_type):
    alacarteid = read alacarte by id(alacarte id)
    meals = select dict meals()
    flavordict = select dict flavors()
    saucedict = select dict sauces()
    loginuser = select_dict_user()
    for users in loginuser:
        if 'user' not in session:
            if 'quest' in users['username']:
                username = users['username']
                user id = users['user id']
        elif 'user' in session:
            if users['username'] == session['user']:
                users['username']
                username = users['username']
                user id = users['user id']
    return
render template('alacartemeals.html', alacarte id=alacarte
 id, alacarteid=alacarteid,
alacarte type=alacarte type, flavordict=flavordict, saucedi
ct=saucedict,
meals=meals,loginuser=loginuser,username=username,user id
=user id)
```

## À LA CARTE





A la Carte meals contain the individual data of each meal under the A la Carte meal type. The user\_id and user are changed based on the user inside of session. If the user is not in session, by default the user is guest. Included in the A la Carte meal data are: user\_id (hidden), user (hidden),

```
<input class="hidden" id="username" name="username"
value="{{ username }}" readonly>
<input class="hidden" id="user_id" name="user_id"
value="{{ user_id }}" readonly>
meals_type (hidden),
```

alacarte\_type, drinks\_type (hidden and NULL),

```
<input class="hidden" id="drinks_type" name="drinks_type"
value="NULL" readonly>
```

amount (user input), price (user input), and flavors\_type and/or sauces\_type (user input). 'Go back' takes the user to the previous page which is the meal type the meal is in.

```
<div class="grid-item">
    <form action="/menu/alacarte">
        <input class="custom-btn btn-11" type="submit"
value="Go back" name="action" style="margin-right:80%;">
        </form>
</div>
```

Depending on the A la Carte meal type, a flavors or sauces select element will appear with their corresponding choices. At the same time, either flavor or sauce set each other's input values (hidden) into 'NULL' when they are present.

```
{% if alacarteid.alacarte type == 'Pancit Canton' %}
     <span style="text-align:left;">Flavors:</span>
        Select name="alacarte flavor" id="fl type"
style="position:center;" required>
       {% for flavors in flavordict %}
           <option value="{{ flavors.flavors type }}"</pre>
name="alacarte flavor">
                {{ flavors.flavors type|title }}
           </option>
       {% endfor %}
       </select>
   <input class="hidden" id="alacarte sauce"</pre>
name="alacarte sauce" value=NULL readonly>
   {% else %}
       <span style="text-</pre>
align:left;color:#ff928e;">Sauces:</span>
       <select name="alacarte sauce" id="scs type"</pre>
style="position:center;" required>
       {% for sauces in saucedict %}
           <option value="{{ sauces.sauces type }}"</pre>
name="alacarte sauce">
                {{ sauces.sauces type|title }}
           </option>
       {% endfor %}
       </select>
   <input class="hidden" id="alacarte flavor"</pre>
name="alacarte flavor" value=NULL readonly>
   {% endif %}
```

The user can input the amount of meal/s that they want to have with amount input. The input only accepts a greater than or equal to one numerical value.

```
<div class="number" style="text-
align:left;color:#ff928e;">
          Amount:
          <input type="number" min="1" value="{{</pre>
```

'Confirm order' takes all the data in the web page and passes it onto mealprocessing(), which appends the data into the database cart table. Applying mealprocessing() redirects the user to Cart ('cart.html').

4. Drinks (drinks\_id, drinks\_type)), ('drinks.html')

```
@app.route('/menu/drinks/<int:drinks id>/<drinks type>/')
def drinks (drinks id, drinks type):
    drinksid = read drinks by id(drinks id)
    meals = select dict meals()
    loginuser = select dict user()
    for users in loginuser:
        if 'user' not in session:
            if 'guest' in users['username']:
                username = users['username']
                user id = users['user id']
        elif 'user' in session:
            if users['username'] == session['user']:
                users['username']
                username = users['username']
                user id = users['user id']
    return
render template('drinks.html',drinks id=drinks id,drinks
type=drinks type, drinksid=drinksid,
meals=meals,loginuser=loginuser,username=username,user id
=user id)
```

Go back



Confirm order

Amount

0

## Water

₱10

Drinks contain the individual data of each drink under the Drinks meal type. The user\_id and user are changed based on the user inside of session. If the user is not in session, by default the user is guest. Included in the Drink meal data are: user\_id (hidden), user (hidden), meals\_type (hidden), alacarte\_type (hidden and NULL), flavors\_type and sauces\_type (hidden and NULL).

