



# User Documentation

*Little Bits*

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Group number 4

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# USER'S Documentation

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## **1.0 GENERAL INFORMATION**

## A. GENERAL INFORMATION

### 1.1 System Overview

A restaurant automation system

- A software system based on Windows 10 Pro 64-bit English
- System name or title: Little Bits
- Has three portals:
  - Manager portal
  - Employee Portal
  - Customer portal
- Intended for use by chain restaurants
- Operational status:
  - Partially Operational
  - Under development

## 1.2 Project References

<http://www.ece.rutgers.edu/~marsic/Teaching/SE/report1.html>  
[https://github.com/SkylerMalinowski/WBSF/blob/master/5\\_Documentation/Report%201/Report%201%20Final.pdf](https://github.com/SkylerMalinowski/WBSF/blob/master/5_Documentation/Report%201/Report%201%20Final.pdf)  
<http://www.ece.rutgers.edu/~marsic/books/SE/projects/Restaurant/2015-g3-report3.pdf>  
<https://fccid.io/XOX-Z400/User-Manual/Users-Manual-2576495>  
<https://neutrium.net/mathematics/least-squares-fitting-of-a-polynomial/>

## 1.3 Point of Contact

Little Bits team: [littlebits2018@gmail.com](mailto:littlebits2018@gmail.com)

## 1.4 Organization of the Manual

User's Manual v0.01.

## **2.0 SYSTEM SUMMARY**

## **B. SYSTEM SUMMARY**

### **2.1 System Configuration**

We are using the flask python framework that requires python 2.7 and above to be installed on your computer whether its 32 bit or 64 bit. In most cases, the older versions of python and other software installations prevent working of the software correctly and therefore, we need to have a virtual environment installed. All packages such as numpy and pandas that were installed initially before installing virtual environment must be installed again inside the virtual environment.

Python comes with an in-built database called SQLITE3 so any additional packages need not be installed, however to create new objects and to use SQL queries from the command line, a SQLITE package needs to be downloaded into the user's folder.

### **2.2 Data Flows**

Each python method in the main file is executed line by line, that is, python executes commands interactively. Each python method is associated with a URL. The syntax of which is written as `@app.route("/name")`, where the name defines the route. By default, the port number 5000 is accessed.

### **2.3 User Access Levels**

The only users allowed access into the system are employees and managers where the login credentials are stored in the database for each user who is trying to access the database. The employees and managers have separate login systems so that the employees cannot maliciously try to gain access to the manager's system.

## **3.0 GETTING STARTED**



## C. GETTING STARTED

### 3.1 Customer

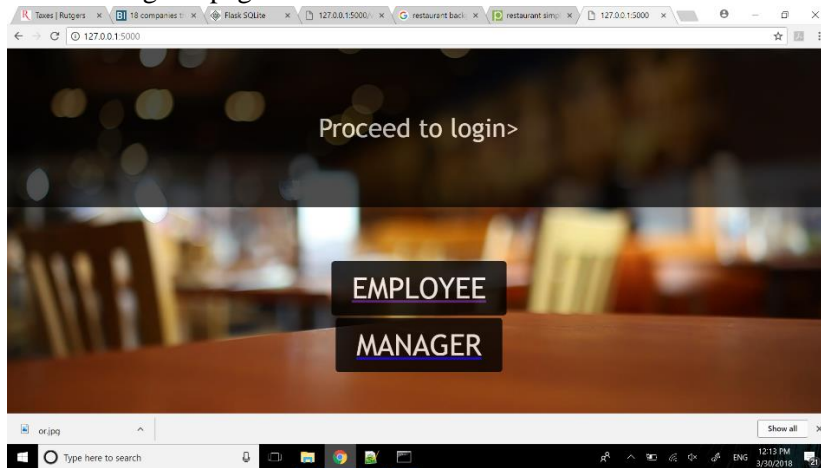
Signing in is not required.

### 3.2 Employee

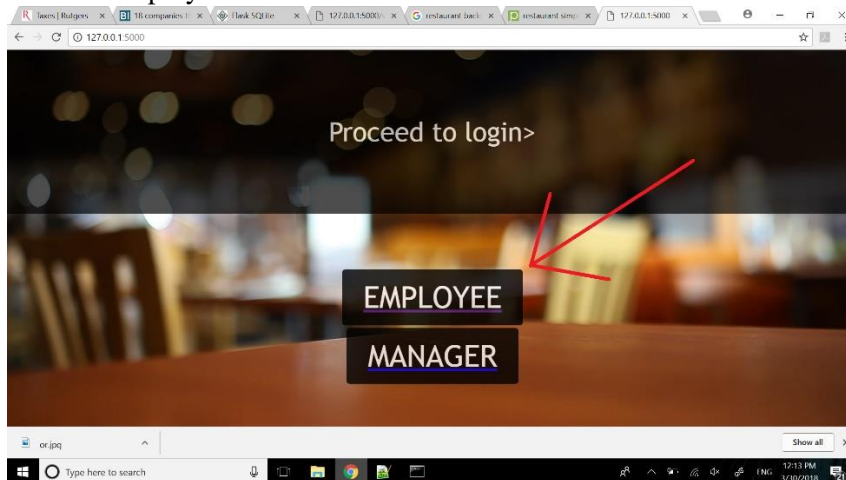
A user ID and password are required to log onto the employee portal.

