

"Perfect Party Company" Web Application

File Hierarchy Visualization

```
the_perfect_party/  
├── app.py  
├── dbConnect.py  
├── db_helper.py  
├── templates/  
│   ├── admin.html  
│   ├── adminDashboard.html  
│   ├── dashboard.html  
│   ├── event.html  
│   ├── index.html  
│   ├── login.html  
│   ├── login2.html  
│   ├── order.html  
│   ├── payment.html  
│   ├── shoppingcart.html  
│   ├── success.html  
│   ├── supplier.html  
│   ├── supplyRecord.html  
│   ├── userDashboard.html  
│   └── orderInfo.html  
├── static  
│   ├── .. contain all javascript files ..  
│   └── .. contain all css files ..  
├── bootstrap/  
├── env/  
├── requirements.txt  
...
```

1. Technology and File Description

`the_perfect_party` is a website demo created for CS348 course at University of Waterloo.

The main features listed below:

Customer Side:

- Interactive dashboard created using Javascript
- Responsive shopping cart with real-time tax, shipping, subtotal price calculation
- Automatic customer information fillin and order status verification
- Customer's ability to delete, escalate any existing order information
- Customer login and signup support with validation

Administrator Side:

- Secure login page
- All in one information displayed by each order creation time and status
- Active order notification system
- Search engine based on customer username
- Modification, Escalation, Deletion and Insertion of any past/new orders or events
- Supplier and Stock availability monitoring and modification support.

Technology Breakdown:

Backend: `/app.py`

`the_perfect_party` web app is deployed as a `flask app` with backend written in `python` and connected through `GET` & `POST` requests with frontend.

Frontend: `/templates/*`

Adopted traditional frontend technology including: `JQuery(JS)` , `HTML` , `CSS` with stylesheet from `Twitter Bootstrap`

Database: `/dbConnect.py` and `/db_helper.py`

Connected with a `Mysql` server through `mysql.connector`

2. SQL Demonstration

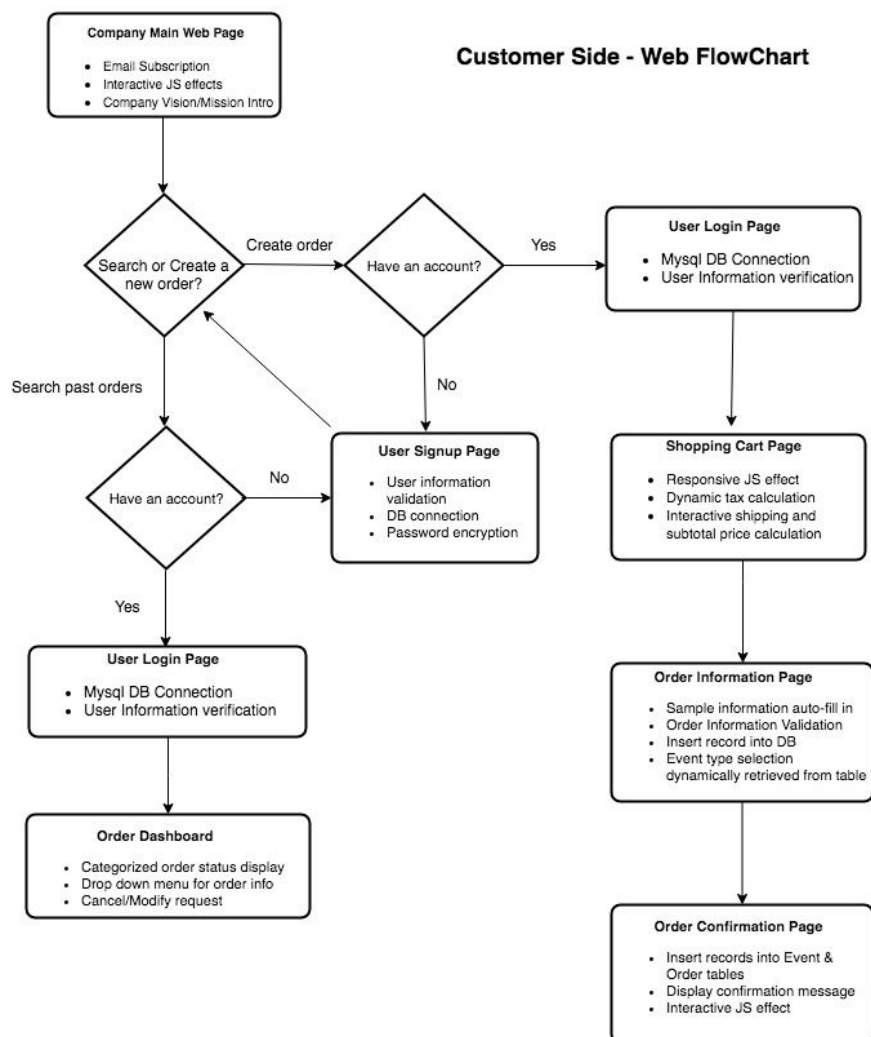
There are three main parts of SQL code to demonstrate. ***Please refer to file `dbConnect.py` and `db_helper.py` for details.***