```
<input class="hidden" id="username" name="username"</pre>
value="{{ username }}" readonly>
(input class="hidden" id="user id" name="user id"
value="{{ user id }}" readonly>
(input class="hidden" id="alacarte type"
name="alacarte type" value="NULL" readonly>
(input class="hidden" id="alacarte sauce"
name="alacarte sauce" value="NULL" readonly>
 (input class="hidden" id="alacarte flavor"
name="alacarte flavor" value="NULL" readonly>
  {% for meal in meals %}
    {% if meal['meals type'] == 'drinks' %}
        <input class="hidden" name="meals type" value="{{</pre>
meal['meals type'] }}" readonly>
    {% endif %}
{% endfor %}
<input class="hidden" id="drinks type" name="drinks type"</pre>
value="NULL" readonly>
```

drinks\_type, amount (user input), and price (user input).

'Go back' takes the user to the previous page which is the meal type the meal is in.

```
<form action="/menu/drinks">
<input class="custom-btn btn-11" type="submit" value="Go
back" name="action" style="margin-right:80%;">
</form>
```

Drinks have no flavors nor sauces select element and are set to NULL by default.

```
<input class="hidden" id="alacarte_sauce"
name="alacarte_sauce" value="NULL" readonly>
<input class="hidden" id="alacarte_flavor"
name="alacarte_flavor" value="NULL" readonly>
```

The user can input the amount of meal/s that they want to have with amount input. The input only accepts a greater than or equal to one numerical value.

'Confirm order' takes all the data in the web page and passes it onto mealprocessing(), which appends the data into the database cart table.

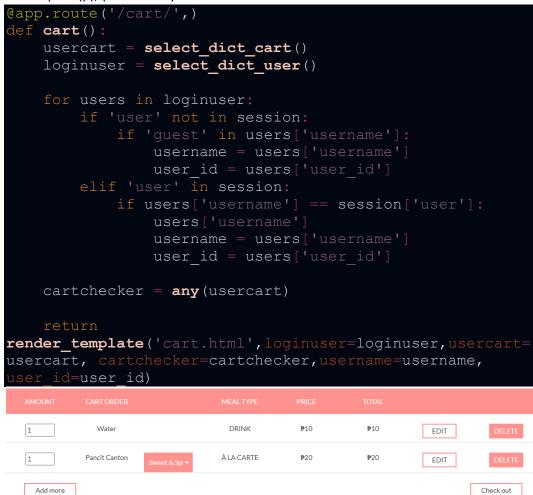
## 5.mealprocessing()

```
@app.route('/mealprocessing/', methods=['POST'])
def mealprocessing():
    totalamount = int(request.form['amount']) *
int(request.form['price'])
    cart data = {
        'user id': request.form['user id'],
        'user' : request.form['username'],
        'meals type' : request.form['meals type'],
        'alacarte type' : request.form['alacarte type'],
        'drinks type' : request.form['drinks type'],
        'amount': int(request.form['amount']),
        'price': int(request.form['price']),
        'flavors type' : request.form['alacarte flavor'],
        'sauces type' : request.form['alacarte sauce'],
        'total amount': int(totalamount),
    insert cart into cart(cart data)
    return redirect(url for('cart'))
```

mealprocessing() is a function that appends all the gathered data from a specific meal type into the database cart table. From the meal types earlier, some values are set to NULL. This is to avoid key errors and not null errors. total\_amount is a data that takes

the variable totalamount which multiples the input amount with the set meal price. Applying mealprocessing() redirects the user to Cart ('cart.html').

## 6. Cart ( cart() ), ('cart.html')



## Your cart seems to be empty. Order meals here.

Cart shows the items added by a user into their cart database. When the user is not logged in, the default user and user\_id is set to guest. cartchecker is a variable that returns true or false values. When it is false, the page shows a prompt and a link that leads to Menu ('basemenu.html').