1- login:

a) Go to the sign in page

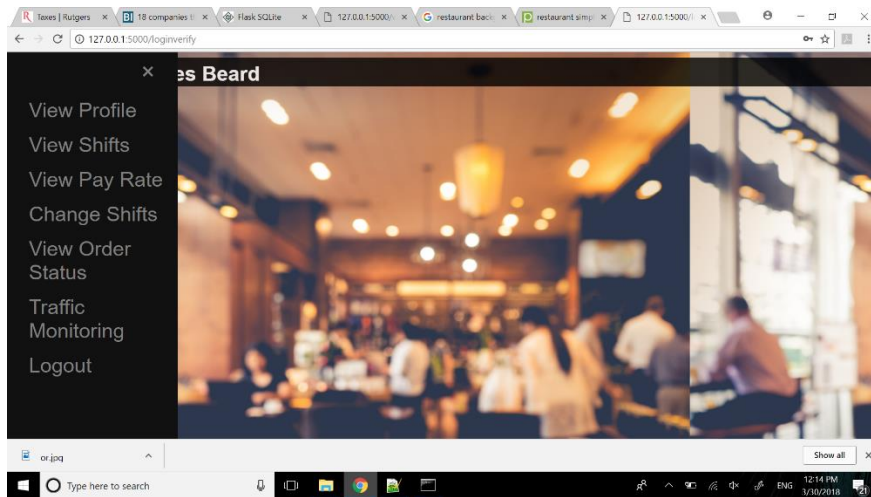


b) Click on Employee



This will take you to the sign in page. Enter your username and password

After you are signed in, you can hover over the side. A side menu will show up. You can click on the option you desire.



### **3.3 Manager**

The sign in function isn't implemented yet.

### **3.4 Exit System**

Click on logout.

## **4.0 USING THE SYSTEM**

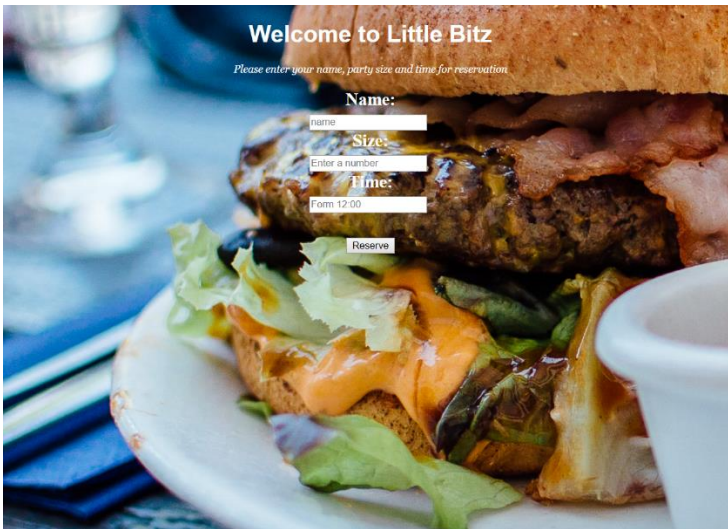
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## D. USING THE SYSTEM

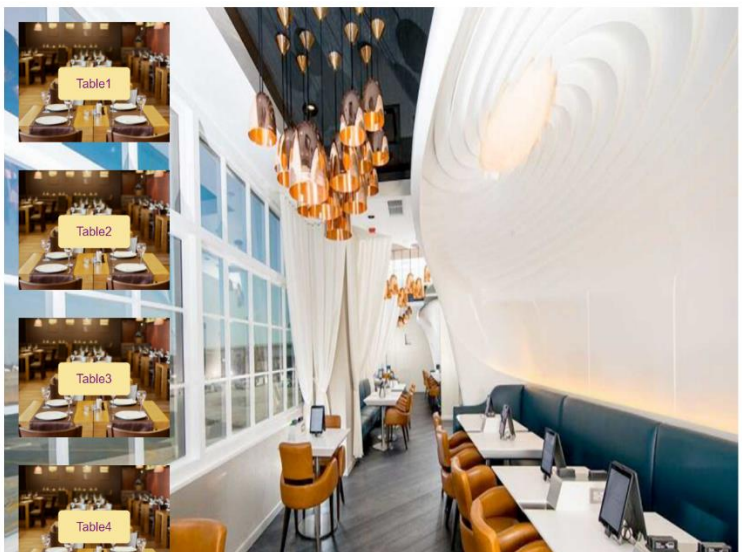
### 4.1 Customer

#### 4.1.1 RESERVATION TABLET

- a) Upon arrival at the restaurant the customer comes up to a tablet with the following screen. This screen allows the customer to make a reservation for their desired group size.



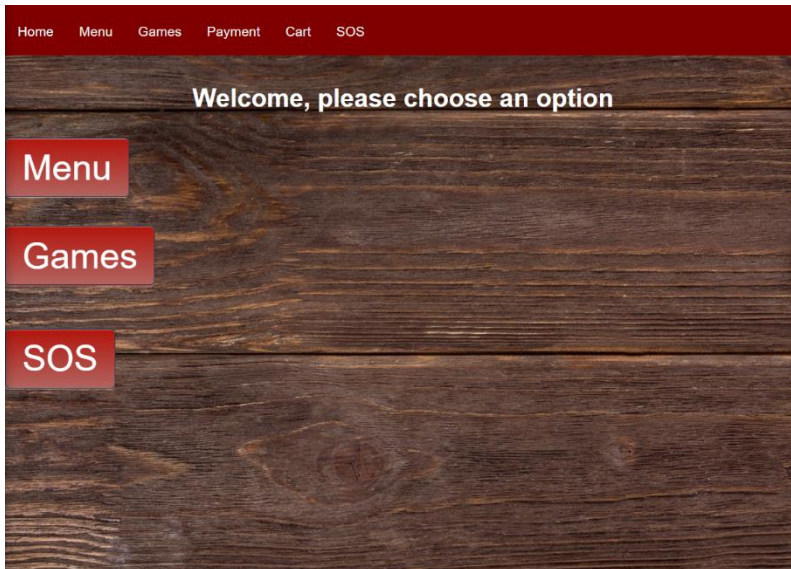
- b) After selecting the party size, the customer is able to select where they prefer to sit, in the case that they prefer a booth over a table or vice versa.