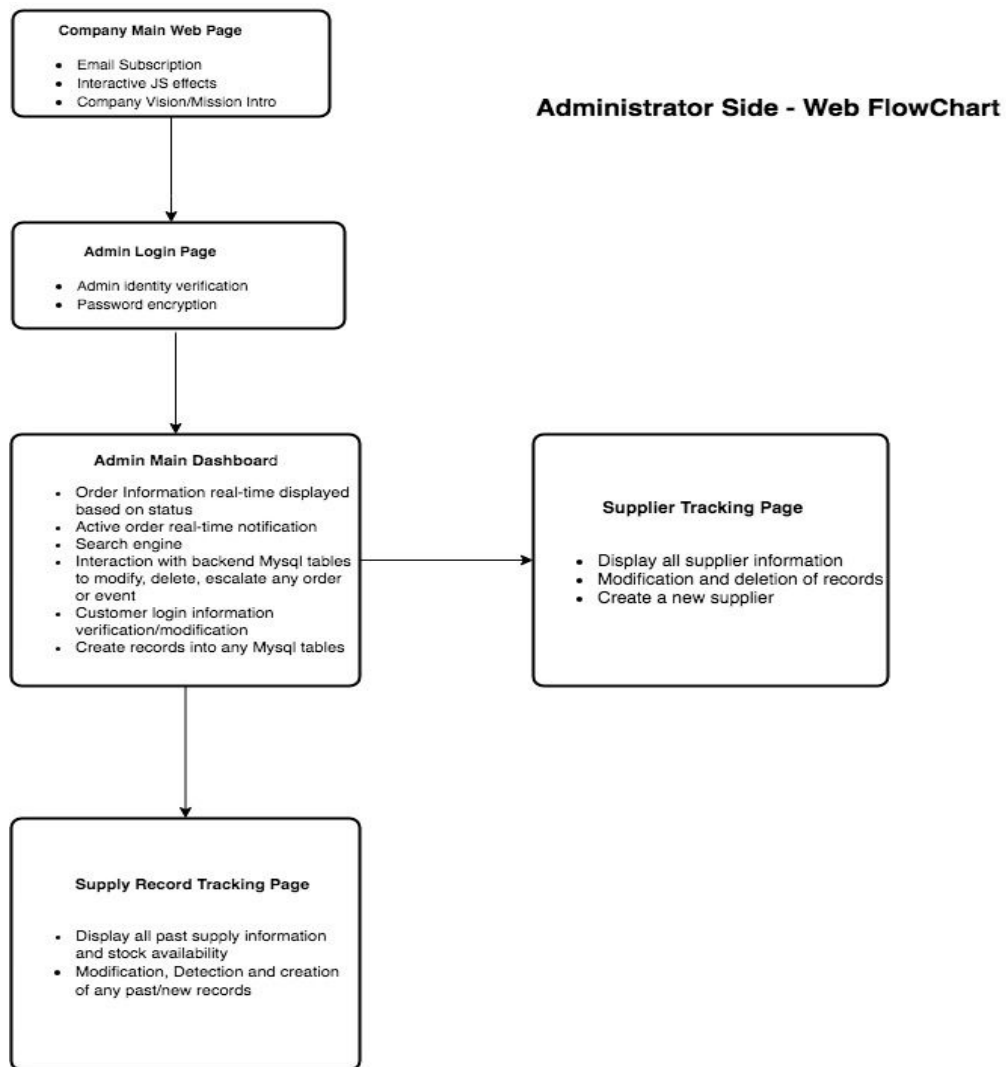
1. Database and table creation query
 2. Creation, deletion and update operations on record
 3. Select operations with/without specific conditions
-

2. Bonus Work

- Interactive Company Website
- Responsive Shopping Cart with Shipping and Tax auto-calculated
- Admin page:
 - Active new order notification
 - Real-time Information Modification support
 - Order dynamically displayed based on status categorization
- Sign up page and user information validation
- Payment Type Dynamic Selection Page

