RENIM

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CSE 3330 - Database Systems and File Structures
The University of Texas at Arlington
Professor Bhanu Jain
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Our Domain Choice

- Denim is a popular commodity in today's fashion and retail industries.
- It is a market that is steadily increasing over the years, from 14.6 billion US Dollars (USD) in 2015 to 90 billion USD in 2019. [1]
- It is expected to grow as large as 105 billion USD by 2023. [1]

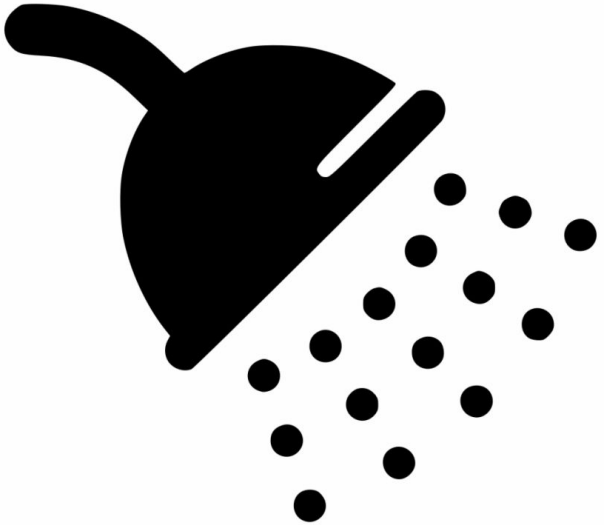
[2]

Our Impact

- **The Environmental Protection Agency (EPA) says that 26 billion pounds of apparel and textiles end up in the landfill every year. [3] This can be attributed by the average US Citizen, who throws away their textiles, and companies who choose not to sell their products second-hand.**

- **Our company encourages customers to return their unwanted denim to their local retail companies. Those companies will then send us the denim to our facilities where we will convert the denim waste into high performance composite for reuse or compost.**

- **Although this may not address the entirety of the post consumer textile waste issue, it is a shared responsibility among everyone, and any effort to combat this issue paves the way for larger solutions.**



It takes **1,800 gallons** of water to grow enough cotton for **one pair of jeans**. If a usable pair of jeans were to end up in a landfill, that would be the equivalent of running your shower for **14 hours**. [4]

Requirements

1. We want to store and query information for our RENIM database for our denim recycling program at Renim, where retailers can turn in denim waste. Each CUSTOMER has a Name (made up of the components FName, LName), Address, Contact Information (made up of Email, Phone), NoOfItems, and CustomerID. Each RETAIL_COMPANY has a Name, ClientID, and Address.

2. CUSTOMERS will *return* their used denim to their respective RETAIL_COMPANY.

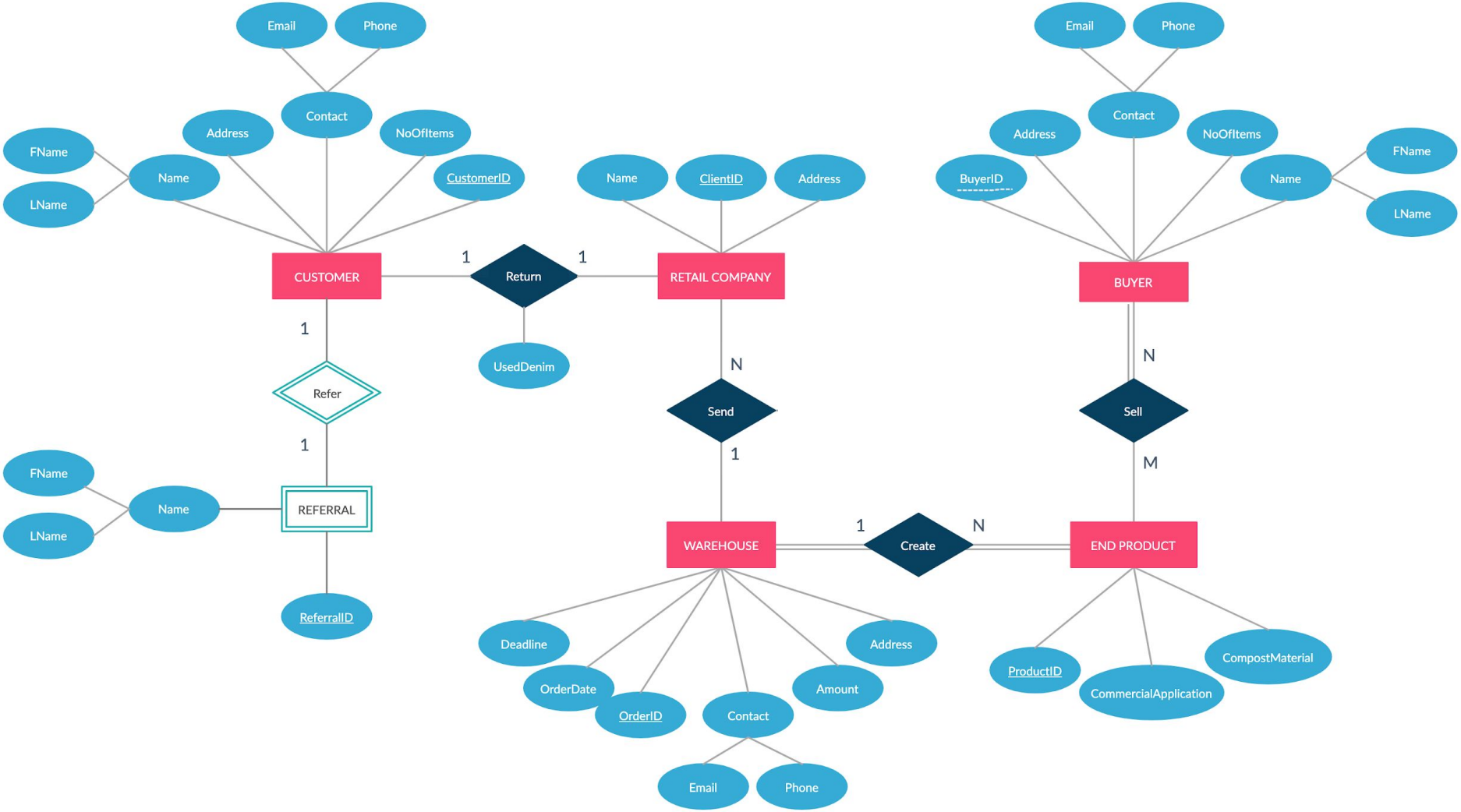
3. CUSTOMERs are *referred* to a REFERRAL. A REFERRAL has a ReferralID and Name of the CUSTOMER (FName, LName).