```
{% if cartchecker == True %} ...
{% else %}
<div class="w3-container w3-panel ">
```

If cartchecker is true, it shows a table with all the data stored in the user's cart. A for loop for the variable usercart, which selects the cart table in the database, is ran to get its data. The data found in the Cart page are: cart\_id (hidden), alacarte\_amount (user input), drinks\_type or alacarte\_type ( from the cart database, depending on which meal type is NULL), flavors\_type or sauces\_type ( from the cart database, depending on which meal type is NULL, and also a user input), meal\_type ( depending on which meal type is NULL), price, and total amount.

```
{% for userdata in usercart %}
   <form action="{{ url for('edit') }}" method="post">
               <div class="table-data"><input</pre>
class="custom-btn btn-11" type="submit" value="EDIT"
name="action">
               </div>
   </form>
               <div class="table-data">
                   <form action = { { url for('delete',
<input class="custom-btn btn-11"</pre>
type="submit" value="DELETE" name="action"
                       style="font-
                   </form>
               </div>
               <div class="table-data">
               </div>
            </div>
     </div>
{% endfor %}
```

Each row in the cart has subsequent 'Edit' and 'Delete' buttons. The user can change the amount of meal/s that they want. And depending on the meal type, can also change its subsequent flavor or sauce type. The user must press the edit button to commit these changes. The edit button leads to edit(). The delete button leads to delete(cart\_id). Below the table are the 'Add more' and 'Check out' buttons. Add more goes back to Menu ('basemenu.html').

Check out leads to checkout ('checkout.html').

## 7.edit()

```
@app.route('/cart/edit', methods=['post'])
def edit():
    usercart = select dict cart()
    alacarte flavor = request.form['alacarte flavor']
    alacarte sauce = request.form['alacarte sauce']
    alacarte amount = request.form['alacarte amount']
    cart id = request.form['cart id']
    price = request.form['price']
    totalamount = int(request.form['alacarte amount']) *
int(request.form['price'])
    cart data = {
        'amount': alacarte amount,
        'flavors type' : alacarte flavor,
        'sauces type' : alacarte sauce,
        'price' : price,
        'total amount' : totalamount,
    update cart(cart data)
    return redirect(url for('cart', cart id=cart id))
```

Edit changes the values of some data in specific rows in the cart database. It uses the values inside the cart\_data dictionary as replacement for the values in the cart table in the database. When edit() takes place, the user is then redirected back to the cart page. 8.delete(cart\_id)

```
@app.route('/cart/delete/<int:cart_id>',
methods=['POST'])
def delete(cart_id):
    usercart = select_dict_cart()
    if request.form['action'] == 'DELETE':
        delete cart from cart(cart id)
```

```
return redirect(url_for('cart', cart_id=cart_id,
usercart=usercart))
```

Delete removes the cart data that a user has added into the database. It uses cart\_id to specify which cart will be deleted. Each row from the cart webpage table is produced by a for loop, which is the source of the cart\_id.

Checkout ( checkout(user\_id, users) ), ('checkout.html')

```
@app.route('/cart/<int:user id>/<users>/checkout/',
def checkout(user id, users):
    loginuser = select dict user()
    usercart = select dict cart()
    totalprice = 0
    for userdata in usercart:
        totalprice += int(userdata['total amount'])
    if any(session) == False:
        for users in loginuser:
            users = users['username']
        if any(session) == True:
            for users in loginuser:
                users['username'] == session['user']
                users = users['username']
    return render_template('checkout.html',
users=users, user id=user id, usercart=usercart, totalprice
totalprice)
```

AMOUNT	CART ORDER			PRICE		
1	Water	Null	DRINK	₱10	₱10	
1	Pancit Canton	Sweet & Spicy	À LA CARTE	₱20	₱20	
				Total Price:	₱30	

Delivery type:	O Delivery O Pickup
Location:	Choose location 🔻
Payment Method:	Cash on Delivery
Payment Amount:	₽0
Return to Cart	

Checkout is a page in the website that takes the user's final data. The data found in the Checkout page are similar to Cart: cart\_id (hidden), alacarte\_amount, drinks\_type or alacarte\_type ( depending on which meal type is NULL), flavors\_type or sauces\_type (

Finalize

depending on which meal type is NULL), meal\_type ( depending on which meal type is NULL), price, total amount, total price, order\_location (user input), order\_type (user input), payment method and payment amount (user input).

The cart data from Cart is passed on and displayed on this page after clicking the 'Check out' button. totalprice is also now being displayed. totalprice is a variable that adds all the values of total\_amount. None of the data in Cart are now editable, instead the user is left to add their data for the delivery/pick up service. order\_type is a radio input that makes the user choose between Delivery or Pickup.

The order\_location is a select input that makes the user choose which place their order is going to be picked up or delivered.

The payment\_amount is a number input that requires the user to meet the total price required for their order to be purchased.

The 'Return to Cart' button directs the user back to Cart.