3. Web Page FlowChart

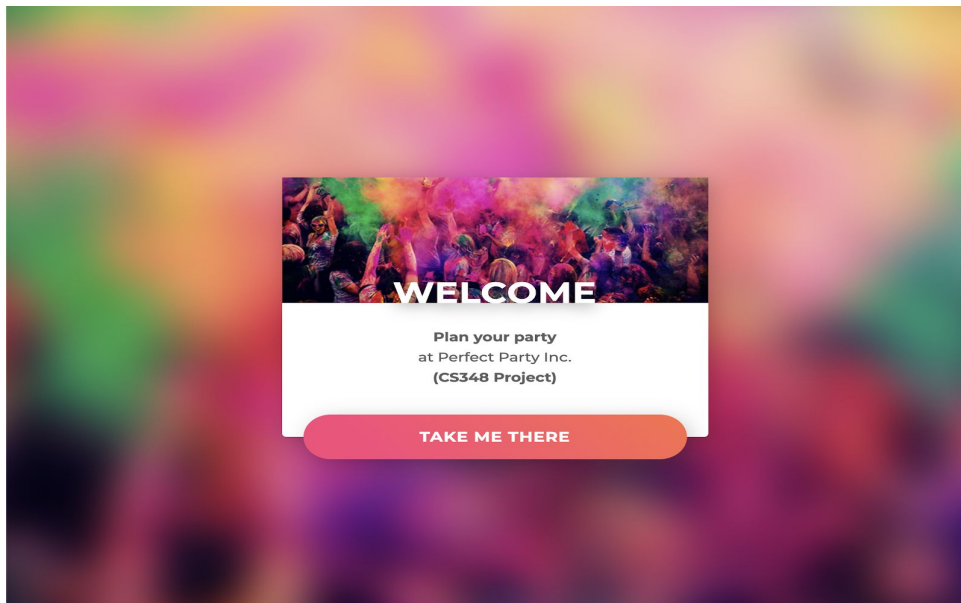




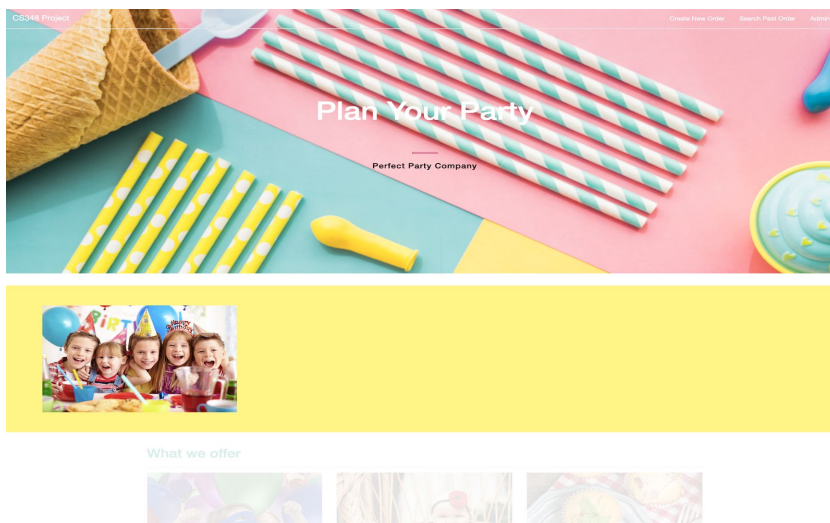
4. Interface Explanation

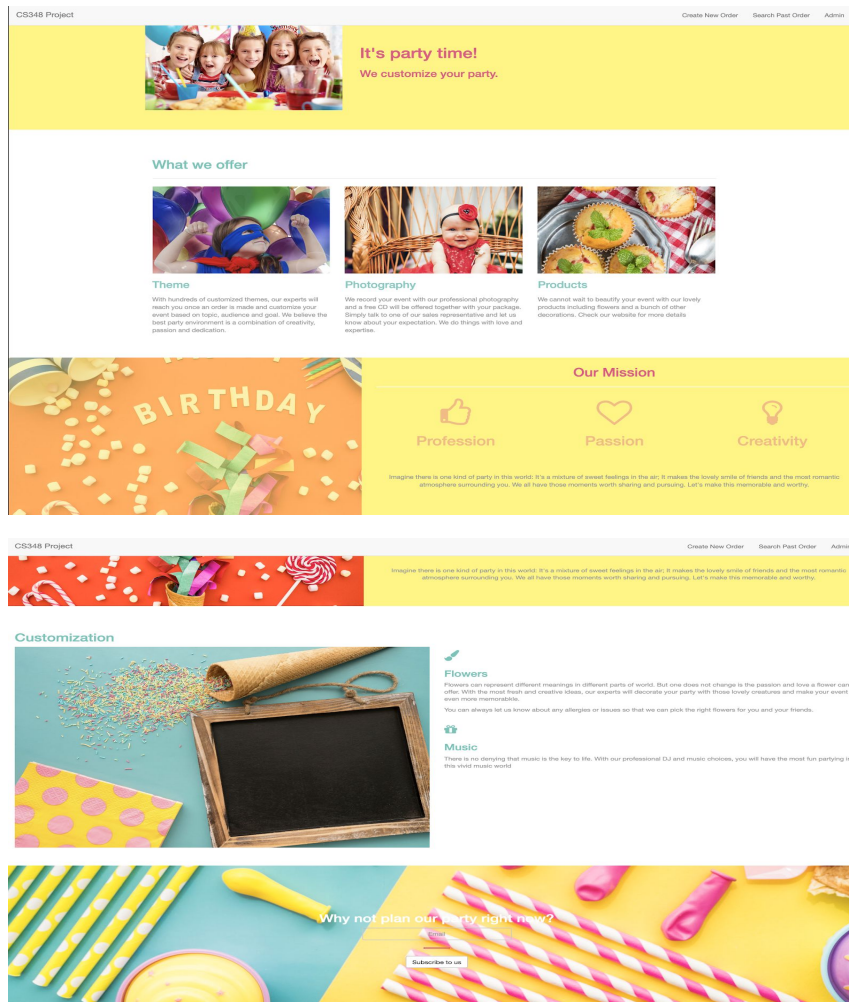
11. Company web page

We have written a welcome page, clicking on the button on the welcome page will take you to the main page.

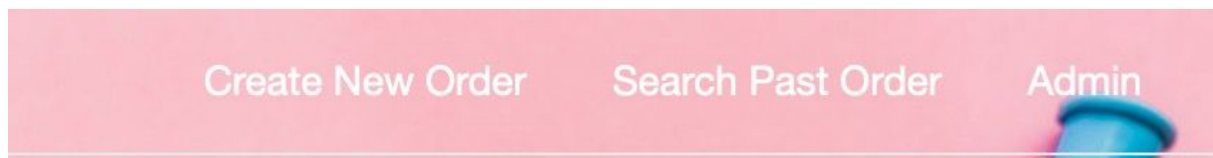


The main page shows the basic information of our company, such as our company's main business, what we offer, why choose us and what can be customized.

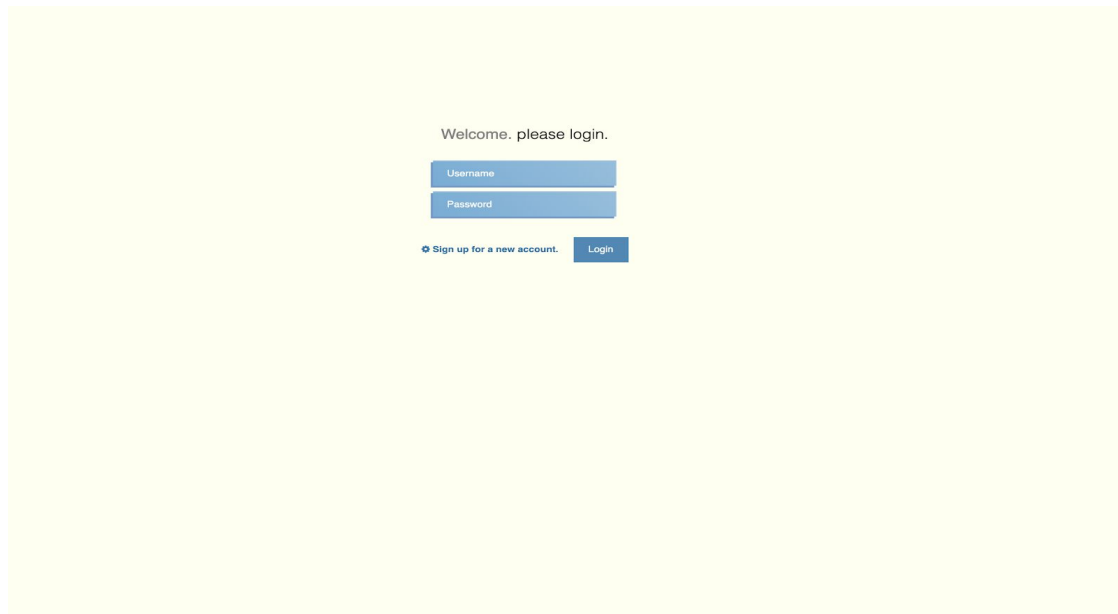




We add a toolbar at the top of our main page, the first two button linked to customer login page and the Admin button linked to the admin login page.



2. Login Page

A login form centered on a solid yellow background. At the top, the text "Welcome, please login." is displayed in a small, dark font. Below this, there are two stacked input fields: the top one is labeled "Username" and the bottom one is labeled "Password". Both labels are in a small, dark font. At the bottom of the form, there is a link that says "Sign up for a new account." with a small circular icon to its left, and a blue button labeled "Login" to its right.

Customer type in their username and password in the given login page. Username and password pairs are checked by pulling data from database to frontend and validating the pairs, so either non-existing username or incorrect password will lead to rejection of customer page access. Clicking “sign up for a new account” will lead users into the signup page.

3. Signup

Join Us Sign up for new account.