Requirements

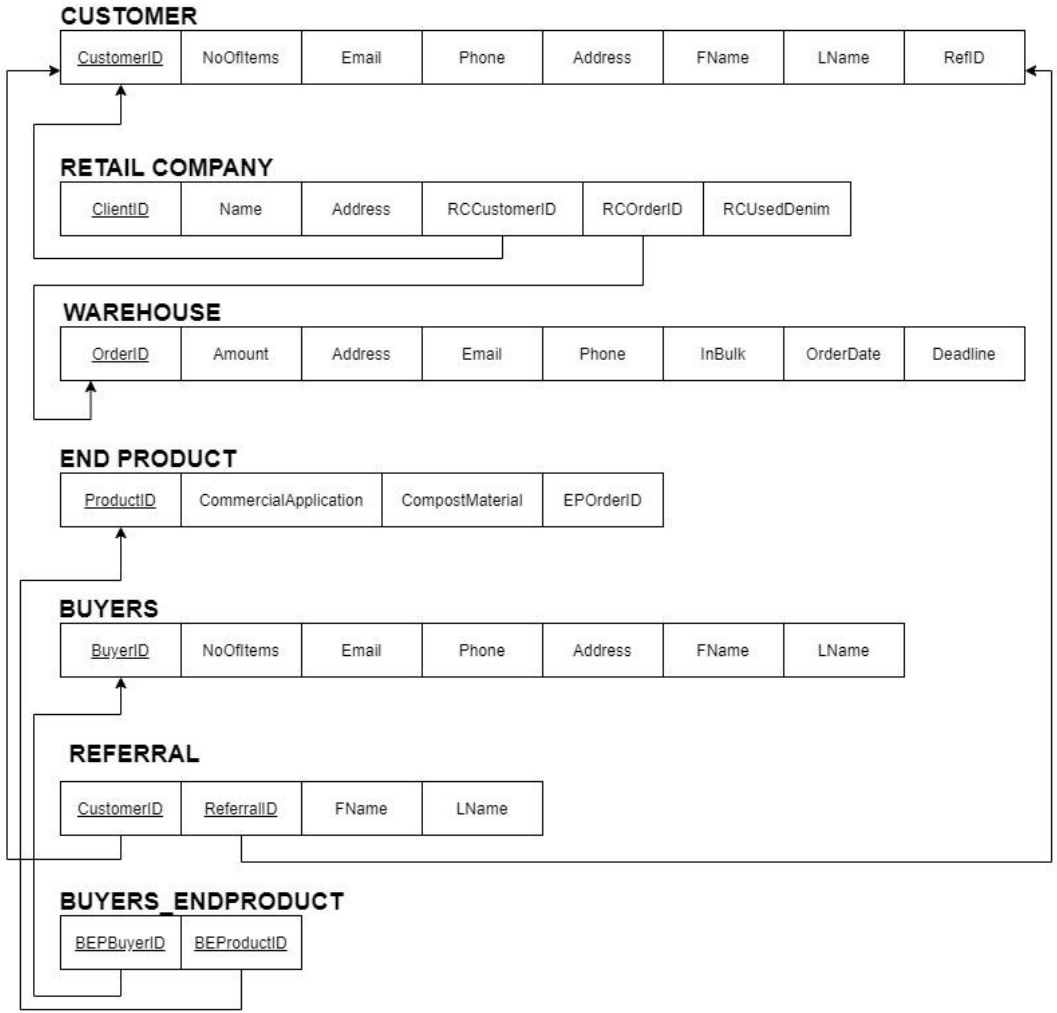
4. RETAIL_COMPANYS will *send* their denim to one of our WAREHOUSES where we will process the material. Each WAREHOUSE will have an OrderID, OrderDate, Deadline, Contact (made up of Email, Phone), Amount, and Address.