```
<form action="{{ url_for('cart', loginuser=loginuser,
usercart=usercart, cartchecker=cartchecker,
totalprice=totalprice) }}">
```

```
<input class="custom-btn btn-11" type="submit"
value="Return to Cart" name="action"
style="position:left;width:100px;">
```

And the 'Finalize' button takes all the input data in checkout and sends it to finalize processing.

```
<form action="{{ url_for('finalizeprocessing') }}"
method="POST">
.
.
.
<input class="custom-btn btn-11" type="submit"
value="Finalize" name="action" for="" >
</form>
```

### 10. finalizeprocessing()

```
@app.route('/finalizeprocessing', methods=['POST'])
def finalizeprocessing():
    usercart = select dict cart()
    finalcart = select dict finalcart()
    if int(request.form['payment amount']) >=
int(request.form['totalprice']):
        change = int(request.form['payment amount']) -
int(request.form['totalprice'])
    else:
        return redirect(url for('checkout',
users=users,user id=user id,usercart=usercart,
                                 totalprice=totalprice))
    if any(finalcart) == False:
        finalcart id = 0
        finalcart id += 1
    else:
        for data in finalcart:
            finalcart id = data['finalcart id']
            finalcart id += 1
    for userdata in usercart:
        cart data = {
            'cart id': userdata['cart id'],
            'user id': userdata['user id'],
            'user': userdata['user'],
            'meals type': userdata['meals type'],
            'alacarte type': userdata['alacarte type'],
            'drinks type': userdata['drinks type'],
            'amount': userdata['amount'],
            'price': userdata['price'],
            'flavors type': userdata['flavors type'],
```

```
sauces_type': userdata['sauces type'],
            'total amount': userdata['total amount'],
        insert cart into cartreceipt(cart data)
        for userdata in usercart:
            finalcart data = {
                'finalcart id' : int(finalcart id),
request.form['order type'],
request.form['order location'],
                 'cart id' : userdata['cart id'],
                'user id' : userdata['user id'],
                'user' : userdata['user'],
int(request.form['totalprice']),
int(request.form['payment amount']),
                'change' : int(change),
request.form['payment method']
            insert final into finalcart(finalcart data)
delete cart from cart(finalcart data['cart id'])
    except:
        abort(400)
    return redirect(url for('finalize',
user id=request.form['user id'],
users=request.form['username'],
finalcart id=finalcart id))
```

finalizeprocessing() is a function that appends all the gathered data from the Cart table and user data from Checkout into the database cartreceipt and finalcart table. From checkout, the data from cart are more or less just repeated, this is because the data needs to be appended to the cartreceipt table in the database. And when the order is finalized and processed through finalizeprocessing(), all of the data in the cart table are deleted. This is so that the user will have a new instance of orders that they can send to the cart table in the database, if they so want. Saving the cart data into cartreceipt after deleting the data itself from cart makes a backup system where the admin, and user through another website function, can see their specific order history.

All of the data from checkout are passed onto the cart\_data and finalcart\_data dictionaries. cart\_data is added in the cartreceipt database table. finalcart\_data is added in the finalcart database table. Notice that the finalcart\_data doesn't specify the meals, only their cart\_id. This makes for a cleaner design, having to look up which cart\_id in

finalcart matches with the cart\_id in cartreceipt. And justifies the existence of the cartreceipt table in the database as well.

change is a variable that calculates the payment\_amount (user input) and its difference with totalprice. Applying mealprocessing() redirects the user to Cart ('cart.html').

A return error is also added, in the case that the user forgets to change their order\_location from checkout.

11. Finalize ( finalize(user\_id, users, finalcart\_id) ), ('final.html')