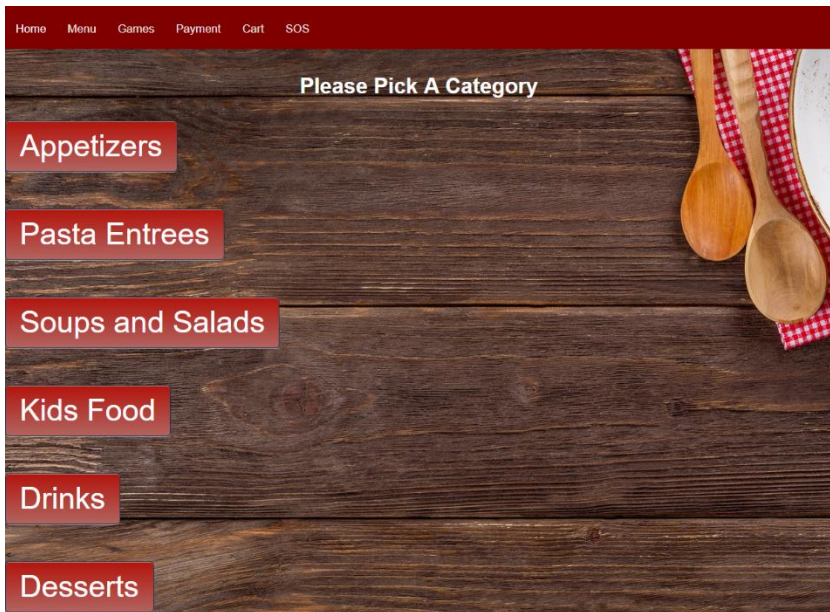
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#### 4.1.2 TABLE TABLET

- a) Customer is presented with this screen on the tablet located at their table.

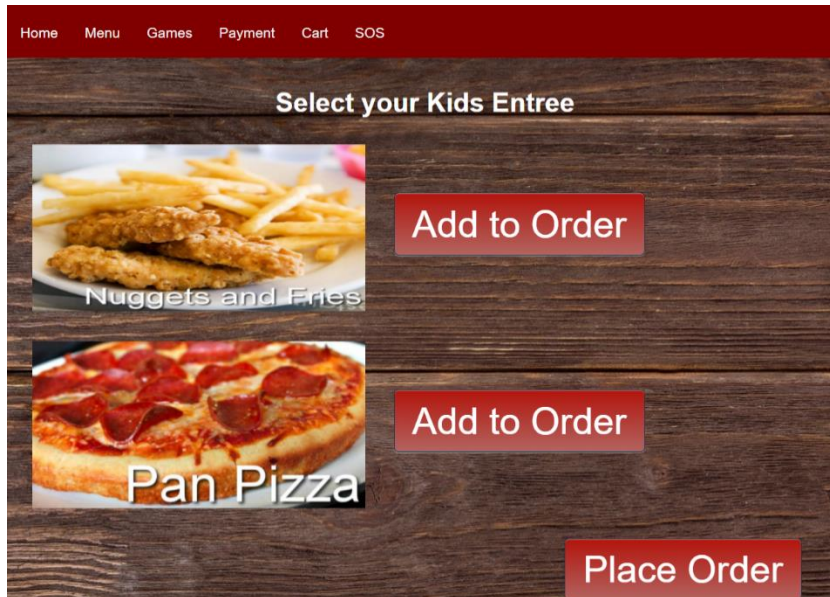


- b) Upon selecting the Menu option, the customer is able to select what type of food category they want to view food or drinks from.

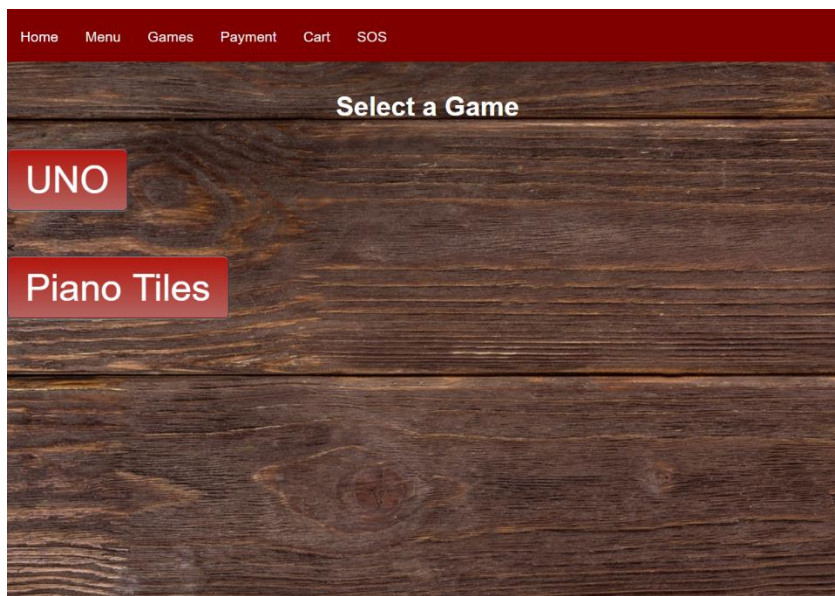


- c) For example, if the customer wished to view kids entrees then the customer could select “Kids Food”. Then they are redirected to this screen with options of what food they would like to order. Here the customer is able to select which items they would like to order by selecting “Add to Order” and selecting “Place Order” once they are done selecting items in this category.