5. Our WAREHOUSE will *create* END_PRODUCTS. END_PRODUCTS will have a ProductID, CommercialApplication, and CompostMaterial.

EER Diagram

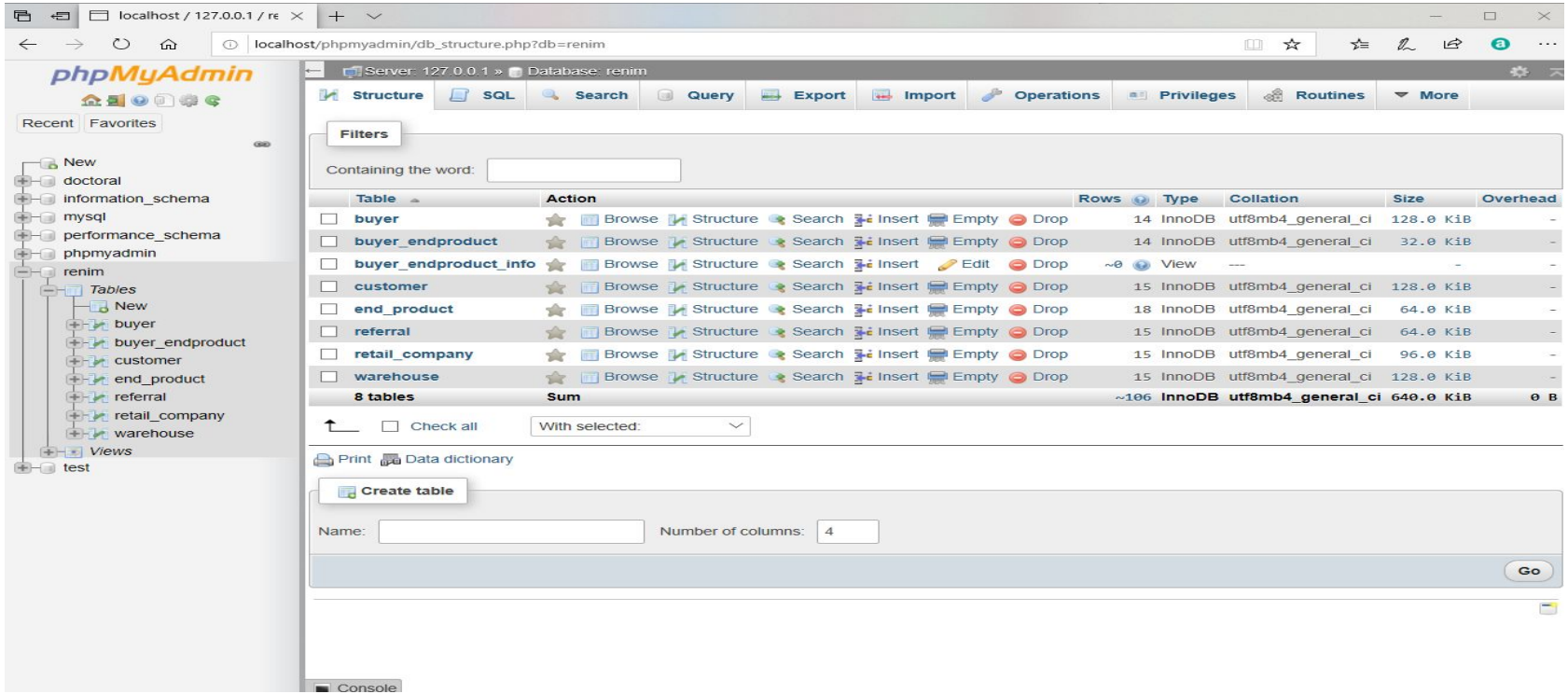

Email
Phone
Contact
Address
NoOfItems
FName
Name
LName
CustomerID
CUSTOMER
1
Return
1
RETAIL COMPANY
Name
ClientID
Address
UsedDenim
1
Refer
1
FName
Name
LName
REFERRAL
ReferralID
N
Send
1
WAREHOUSE
1
Create
N
END PRODUCT
Email
Phone
Contact
Address
NoOfItems
BuyerID
Name
FName
LName
BUYER
N
Sell
M
ProductID
CommercialApplication
CompostMaterial
Deadline
OrderDate
OrderID
Contact
Amount
Address
Email
Phone