```
@app.route('/cart/<int:user id>/<users>/<int:finalcart id</pre>
def finalize(user id, users, finalcart id):
    loginuser = select dict user()
    finalcartid = read finalcart by id(finalcart id)
    finalcart = select dict finalcart()
    cartreceipt = select dict cartreceipt()
    if 'user' not in session:
        for users in loginuser:
            users = users['username']
        if 'user' in session:
            for users in loginuser:
                users['username'] == session['user']
                users = users['username']
    return render template('final.html', user id=user id,
                            finalcartid=finalcartid,
finalcart=finalcart, cartreceipt=cartreceipt,
                            loginuser=loginuser)
```



#### THANK YOU FOR PURCHASING!

ORDER IS NOW BEING PROCESSED

Guest
Pickup at Arki
Cart No. 1

1	Water ₱10	₱ 10
1	Pancit Canton ₱ 20	₱20
	Total	₱ 30
	₱33	

## Enjoy your meal!

Finalize is the webpage that shows the receipt of the user after a successful transaction. If the user is not in session, by default the user is guest. The data shown, from the finalcart database table, are the user, order\_type, order\_location,

```
{{ finalcartid.user|title }}
   {% if finalcartid.order_type == 'pickup' %}
   <br>Pickup at {{ finalcartid.order_location }}
   {% elif finalcartid.order_type == 'delivery' %}
   <br>Deliver near {{ finalcartid.order_location }}
   {% endif %}
        <br>Cart No. {{ finalcartid.finalcart_id }}
```

total\_price, payment\_type, payment\_amount, change.

```
P {{ finalcartid.total_price
}}

Payment ({{
finalcartid.payment_method }})

P {{
finalcartid.payment_amount }}

Change

P {{
finalcartid.payment_amount }}

Change

P {{
finalcartid.change
}}
```

The data shown, from the cartreceipt database table, are amount, drinks\_type or alacarte\_type, price and total\_amount.

```
{% for data in finalcart %}
{% if data.finalcart id == finalcart id %}
{% for items in cartreceipt %}
{% if items.cart id == data.cart id %}
   {% if items['alacarte type'] == 'NULL' %}
   >
      <span style="margin-left:5%;"> {{
items.amount } </span>
          <span style="margin-left:10%;"> {{
items['drinks type'] }} </span>
          <span style="margin-left:10%;" >₱{{
items['price'] }}</span>
      <span style="margin-right:0%;">₱ {{
items['total amount'] }}</span>
   {% elif items['drinks type'] == 'NULL' %}
   >
      <span style="margin-left:5%;"> {{
items['amount'] }}</span>
          <span style="margin-left:10%;"> {{
items['alacarte type'] }} </span>
          <span style="margin-left:10%;">₱ {{
items['price'] }}</span>
      <span style="margin-right:0%;">₱ {{
items['total amount'] }}</span>
```

## iii. User Login Functions

## 1. Login ('login.html')

```
@app.route('/login',)
def login():
    return render template('login.html',)
```



THE UP E-KIOSK

## SIGN-IN

Username

Password

LOG-IN

No account? Create one here.

The website has a login function that takes the user's inputs. The inputs are username and password respectively. The 'LOG-IN' button directs the user to loginprocessing(). The link 'Create one here' directs the user to register ('register.html')

## 2.loginprocessing()

```
@app.route('/loginprocessing', methods=['POST', 'GET'])
def loginprocessing():
    usercart = select_dict_cart()
    loginuser = select_dict_user()

    for users in loginuser:
        if request.form['name'] in users['username']:
            if request.form['name'] == users['username']
and request.form['password'] == users['password']:
            user = request.form['name']
```