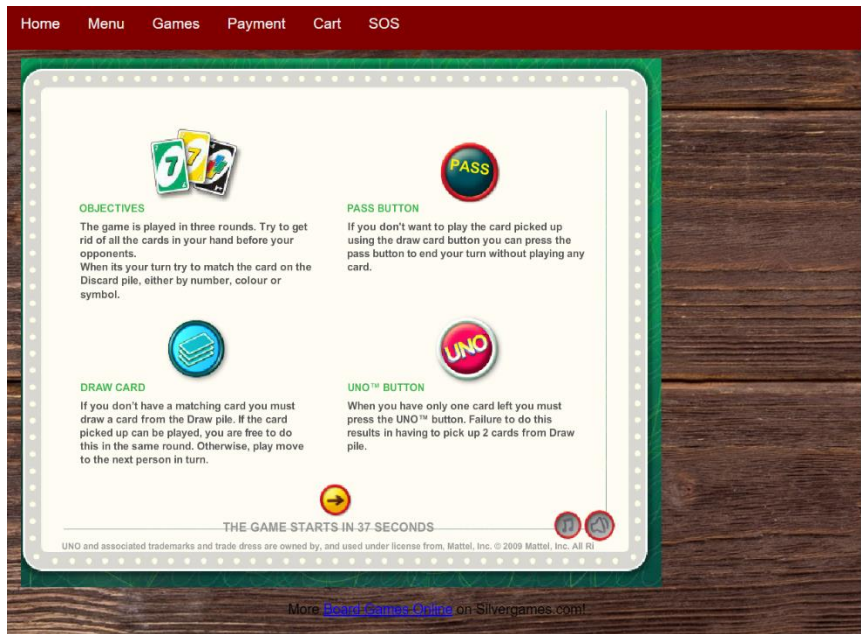




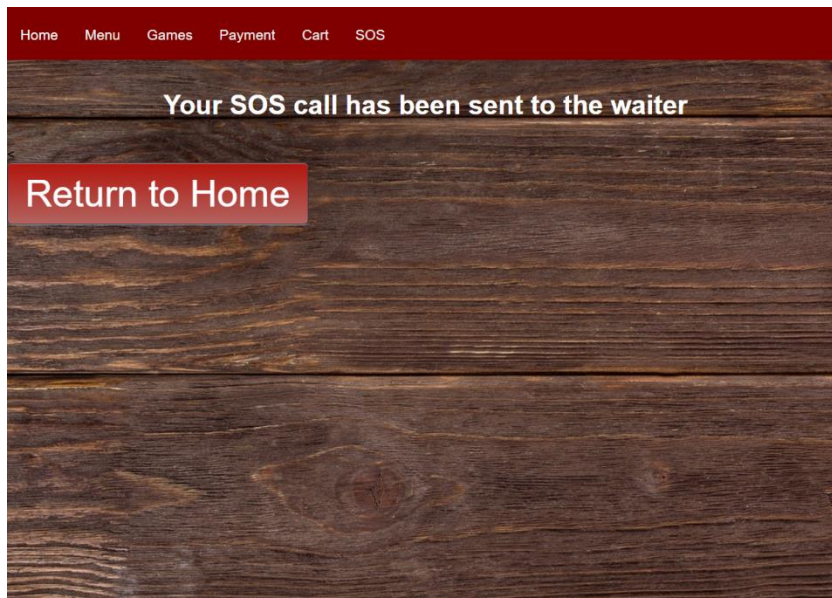
- d) If the customer wishes to play a game while they wait for their food to be prepared, they can select the “Games” option on the top menu list or go back to the “Home” page and select “Games” there.



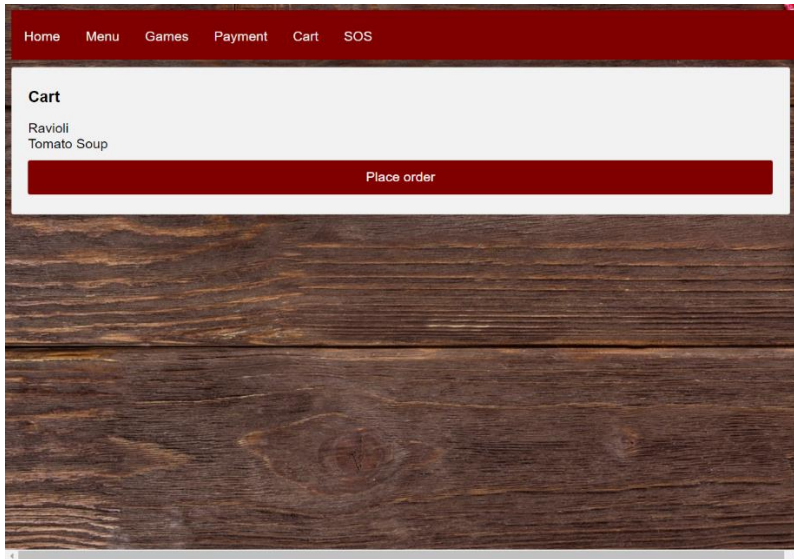
- e) If the customer selects a game then they are able to play the game while they wait for their food, and leave the game at any time.



- f) If the customer is in need of the waiter's attention for any reason they can select the "SOS" button. This option is located in the top menu list and on the home page. Selecting this button sends an alert to the waiter that the table requires their attention as soon as possible.



- g) Selecting the "Cart" option allows the customer to view what is in their cart and make changes if needed.



- h) Selecting the “Payment” option allows the customer to input their credit card information in order to pay for their meal on the spot.