Username
Password
Repeat Password
First Name
Last Name
Phone Number
Email
Home Address
Postal Code

Signup

Back to Home

New users need to register for new accounts to gain access into customer page and to be able to make reservation and create orders. They need to fill out all fields specified on the signup pages, such as name, password, phone number, and email. After information is recorded, data is pulled from database to check if the username has already been taken by another user. New account is successfully created if the information pass the duplicate test.

4. order history

Your Order History

Active Order

Completed Order

Cancelled Order

ID: 000004

Order Details

Cancel

ID: 000006

Order Details

Cancel

ID: 000008

Order Details

Cancel

Order Number	000004
Budget	2000.00
Capacity	100
Event type	other
Status	Cancelled
Start time	2019-01-01 00:00:01
Finish time	2019-01-01 10:00:01
Venue location	234 Col st
Delivery time	8:00:00
Orders	flower3: qty:1 music1: qty:1
Billing address	315 ABC st
Paid amount	208
Payment type Data	Visa Card
Customization	Write anything you like...

ID: 000010

Order Details

Cancel






Back to Dashboard

There is a separate interface for customers to manage their orders. Specifically, they can view all completed orders in the past. Also, this page shows all cancelled orders that are either made by customers by mistake or rejected by the company Perfect Party due to other reasons. Besides, all active orders are shown and customers are able to cancel those orders before their starting dates. Each order, regardless of its state(completed or cancelled), has its details open for review. After user clicks the “order details” button on any order tab, a drop down table is pulled down, displaying customization, capacity, venue location and other specifics.

5. shopping cart

Shopping Cart

Item		Action			
000000 - flower type a - red		Add			
000001 - flower type b - blue		Add			
000003 - flower type c - blue		Add			
000004 - funk music		Add			
000005 - blues music		Add			
000006 - pop music		Add			

		Price	Quantity	Total
	000006 pop music	\$33	<input type="text" value="1"/>	\$33
	000006 pop music	\$33	<input type="text" value="1"/>	\$33
	000006 pop music	\$33	<input type="text" value="1"/>	\$33
	000003 flower type c = blue	\$100.99	<input type="text" value="1"/>	\$100.99
	000004 funk music	\$70	<input type="text" value="1"/>	\$70
				Subtotal \$269.99
				Tax (13%) \$35.10
				Shipping \$15.00
				Grand Total \$320.09

Checkout

To finish creating an order, customers need to select all menu items they would like to make use of during their parties. Shopping cart interface will list all available options at the moment, including music choices and flower stocks. Adding any option in the above table will create another row below, which shows the item unit price and has the input box for users to change item quantity(if applicable). After customers have made their selection, prices will be auto-calculated by adding up subtotals, taxes, and auto-loaded shipping expenses. Clicking “checkout” button will redirect user to the payment method selection page.

6. order information form

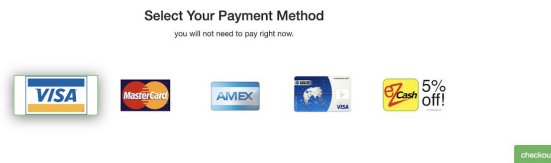
Complete Your Order

After information is verified, you may have a chance such that the order is being rejected due to stock or other reasons. Please contact our specialists for details and the payment will be reversed in 1-3 business days.

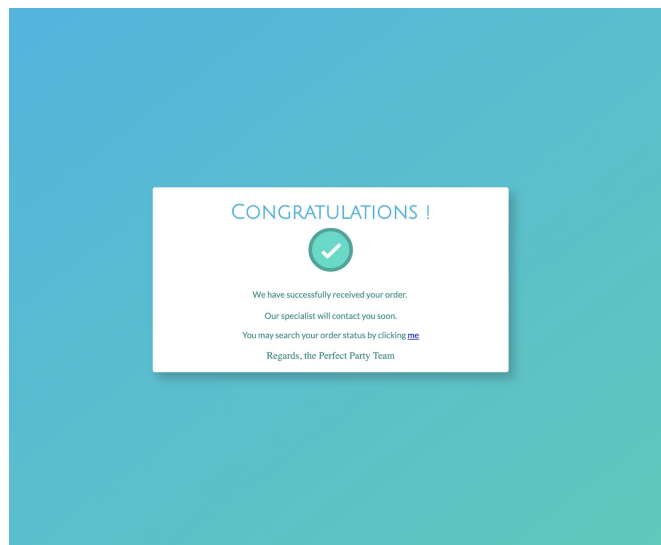
Number of Invittes	<input type="text" value="100"/>
Party Start Time	<input type="text" value="2019-01-01 00:00:01"/>
Party Close Time	<input type="text" value="2019-01-01 10:00:01"/>
Budgets	<input type="text" value="2000.00"/>
Delivery Time	<input type="text" value="08:00:00"/>
Billing address	<input type="text" value="315 ABC st"/>
Customization Needs	<input type="text" value="Write anything you like..."/>
Select Venue Location (retrieved from venue database)	
<input type="radio"/> 254 phillips st <input type="radio"/> 315 King st <input type="radio"/> 123 Univ st <input checked="" type="radio"/> 234 Col st	
Select Event Type	
<input type="radio"/> birthday <input type="radio"/> wedding <input type="radio"/> professional <input checked="" type="radio"/> other	
<input type="button" value="Next"/>	