```
session['user'] = user
                if user in users:
                    users['user id']
                    user id = users['user id']
                     if any(usercart) == True:
                         for ids in usercart:
                             user data = {
                                 'user id': user id,
                                 'user': user,
ids['cart id'],
update user in cart(user data)
                         return redirect(url for('user'))
                    else:
                         return redirect(url for('user'))
            else:
                return redirect(url for('login', ))
    else:
        return redirect(url for('register', ))
```

loginprocessing() takes the user's input from Login ('login.html') and processes it. There are four different if statements that have different purposes for the function. From inside-out, the first if statement checks if there is any data inside of the cart table in the database. If there is, then upon login, the dictionary user\_data changes the user\_id and user of the current cart by using the cart\_id to specify which cart will be changed. It then directs the user to user(). If cart is empty, then the user is directed to user(). The second if statement, assigns the variable user\_id as users['user\_id'] if the user input is in users, which is a variable defined in the loginuser for loop. The third if statement checks if the username and password given by the user are similar to a user and password in the user database. It also sets the input username as session['user']. If the username and password do not match, the user is sent back to Login ('login.html'). The outermost if statement checks if the input username is in the user database. If it is not, the user is then redirected to Register ('register.html').

#### 3. user()

```
@app.route('/user')
def user():
    if 'user' in session:
        user = session['user']
        return redirect(url_for('index'))
    else:
        return redirect(url_for('login'))
```

user() checks if the user is in session. If the user is in session, user() redirects the user back to frontpage('index.html'). If the user is not in session, user() redirects the user into Login ('login.html').

## 4. Register ('register.html')

```
@app.route('/register')
def register():
    return render template('register.html',)
```



Sign up for the E-Kiosk

## Create an account

Username		
Password		
Confirm Password		
REGISTER		

Already have an account? Sign-in here.

Register ('register.html') is the account register page. The webpage takes three inputs, name(username), password and confirmpassword.

The 'Sign-in here' link below redirects the user to Login ('login.html').

```
Already have an account?<a href="{{ url_for('login')}}">Sign-in here.</a>
```

5.registerprocessing()

```
@app.route('/registerprocessing', methods=['POST'])
def registerprocessing():
    loginuser = select_dict_user()
    usercart = select dict cart()
    for user in loginuser:
        user['username']
    login data = {
        'user' : request.form['name'],
        'password' : request.form['password'],
    if request.form['password'] ==
request.form['confirmpassword']:
        if login_data['user'] in user['username']:
            return redirect(url for('login',))
        elif login data['user'] not in user['username']:
            user = request.form['name']
            session['user'] = user
            if any(usercart) == True:
                for ids in usercart:
                    ids['cart id']
                    cart id = ids['cart id']
                    user data = {
                        'user' : request.form['name'],
                    insert user into user(login data)
                    update user in cart(user data)
            elif any(usercart) == False:
                insert user into user(login data)
            return redirect(url for('user'))
    else:
        return redirect(url for('register'))
```

registerprocessing() processes the user input from Register ('register.html'). There are three different if statements that have different purposes for the function. From inside-out, the first if statement checks if there is any data in the database cart table. If there is, the user's input in the login\_data dictionary is added into the database user table. And the user's input in the user\_data dictionary is used to update and change the user and user\_id of the user and user\_id in the database cart table; while using the cart\_id to specify which cart will be changed. If there is no data in the database cart table, the login\_data is simply added to the user database. The second if statement, checks if the input user already exists in the user table. If it does, then the user is redirected to Login ('login.html'). If it doesn't, then it proceeds to the inner if statement. The outer most if statement requires the user to math the password and confirmpassword input. If the user fails, it redirects the user back to register ('register.html').

## 6. Profile (profile(username)), ('profile.html')