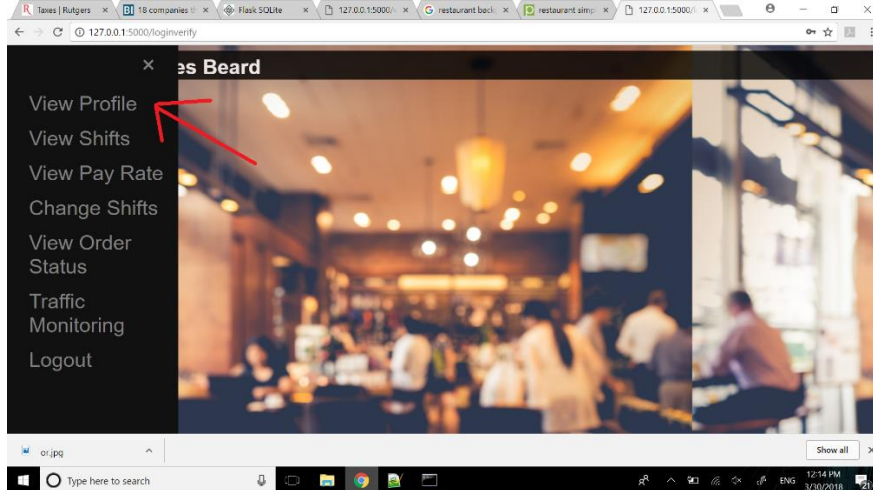


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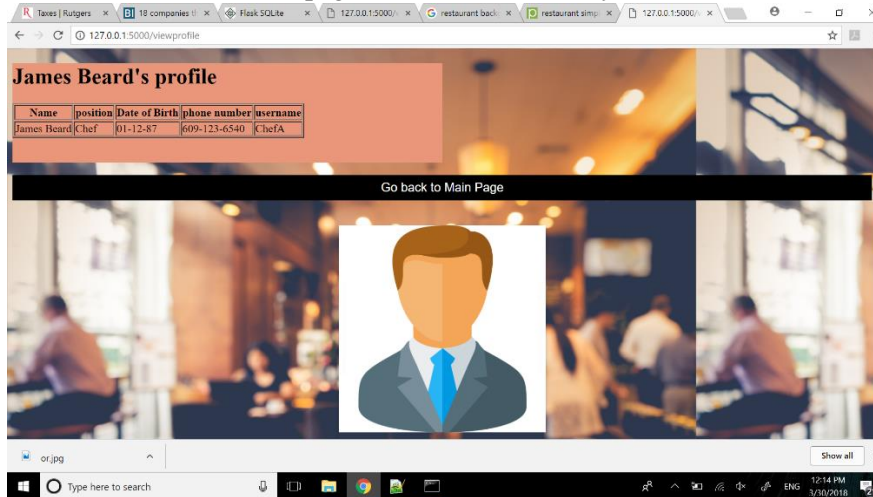
## 4.2 Employee

### 4.2.1 View Profile

- a) Sign in following the steps described in the “Getting Started” section. Click on “View Profile”

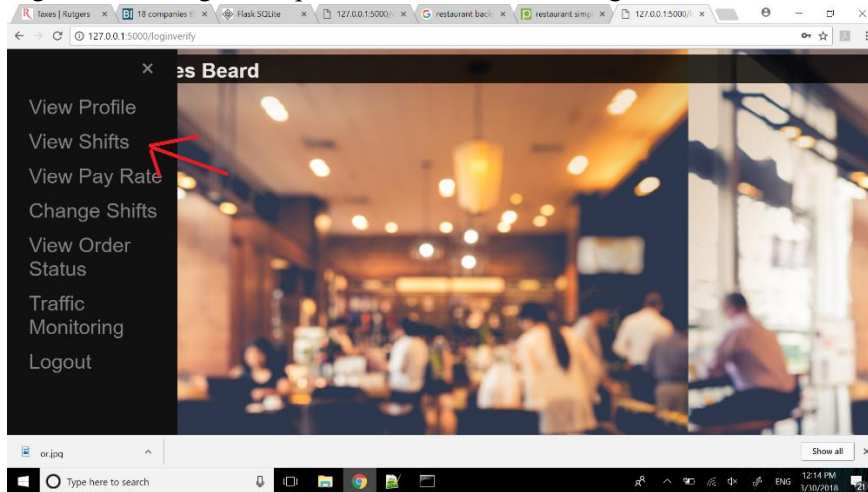


- b) You will be directed to a page that shows some of your information

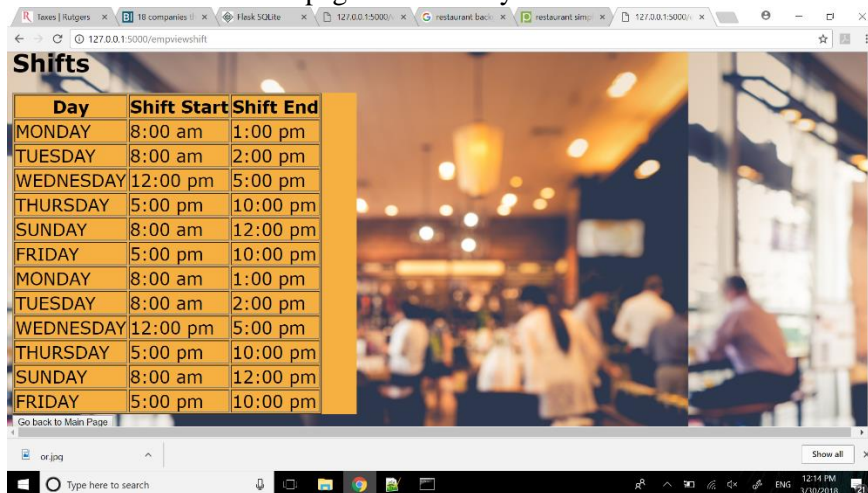


## 4.2.2 View shifts

- a) Sign in following the steps described in the “Getting Started” section. Click on “View Shifts”