Relational Schema


CUSTOMER
CustomerID
NoOfItems
Email
Phone
Address
FName
LName
RefID
RETAIL COMPANY
ClientID
Name
Address
RCCustomerID
RCOrderID
RCUsedDenim
WAREHOUSE
OrderID
Amount
Address
Email
Phone
InBulk
OrderDate
Deadline
END PRODUCT
ProductID
CommercialApplication
CompostMaterial
EPOrderID
BUYERS
BuyerID
NoOfItems
Email
Phone
Address
FName
LName
REFERRAL
CustomerID
ReferralID
FName
LName
BUYERS_ENDPRODUCT
BEPBuyerID
BEProductID

Database / Tables / Queries / View / Web Interface

Database


localhost / 127.0.0.1 / re
localhost/phpmyadmin/db_structure.php?db=renim
phpMyAdmin
Recent
Favorites
New
doctoral
information_schema
mysql
performance_schema
phpmyadmin
renim
Tables
New
buyer
buyer_endproduct
customer
end_product
referral
retail_company
warehouse
Views
test
Server: 127.0.0.1 » Database: renim
Structure
SQL
Search
Query
Export
Import
Operations
Privileges
Routines
More
Filters
Containing the word:
Table
Action
Rows
Type
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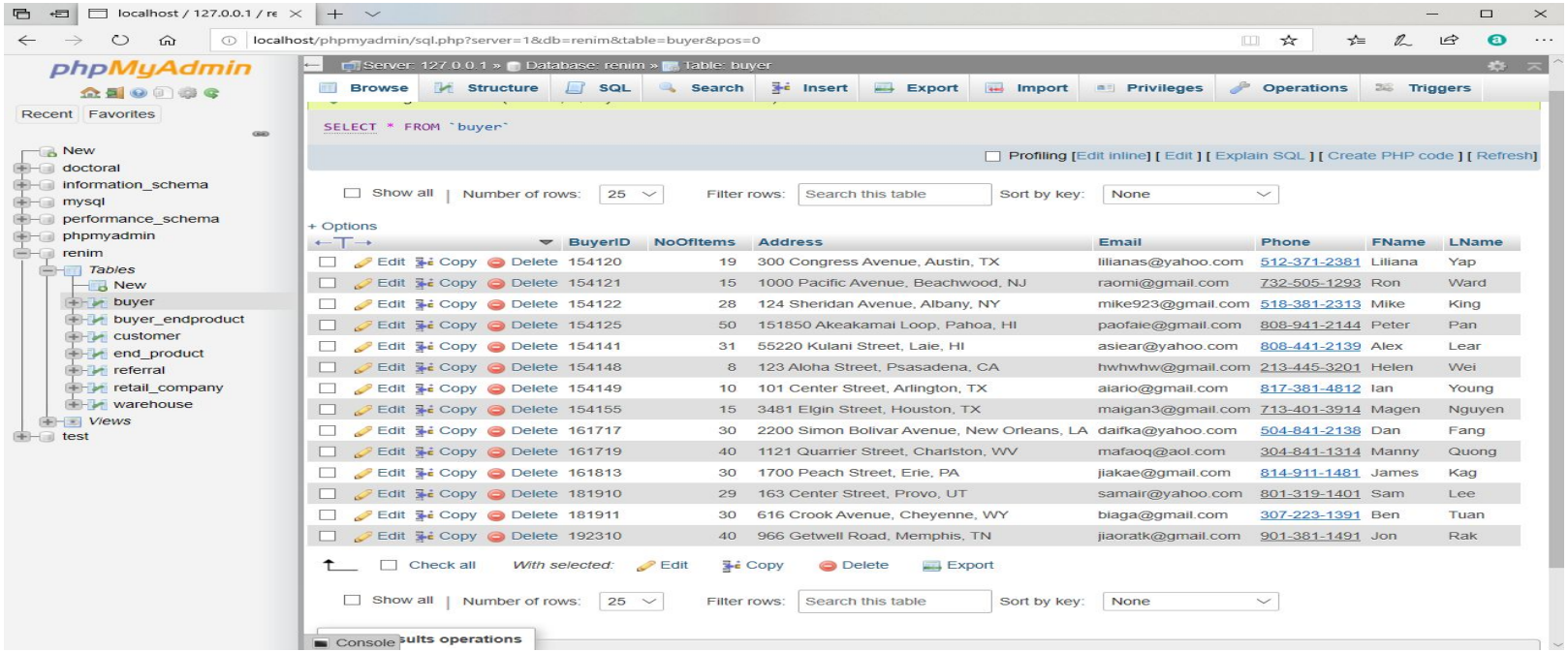
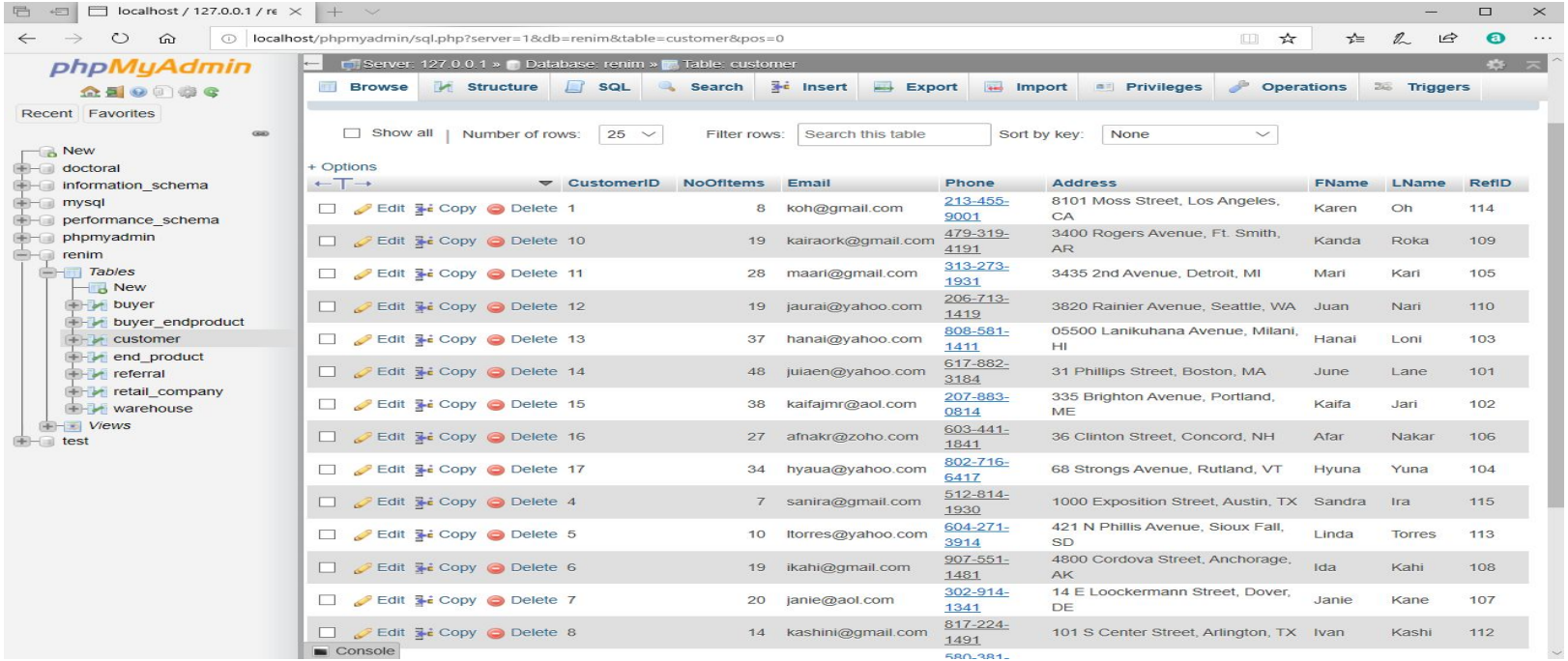
Size
Overhead
buyer Browse Structure Search Insert Empty Drop 14 InnoDB utf8mb4_general_ci 128.0 KiB -
buyer_endproduct Browse Structure Search Insert Empty Drop 14 InnoDB utf8mb4_general_ci 32.0 KiB -
buyer_endproduct_info Browse Structure Search Insert Edit Drop ~0 View --- - -
customer Browse Structure Search Insert Empty Drop 15 InnoDB utf8mb4_general_ci 128.0 KiB -
end_product Browse Structure Search Insert Empty Drop 18 InnoDB utf8mb4_general_ci 64.0 KiB -
referral Browse Structure Search Insert Empty Drop 15 InnoDB utf8mb4_general_ci 64.0 KiB -
retail_company Browse Structure Search Insert Empty Drop 15 InnoDB utf8mb4_general_ci 96.0 KiB -
warehouse Browse Structure Search Insert Empty Drop 15 InnoDB utf8mb4_general_ci 128.0 KiB -
8 tables Sum ~106 InnoDB utf8mb4_general_ci 640.0 KiB 0 B
Check all
With selected:
Print
Data dictionary
Create table
Name:
Number of columns: 4
Go
Console