```
@app.route('/profile/<username>/')
def profile(username):
    loginuser = select_dict_user()
    finalcart = select_dict_finalcart()
    cartreceipt = select_dict_cartreceipt()
    cartchecker = any(finalcart)
    for users in loginuser:
        if users['username'] == session['user']:
            users['username']
            username = users['username']
            user id = users['username']
```

# Rick

This is your data profile.

## Order History

Delete Account

The UP Diliman E-KIOSK is brought to you by Brian Cho and Mc Sestoso.

Mc This is your data profile.				
Order History				
Cart ID   Location	159	Math		
Meal				
1 Total Price Amount Paid	Buko Juice	₱20 ₱20 ₱21		
Cart ID   Location	160	Arki		
Meal				
1 Total Price Amount Paid	Pancit Canton (Classic)	₱20 ₱105 ₱105		
Cart ID   Location	161	Arki		
Meal				
15 Total Price Amount Paid	Kwek-Kwek (Sweet & S	Spicy) ₱75 ₱105 ₱105		
Cart ID   Location	162	Arki		
Meal				
1 Total Price Amount Paid	Water	₱10 ₱105 ₱105		

Profile ('profile.html') shows the order history of the current user in session. The data shown are a mix of items from cartreceipt and finalcart. The button 'Delete Account', sends the user to deleteconfirm().

#### 7. deleteconfirm() ('choice.html')

```
@app.route('/deleteconfirm', methods=['POST'])
def deleteconfirm():
    #delete_user_from_user(username)
    if request.form['action'] == 'Delete Account':
        return render_template('choice.html')
```

Are you sure you want to delete your account? All of your data will be lost.

Yes

No

deleteconfirm() returns 'choice.html', a web page that gives the user the option to confirm their account deletion or not. The button 'Yes' and 'No' direct the user to deleteaccount().

## 8. deleteaccount()

```
@app.route('/deleteaccount', methods=['POST'])
def deleteaccount():
    loginuser = select dict user()
    usercart = select dict cart()
    if request.form['action'] == 'Yes':
        for users in loginuser:
            if users['username'] == session['user']:
                users['username']
                username = users['username']
            for cart in usercart:
                cart id = cart['cart id']
                delete cart from cart(cart id)
        session.pop('user', None)
        delete user from user(username)
        return redirect(url for('index'))
    elif request.form['action'] == 'No':
        return redirect(url for('profile',
username=session['user']))
```

deleteaccount() is a function that processes the user's input from 'choice.html'. If they selected Yes, the current user in session gets popped, the current user's data in the database user table is deleted and their cart in the cart table also deleted. They are then redirected back to the homepage ('index.html'). If they selected No, they will be redirected back to their profile ('profile.html') page.

## 9. Logout

```
@app.route('/logout')
def logout():
    loginuser = select_dict_user()
    usercart = select_dict_cart()
```

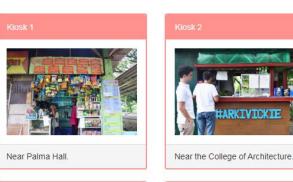
```
for users in loginuser:
    if users['username'] == session['user']:
        users['username']
        username = users['username']
    for cart in usercart:
        cart_id = cart['cart_id']
        delete_cart_from_cart(cart_id)
    session.pop('user', None)
    return redirect(url_for('login'))
```

logout() is a function that pops the current user from the session and deletes their cart data in the cart table. The user is then redirected to the Login ('login.html') page.

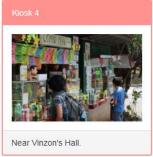
- iv. Miscellaneous Functions
  - 1. Kiosks ('order.html')

```
@app.route('/kiosk')
def kiosk():
    return render template('order.html')
```

#### KIOSKS FEATURED







Kiosks shows that various kiosk within UP Diliman. Ideally these are the kiosks that utilize the website and where the user can pick up their orders.

## 2. About ('about.html')

```
@app.route('/about')
def about():
    return render template('about.html')
```

Welcome to the UP Diliman E-Kiosk. A project made by Brian Cho and Mc Edrian Sestoso. The E-Kiosk project is a website that offers an online food service on the Internet.

About shows information about the website and who its developers are.

## v. Maybe – Improvements

1. Profile Receipt formatting. Ideally instead of per cart, the items are sectioned per finalcart\_id. In that way, items in the same finalcart are in one space and don't take up much space.

## vi. Known Issue(s)

1. After receiving the receipt and not deleting the cart data, an sqlite unique constraint failed (cart\_id) error appears. Probably because the same data is being passed with no change. Implemented the deletion of cart\_id in the finalcart database table to prevent the error. Probably could add a conditional that changes the cart\_id after getting a receipt and ordering again. In the future maybe.