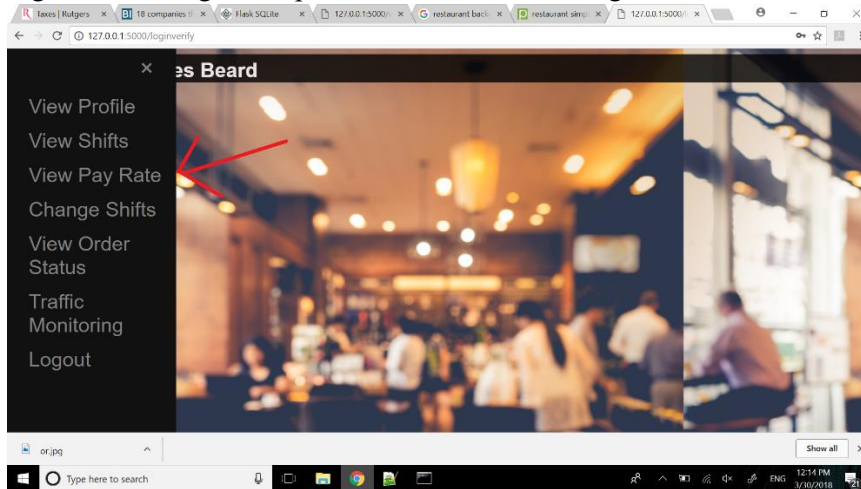


- b) You will be directed to a page that shows your shifts

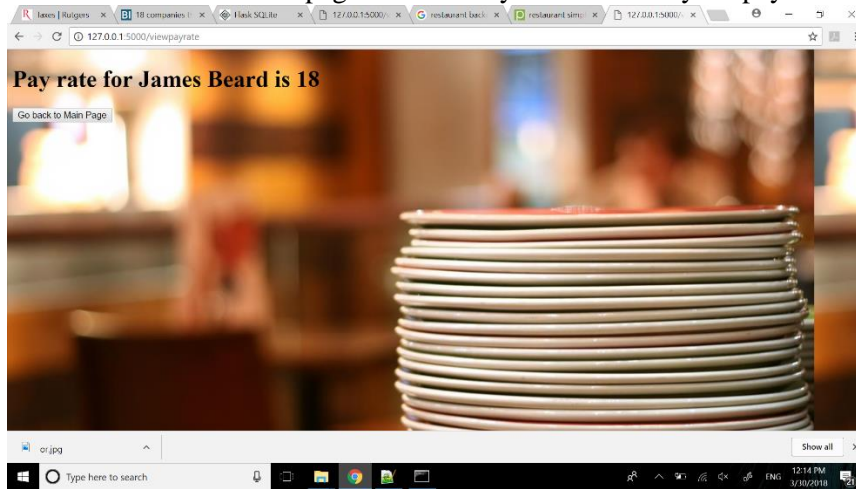


### 4.2.3 View Pay Rates

- a) Sign in following the steps described in the “Getting Started” section. Click on “View Pay Rate”

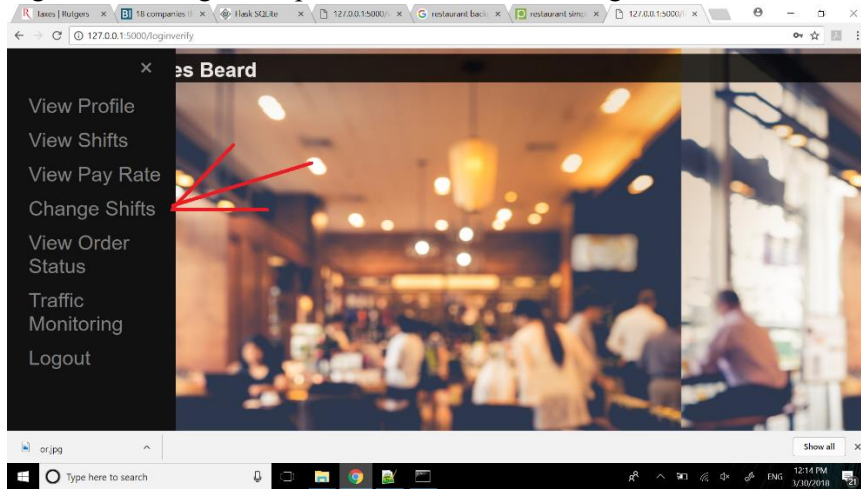


- b) You will be directed to a page that shows your name and your pay rate.

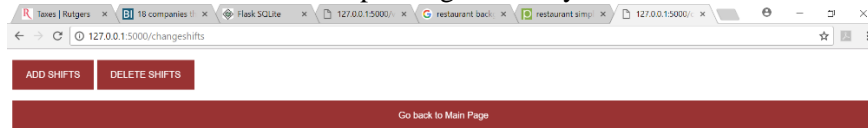


## 4.2.4 Change shifts

- a) Sign in following the steps described in the “Getting Started” section. Click on “Change Shifts”



- b) Click on add or delete shift depending on what you would like to do



Please note that by adding or deleting shifts, you are submitting a request to the manager that may or may not be approved.

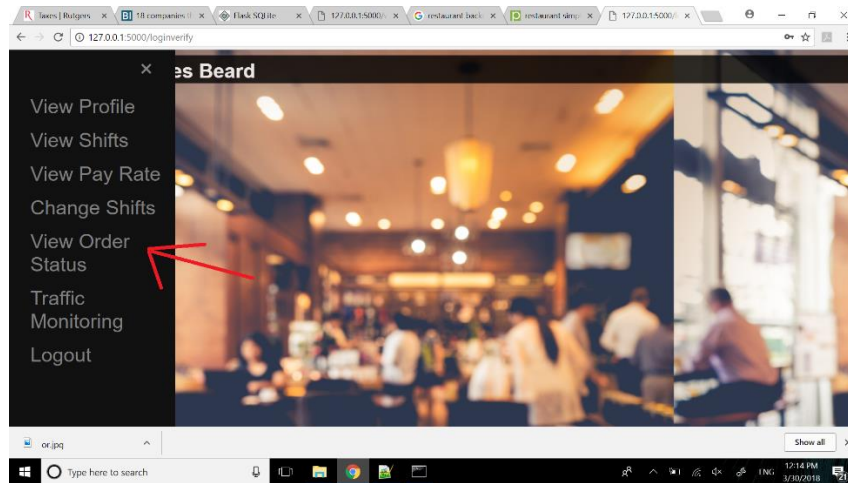
c) Enter the required information in the adjacent fields then click “ADD SHIFT”

The screenshot shows a web browser window with the URL `127.0.0.1:5000/changeshifts`. The page features a header with a logo and a sidebar with a restaurant interior image. The main content area contains a form with the following fields: Fullname (JAMES BEARD), POSITION (CHEF), Day (MONDAY), Shift start time (2) with a dropdown for Start period, pm, End shift time (5) with a dropdown for End period, and pm. A red button labeled "ADD SHIFT" is at the bottom of the form. The browser's taskbar at the bottom shows the Windows Start button, a search bar, and several open applications including a file explorer and a terminal.

#### 4.2.5 View Order Status:

If you are a chef, you can use this tab to update the status of the orders.

- Sign in following the steps described in the “Getting Started” section. Click on “View Order Status”





- b) You will be directed to the order status page. The page shows the table number, the menu items, their quantity and the order status.



Table Number	Menu items	Quantity	Order Status	Order Status
1	BBQ Wings	2	In progress	Ready
1	French Soup	1	In progress	Ready
2	Mozzarella Sticks	1	In progress	Ready
2	Lasagna	1	In progress	Ready
3	Ice Cream	2	In progress	Ready
3	Chicken Nuggets	2	In progress	Ready
4	Mini Pizza	1	In progress	Ready
4	Green Salad	1	In progress	Ready
5	Tomato Soup	3	In progress	Ready
5	Apple Pie	1	In progress	Ready

Go back to Main Page

- c) When you start working on an order, click on the “In Progress” button next to the name of the item. For example, click on the button the arrow is pointing to when you start preparing the French Soup. You will notice the color of the button changing to orange.