The order information form is a page where customers need to specify their detailed requirements about the party they are requiring, such as the number of invitees (int), budgets (decimal). They have to fill every blank according to the data type validly, except the customization needs is optional, and they should select a venue location obtained from our database Venue table, as well as an event type. If they click the "Next" button, all information would be automatically saved to our database Order table. We had also notified our customer that after the information has been verified, there is still a chance this order would be rejected due to stock or other reason, and they could contact our specialist. Lastly, autofill is supported if the customer has already saved their relevant personal information to their browser.

7. payment method selection



In the payment method selection page, we provide various payment types for customers to choose from, and after they click the "checkout" button, the specific type would be saved to associated Order table in our database. Meanwhile, an Order entity would be created with all essential information such as billing information and event id, and the following page would show on the screen. When a customer or an administrator from the company decides to cancel an order, the order entity would be marked as "canceled," while the according event entity is deleted.



8. admin order manager

The page of the admin order manager is only permitted for authorized a manager from the "perfect party" company with unique login name and password, and after logged in, a page as follows would show up.



Customer Information Manager

Q
+
+
+
+
+

Hi admin, you have **2 active orders currently.**

Active 2
Completed 0
Cancelled 4

Search Results 2

	Name: gabriel gu Password: grz232 Event Type: other Name: gabriel gu Phone: 5197815037 Email: bbb@edu.ca	Budget: 1000.00 Pay Type: Visa Card Order: click me Customization: details Location: 254 phillips st Capacity: 999	Start_Time: 2019-01-01 00:00:01 Close_Time: 2019-01-01 10:00:01 Paid Amount: \$43	Billing Addr: 315 ABC st Addr: 2006-2, 254 PHILLIPS STREET	<div>Manage</div> <div>Edit Event Table</div> <div>Edit Order Table</div> <div>Edit Customer Table</div> <div>Delete</div>
Active: ✓ Completed: ⊖ Cancelled: ⊖ Order# 000007 Event# 000011 Userid: gab					
	Name: gabriel gu Password: grz232 Event Type: other Name: gabriel gu Phone: 5197815037 Email: bbb@edu.ca	Budget: 2000.00 Pay Type: Visa Card Order: click me Customization: details Location: 234 Col st Capacity: 100	Start_Time: 2019-01-01 00:00:01 Close_Time: 2019-01-01 10:00:01 Paid Amount: \$320	Billing Addr: 315 ABC st Addr: 2006-2, 254 PHILLIPS STREET	
Active: ✓ Completed: ⊖ Cancelled: ⊖ Order# 000008 Event# 000012 Userid: gab					

Supplier List
Supply Record List

In the top administrator can search order by customer's username, and right beside that, there are five "+" sign, that represents add a customer record, Event record, Supply items record, Supplier record, and Order record, which associated with our database table Customer, Event, Supply_items, Supplier, and Order accordingly as following. Manager can Insert into these table with these functionalities easily. On the top right, there is a line of a reminder of how many active orders the company needs to deal with right the moment in red.

9. New Record Insertion Pop-up window

Customer Information Manager

Search by customer username

Active | Completed | Canceled

Search Results 4

Name	Phone	Address	City	State	Zip	Country	Manager
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu

Supplier List | Supply Record List

Customer Information Manager

Search by customer username

Active | Completed | Canceled

Search Results 4

Name	Phone	Address	City	State	Zip	Country	Manager
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu

Supplier List | Supply Record List

Customer Information Manager

Search by customer username

Active | Completed | Canceled

Search Results 4

Name	Phone	Address	City	State	Zip	Country	Manager
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu

Supplier List | Supply Record List

Customer Information Manager

Search by customer username

Active | Completed | Canceled

Search Results 4

Name	Phone	Address	City	State	Zip	Country	Manager
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu

Supplier List | Supply Record List

Customer Information Manager

Search by customer username

Active | Completed | Canceled

Search Results 2

Name	Phone	Address	City	State	Zip	Country	Manager
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu
gabriel gu	5177615137	224 Canal	PHILIPS STREET	315	NC	USA	gabriel gu

Supplier List | Supply Record List

The main dashboard in this page is all data we might need for order placed with our company in three different categories active, completed, and canceled, and the total number of order in each collection is marked by the side as well as a green checkmark beneath each order. Every specific order's information is received from three different tables of our database, Customers, Order, and Event. Manager can modify any of these data or delete an order efficiently by clicking the "manage" button, then choose the table name of information was stored or simply delete. As follows, select the attribute they intend to update, all

these changes are a direct response to our database management system.