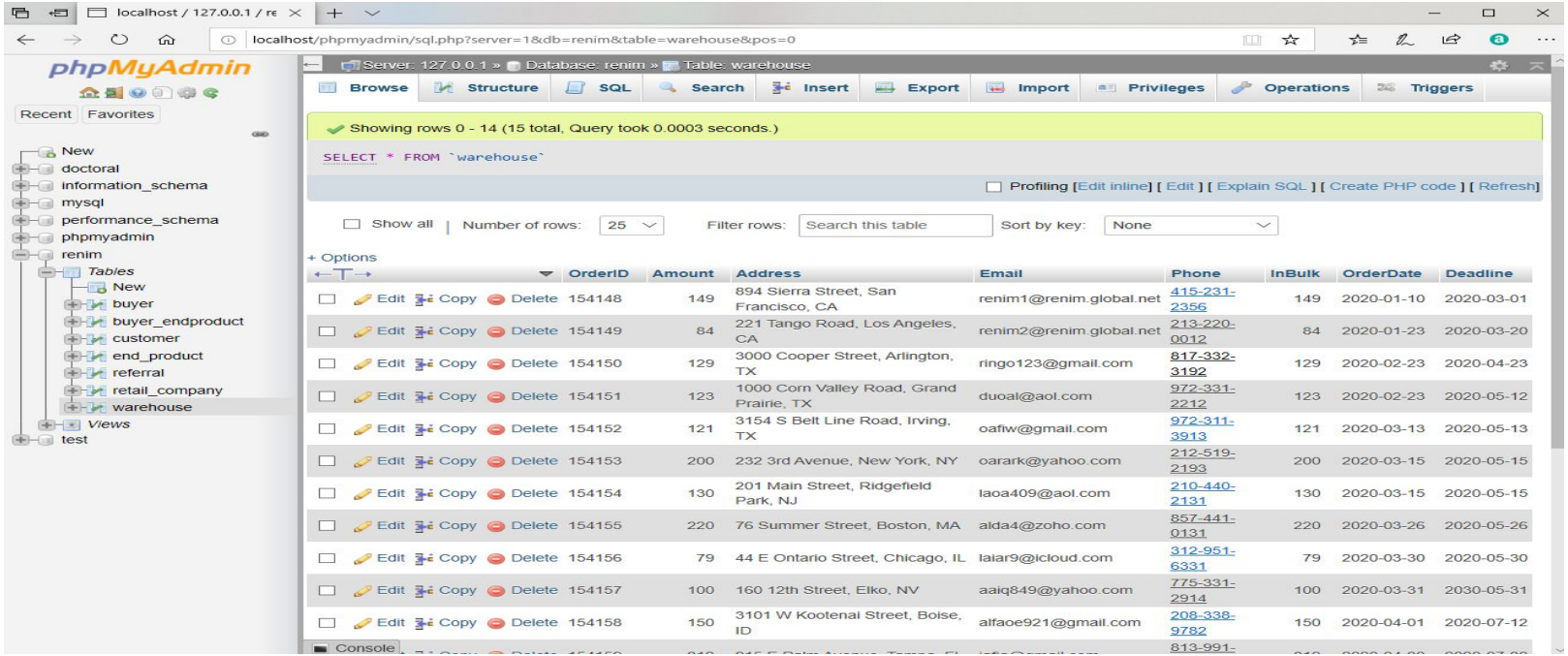
Tables


localhost / 127.0.0.1 / re
localhost/phpmyadmin/sql.php?server=1&db=renim&table=buyer&pos=0
phpMyAdmin
Recent
Favorites
New
doctoral
information_schema
mysql
performance_schema
phpmyadmin
renim
Tables
New
buyer
buyer_endproduct
customer
end_product
referral
retail_company
warehouse
Views
test
Server: 127.0.0.1 » Database: renim » Table: buyer
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Triggers
SELECT * FROM `buyer`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
+ Options
BuyerID NoOfItems Address Email Phone FName LName
Edit Copy Delete 154120 19 300 Congress Avenue, Austin, TX lilianas@yahoo.com 512-371-2381 Liliana Yap
Edit Copy Delete 154121 15 1000 Pacific Avenue, Beachwood, NJ raomi@gmail.com 732-505-1293 Ron Ward
Edit Copy Delete 154122 28 124 Sheridan Avenue, Albany, NY mike923@gmail.com 518-381-2313 Mike King
Edit Copy Delete 154125 50 151850 Akeakamai Loop, Pahoa, HI paofaie@gmail.com 808-941-2144 Peter Pan
Edit Copy Delete 154141 31 55220 Kulani Street, Laie, HI asiear@yahoo.com 808-441-2139 Alex Lear
Edit Copy Delete 154148 8 123 Aloha Street, Psasadena, CA hwhwhw@gmail.com 213-445-3201 Helen Wei
Edit Copy Delete 154149 10 101 Center Street, Arlington, TX aiario@gmail.com 817-381-4812 Ian Young
Edit Copy Delete 154155 15 3481 Elgin Street, Houston, TX maigan3@gmail.com 713-401-3914 Magen Nguyen
Edit Copy Delete 161717 30 2200 Simon Bolivar Avenue, New Orleans, LA daifka@yahoo.com 504-841-2138 Dan Fang
Edit Copy Delete 161719 40 1121 Quarrier Street, Charlston, WV mafaoq@aol.com 304-841-1314 Manny Quong
Edit Copy Delete 161813 30 1700 Peach Street, Erie, PA jiakae@gmail.com 814-911-1481 James Kag
Edit Copy Delete 181910 29 163 Center Street, Provo, UT samair@yahoo.com 801-319-1401 Sam Lee
Edit Copy Delete 181911 30 616 Crook Avenue, Cheyenne, WY biaga@gmail.com 307-223-1391 Ben Tuan
Edit Copy Delete 192310 40 966 Getwell Road, Memphis, TN jiaoratk@gmail.com 901-381-1491 Jon Rak
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None
Console