Table Number	Menu items	Quantity	Order Status	Order Status
1	BBQ Wings	2	In progress	Ready
1	French Soup	1	In progress	Ready
2	Mozzarella Sticks	1	In progress	Ready
2	Lasagna	1	In progress	Ready
3	Ice Cream	2	In progress	Ready
3	Chicken Nuggets	2	In progress	Ready
4	Mini Pizza	1	In progress	Ready
4	Green Salad	1	In progress	Ready
5	Tomato Soup	3	In progress	Ready
5	Apple Pie	1	In progress	Ready

Go back to Main Page

- d) When the order is ready, click on the “Ready” button next to the name of the item. For example, click on the button the arrow is pointing to when the BBQ Wings are ready. You will notice the color of the button changing to green. This will send a notification to the chef to pick the order up and deliver it to the customer.

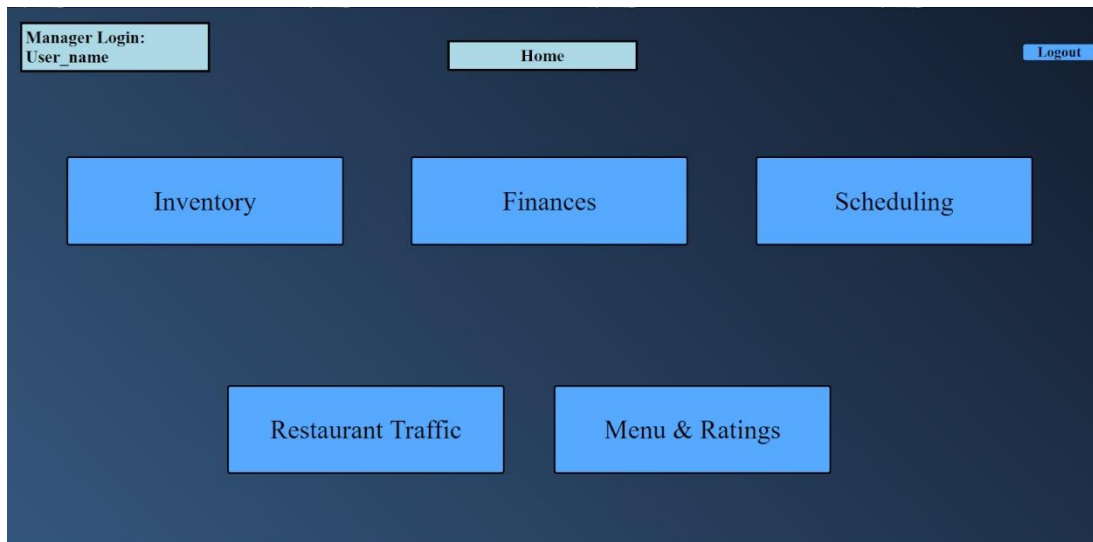


Table Number	Menu items	Quantity	Order Status	Order Status
1	BBQ Wings	2	In progress	Ready
1	French Soup	1	In progress	Ready
2	Mozzarella Sticks	1	In progress	Ready
2	Lasagna	1	In progress	Ready
3	Ice Cream	2	In progress	Ready
3	Chicken Nuggets	2	In progress	Ready
4	Mini Pizza	1	In progress	Ready
4	Green Salad	1	In progress	Ready
5	Tomato Soup	3	In progress	Ready
5	Apple Pie	1	In progress	Ready

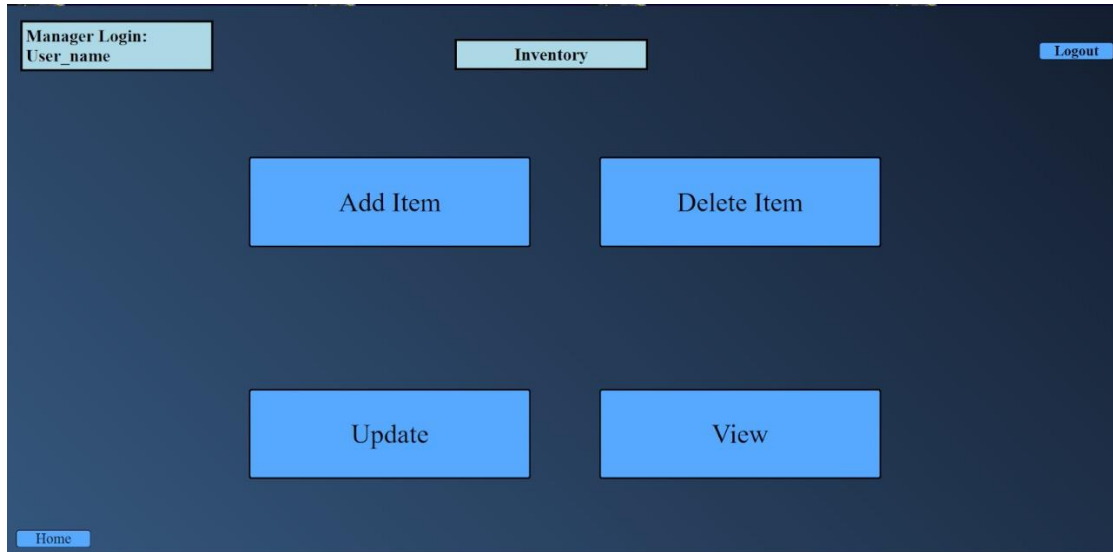
## 4.3 Managers

### 4.3.1 User Information:

In order of a user to complete a task starting from the home menu and return back to the home menu, they must take the following steps for each operation:

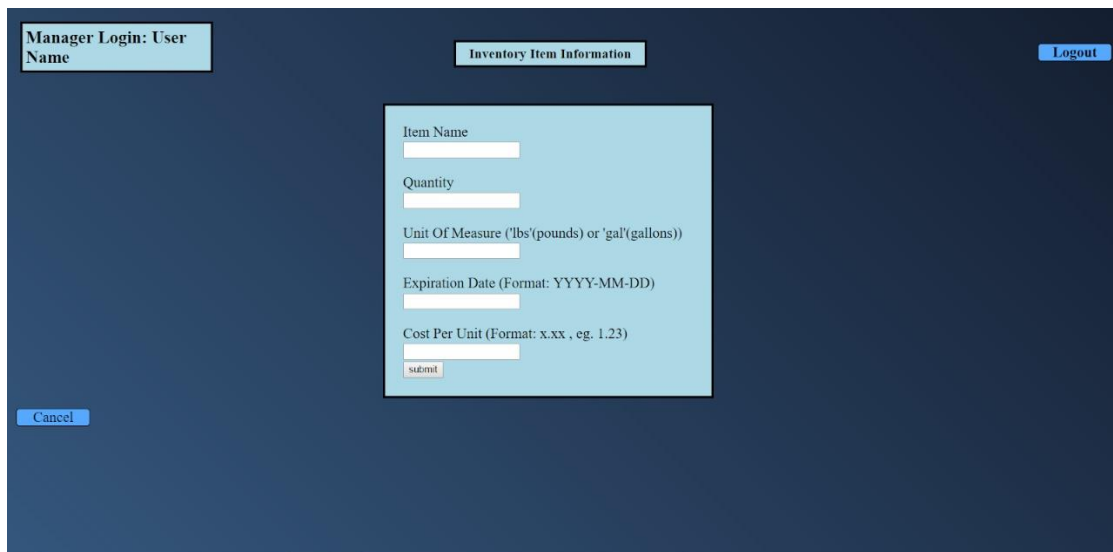


### 4.3.2 INVENTORY:



The screenshot shows a dark blue dashboard for inventory management. At the top left, there is a light blue box containing the text "Manager Login: User\_name". In the top center, a light blue box displays the word "Inventory". At the top right, a small light blue button labeled "Logout" is visible. The main area of the dashboard features four large, light blue rectangular buttons arranged in a 2x2 grid: "Add Item" (top left), "Delete Item" (top right), "Update" (bottom left), and "View" (bottom right). In the bottom left corner, there is a small light blue button labeled "Home".

a) ADD: Inventory>>Add item>>(user inputs item information)>>submit>>back>>home



The screenshot displays the "Add Item" form within the inventory management system. The background is dark blue. At the top left, a light blue box shows "Manager Login: User Name". In the top center, a light blue box is labeled "Inventory Item Information". At the top right, a small light blue button labeled "Logout" is present. The central focus is a light blue rectangular form containing several input fields: "Item Name", "Quantity", "Unit Of Measure ('lbs'(pounds) or 'gal'(gallons))", "Expiration Date (Format: YYYY-MM-DD)", and "Cost Per Unit (Format: x.xx , eg. 1.23)". Below these fields is a small, light blue button labeled "submit". In the bottom left corner of the dashboard area, there is a small light blue button labeled "Cancel".



b) DELETE: Inventory>>delete item>>(user inputs item information)>>submit>>back>>home

Manager Login: User  
Name

Inventory Item Information

Logout

Item Name

Expiration Date (Format: YYYY-MM-DD)

submit

Cancel

c) VIEW: Inventory>>view>>back>>home

Manager Login:  
User\_name

Inventory Management

Logout

Item Name	Quantity	Unit of Measure	Expiration Date	Cost Per Unit
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4
row 0	row 1	row 2	row 3	row 4

Back

### 4.3.3 MENU & RATINGS:

The screenshot shows a dark blue dashboard titled "Menu & Ratings". At the top left, there is a light blue box labeled "Manager Login: User\_name". At the top right, there is a "Logout" button. In the center, there are four large light blue buttons arranged in a 2x2 grid: "Add Menu Item", "Delete Menu Item", "Update", and "View". At the bottom left, there is a "Home" button.

- a) ADD MENU ITEM: Menu & Ratings>>Add Menu Item>>(User I puts item information)>>submit>>back>>home

The screenshot shows the "Add Menu Item" form within the "Menu & Ratings" dashboard. The form is titled "Menu Item Information" and is contained within a light blue box. It has five input fields: "Item Name", "Item Price", "Ingredient Name", "Quantity of Ingredient", and "Unit of Measure". Below these fields is a "submit" button. To the left of the form, there is a "Cancel" button. The top of the dashboard shows the "Manager Login: User Name" box and the "Logout" button.

b) DELETE MENU ITEM: Menu & Ratings>>Delete Menu Item>>(User I puts item information)>>submit>>back>>home

The screenshot shows a web application interface with a dark blue background. In the top left, there is a box labeled 'Manager Login: User Name'. In the top right, there is a 'Logout' button. In the center, there is a box titled 'Menu Item Information' containing two input fields: 'Category' and 'Item Name', followed by a 'submit' button. To the left of this box is a 'Cancel' button.

c) VIEW MENU & RATINGS: Menu & Ratings>>View>>back>>home

The screenshot shows a web application interface with a dark blue background. In the top left, there is a box labeled 'Manager Login: User\_name'. In the top right, there is a 'Logout' button. In the center, there is a box titled 'Menu Management' containing a table with 7 columns: Category, Item Name, Item Price, List of Ratings, Ingredient Name, Quantity, and Unit of Measure. The table has 13 rows, each labeled 'row 0' through 'row 12'. To the left of the table is a 'Back' button.

Category	Item Name	Item Price	List of Ratings	Ingredient Name	Quantity	Unit of Measure
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6
row 0	row 1	row 2	row 3	row 4	row 5	row 6

#### 4.3.4 FINANCES:



a) VIEW TRANSACTION HISTORY: Finances>>Transaction History>>back>>Home



b) EMPLOYEE WAGES: Finances>>Employee wages>>back>>home

Manager Login:  
User\_name

Employee Wages

Logout

Name	Position	Wage
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2
row 0	row 1	row 2

Back