Customer Information Manager

search by customer username

Q


Hi admin, you have 2 active orders currently.

Active 2

Completed 0

Cancelled 4

Search Results 2



Name: gabriel gu

Password: grz232

Event Type: other

Name: gabriel gu

Phone: 5197815037

Email: bbb@edu.ca

Budget: 1000.00

Pay Type: Visa Card

Order: [click me](#)

Customization: [details](#)

Location: 254 phillips st

Capacity: 999

Start_Time: 2019-01-01 00:00:01

Close_Time: 2019-01-01 10:00:01

Paid Amount: \$43

Billing Addr: 315 ABC st

Addr: 2006-2, 254 PHILLIPS STREET




Manage


Edit Event Table

Edit Order Table

Edit Customer Table

Delete

Active:  Completed:  Cancelled:  Order# 000007 Event# 000011 UserId: gab



Name: gabriel gu

Password: grz232

Event Type: other

Name: gabriel gu

Phone: 5197815037

Email: bbb@edu.ca

Budget: 2000.00

Pay Type: Visa Card

Order: [click me](#)

Customization: [details](#)

Location: 234 Col st

Capacity: 100




Start_Time: 2019-01-01 00:00:01

Close_Time: 2019-01-01 10:00:01

Paid Amount: \$320

Billing Addr: 315 ABC st

Addr: 2006-2, 254 PHILLIPS STREET

Active:  Completed:  Cancelled:  Order# 000008 Event# 000012 UserId: gab

Supplier List

Supply Record List

Customer Information Manager

search by customer username

Q


Hi admin, you have 2 active orders currently.

Active 2

Completed 0

Cancelled 4

Search Results 2



Name: gabriel gu

Password: grz232

Event Type: other

Name: gabriel gu

Phone: 5197815037

Email: bbb@edu.ca

Budget: 2000.00

Pay Type: Visa Card

Order: [click me](#)

Customization: [details](#)

Location: 234 Col st

Capacity: 100

Start_Time: 2019-01-01 00:00:01




Close_Time: 2019-01-01 10:00:01


Paid Amount: \$320

Billing Addr: 315 ABC st

Addr: 2006-2, 254 PHILLIPS STREET

Manage

Active:  Completed:  Cancelled:  Order# 000008 Event# 000012 UserId: gab



Name: gabriel gu

Password: grz232

Event Type: other

Name: gabriel gu

Phone: 5197815037

Email: bbb@edu.ca

Budget: 1000.00

Pay Type: Visa Card

Order: [click me](#)

Customization: [details](#)

Location: 254 phillips st

Capacity: 999

Start_Time: 2019-01-01 00:00:01




Close_Time: 2019-01-01 10:00:01

Paid Amount: \$43

Billing Addr: 315 ABC st

Addr: 2006-2, 254 PHILLIPS STREET

Manage

Active:  Completed:  Cancelled:  Order# 000007 Event# 000011 UserId: gab

Supplier List

Supply Record List

Change Information

What to change:

Budget

Event type

Customization

Capacity

Party open time

Party close time

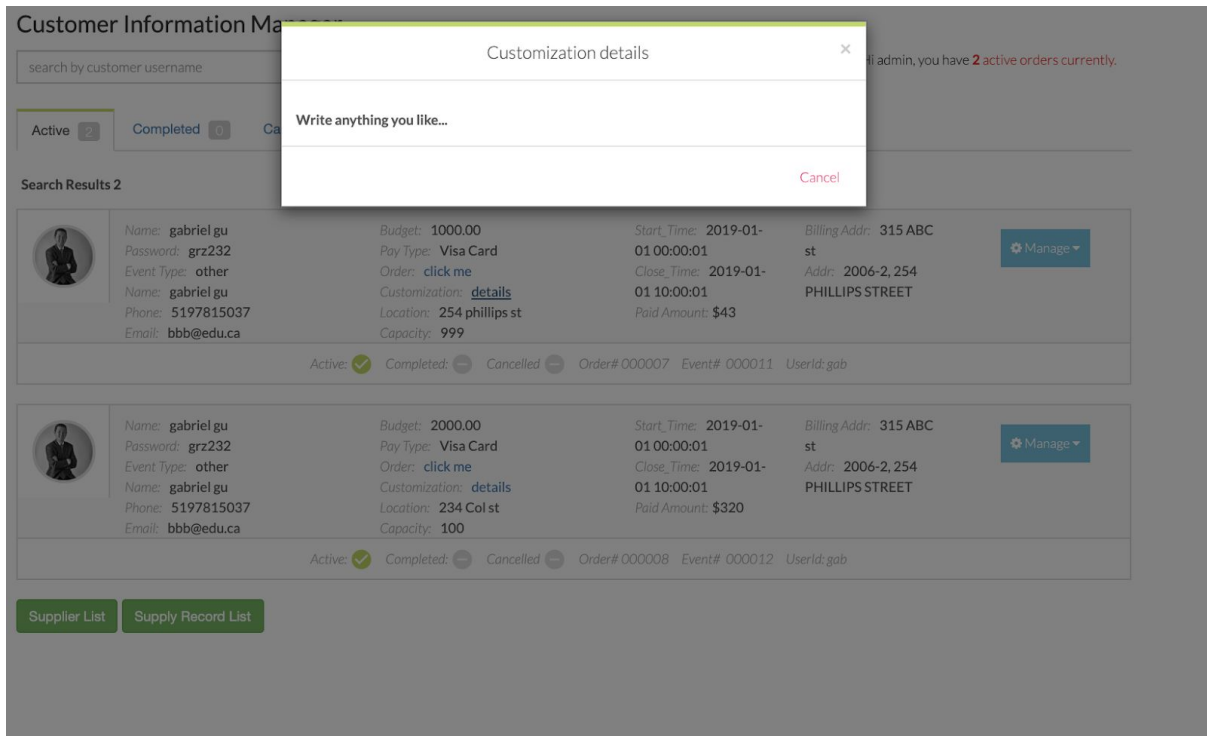
Delivery time

Venue_id

Change to:

Submit

Cancel



Lastly, the two green button "Supplier List" and "Supply Record List" located on the bottom would direct us into new interfaces, as demonstrated in (8), and (9).

10. Supplier list page

This page shows basic information for all suppliers, including Supplier_ID, Phone, Supplier Name, Company Name, Company Address and Company Email.

In the lower left corner of the page there is another green button that you can use to modify the supplier's information.

Perfect Party Inc.					
SUPPLIER LIST					
Supplier ID	Phone	Supplier Name	Company Name	Company Address	Company Email
000000	000000000	ABC	cs3483489	123 abc st	abc@abc.com
000001	222222222	BCD	BCD Company	123 BCD st	BCD@BCD.com
000002	33333333	EFG	EFG Company	123 EFG st	EFG@EFG.com
000003	444444444	MNG	MNG Company	123 MNG st	MNG@MNG.com
000004	5555555	PPP	PPP Company	123 PPP st	PPP@PPP.com
000005	99999999	david	good comp	home st west	goodcomp@gmail.com

Change Fields

When you click this button, a new menu will pop up.

There are three fields in this pop-up menu. You can use the first field to select the field you want to change and set it as the default Phone. Then you can use the second field to decide which supplier you want to modify and use the third one to update a new value to that supplier.

The screenshot displays a web interface for 'Perfect Party Inc.' with a 'SUPPLIER LIST' table and a 'Change Information' modal. The table lists suppliers with their IDs and phone numbers. The modal allows users to select a field to change (currently 'Phone'), choose a supplier ID, and enter a new value. A 'Change Fields' button is visible in the bottom left of the table area.

Supplier ID	Phone
000000	000000000
000001	222222222
000002	333333333
000003	444444444
000004	5555555
000005	99999999

Change Fields

Change Information

What to change: Phone

Supplier ID:

Change to:

Submit Cancel

Company Email

- abc@abc.com
- BCD@BCD.com
- EFG@EFG.com
- MNG@MNG.com
- PPP@PPP.com
- goodcomp@gmail.com

The implementation of this update is found the tuple which has the same Supplier_ID as we entered in the second field and update the value of corresponding attribute.

11. Supply record

This page shows basic information for all suppliers, including Supplier_ID, Product ID, Price and Quantity. In the lower left corner of the page there is another green button that you can use to modify the information of supply record by each supplier.

SUPPLY RECORD LIST

Supplier ID	Product ID	Price	Quantity
000000	000000	8.29	99999
000001	000001	10.29	40
000002	000000	8.29	40
000003	000003	100.00	90
000004	000004	10.00	8
000005	000006	11.00	8
000006	000005	7.00	80
000007	000004	10.00	3
000008	000004	10.00	3

[Change Fields](#)

When you click this button, a new menu will pop up. There are three fields in this pop-up menu. You can use the first field to select the field you want to change and set it as the default Product_ID. Then you can use the second field to decide which supplier's supply

The screenshot shows the 'Change Information' dialog box overlaid on the 'SUPPLY RECORD LIST' table. The dialog box has a title bar with a close button (X). It contains three input fields: 'What to change:' with a dropdown menu showing 'Product_ID', 'Supplier ID:' with a text input field, and 'Change to:' with a text input field. At the bottom right of the dialog are 'Submit' and 'Cancel' buttons. The background table is dimmed, showing the same data as the first image. The 'Change Fields' button from the first image is also visible at the bottom left of the background.

record you want to modify and use the third one to update a new value to that supply record. The implementation of this update is found the tuple which has the same Supplier_ID as we entered in the second field and update the value of corresponding attribute.