Tables

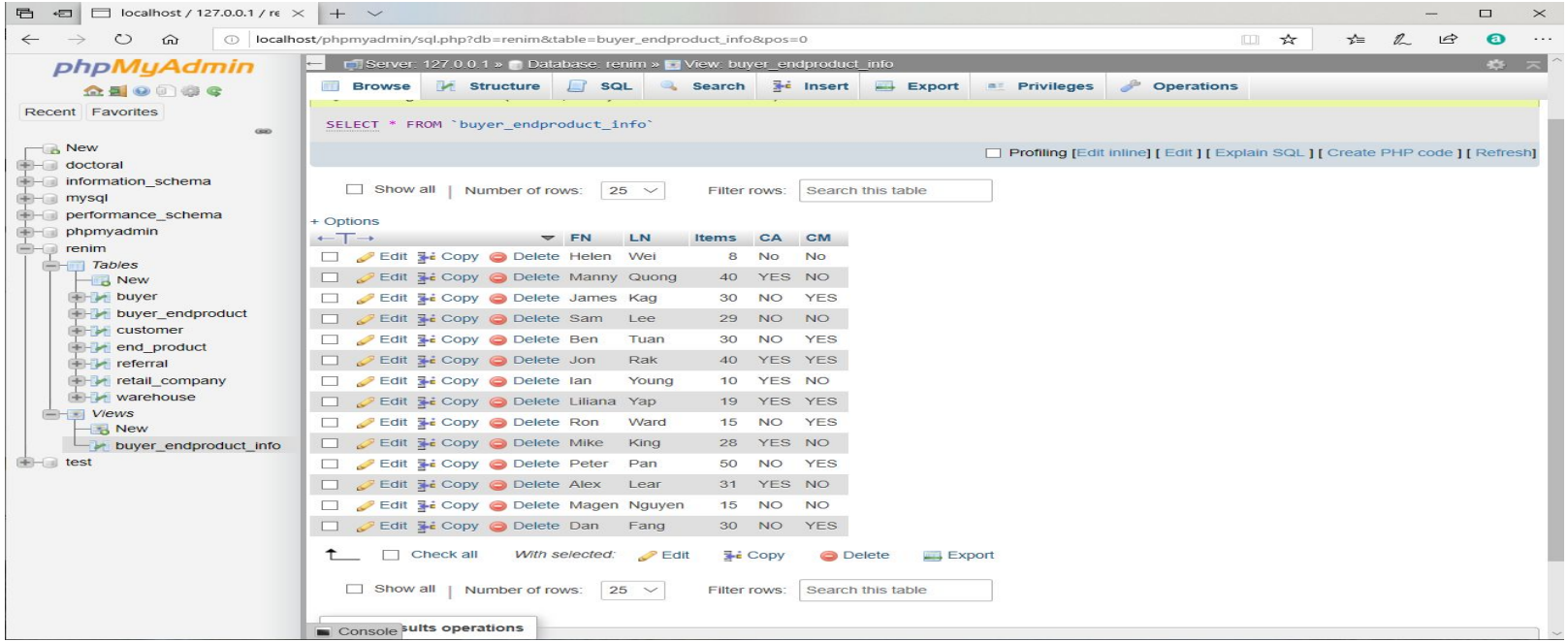

localhost / 127.0.0.1 / re
localhost/phpmyadmin/sql.php?server=1&db=renim&table=customer&pos=0
phpMyAdmin
Recent
Favorites
New
doctoral
information_schema
mysql
performance_schema
phpmyadmin
renim
Tables
New
buyer
buyer_endproduct
customer
end_product
referral
retail_company
warehouse
Views
test
Server: 127.0.0.1 » Database: renim » Table: customer
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Triggers
Show all
Number of rows: 25
Filter rows: Search this table
Sort by key: None
+ Options
CustomerID NoOfItems Email Phone Address FName LName RefID
Edit Copy Delete 1 8 koh@gmail.com 213-455-9001 8101 Moss Street, Los Angeles, CA Karen Oh 114
Edit Copy Delete 10 19 kairaork@gmail.com 479-319-4191 3400 Rogers Avenue, Ft. Smith, AR Kanda Roka 109
Edit Copy Delete 11 28 maari@gmail.com 313-273-1931 3435 2nd Avenue, Detroit, MI Mari Kari 105
Edit Copy Delete 12 19 jaurai@yahoo.com 206-713-1419 3820 Rainier Avenue, Seattle, WA Juan Nari 110
Edit Copy Delete 13 37 hanai@yahoo.com 808-581-1411 05500 Lanikuhana Avenue, Milani, HI Hanai Loni 103
Edit Copy Delete 14 48 juiaen@yahoo.com 617-882-3184 31 Phillips Street, Boston, MA June Lane 101
Edit Copy Delete 15 38 kaifajmr@aol.com 207-883-0814 335 Brighton Avenue, Portland, ME Kaifa Jari 102
Edit Copy Delete 16 27 afnakr@zoho.com 603-441-1841 36 Clinton Street, Concord, NH Afar Nakar 106
Edit Copy Delete 17 34 hyaua@yahoo.com 802-716-6417 68 Strongs Avenue, Rutland, VT Hyuna Yuna 104
Edit Copy Delete 4 7 sanira@gmail.com 512-814-1930 1000 Exposition Street, Austin, TX Sandra Ira 115
Edit Copy Delete 5 10 ltorres@yahoo.com 604-271-3914 421 N Phillis Avenue, Sioux Fall, SD Linda Torres 113
Edit Copy Delete 6 19 ikahi@gmail.com 907-551-1481 4800 Cordova Street, Anchorage, AK Ida Kahi 108
Edit Copy Delete 7 20 janie@aol.com 302-914-1341 14 E Loockermann Street, Dover, DE Janie Kane 107
Edit Copy Delete 8 14 kashini@gmail.com 817-224-1491 101 S Center Street, Arlington, TX Ivan Kashi 112
Console

Tables

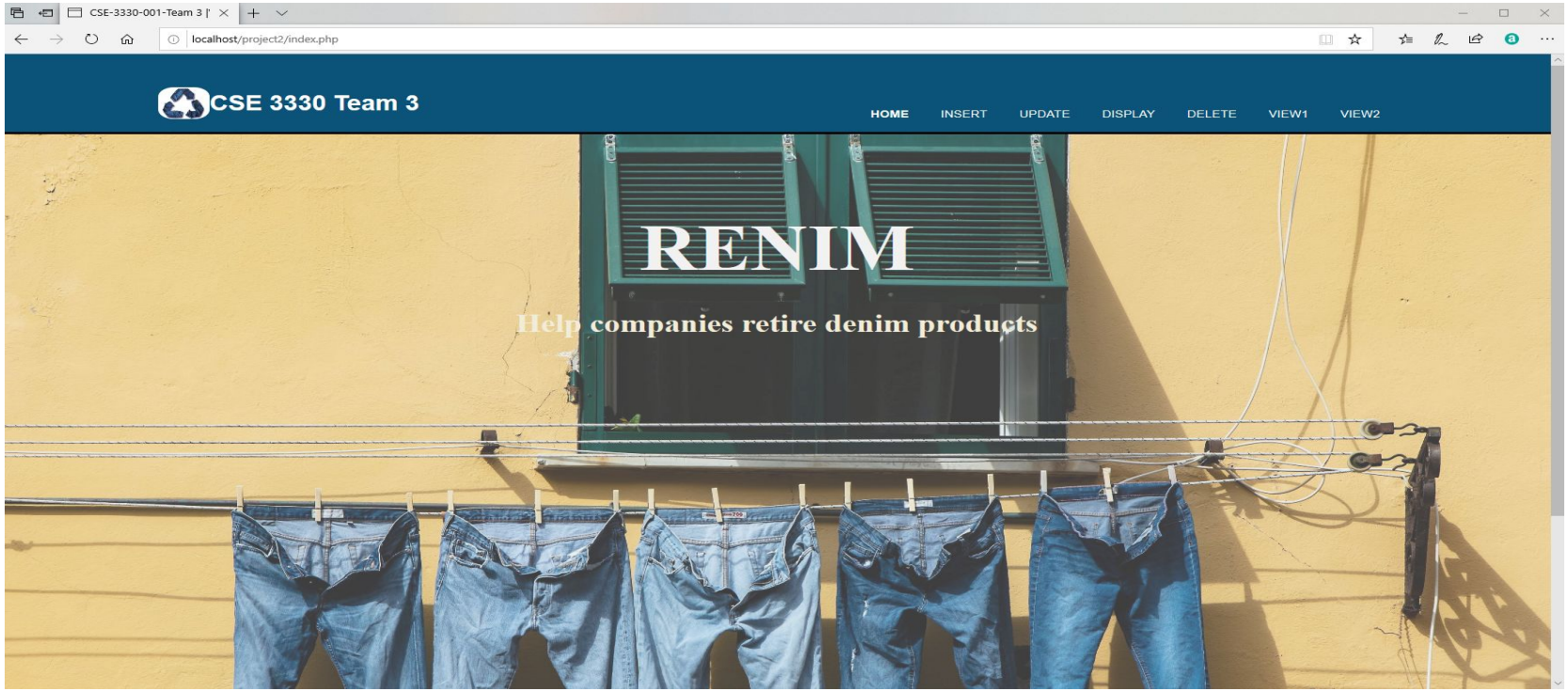


	OrderID	Amount	Address	Email	Phone	InBulk	OrderDate	Deadline
Edit Copy Delete	154148	149	894 Sierra Street, San Francisco, CA	renim1@renim.global.net	415-231-2356	149	2020-01-10	2020-03-01
Edit Copy Delete	154149	84	221 Tango Road, Los Angeles, CA	renim2@renim.global.net	213-220-0012	84	2020-01-23	2020-03-20
Edit Copy Delete	154150	129	3000 Cooper Street, Arlington, TX	ringo123@gmail.com	817-332-3192	129	2020-02-23	2020-04-23
Edit Copy Delete	154151	123	1000 Corn Valley Road, Grand Prairie, TX	duoal@aol.com	972-331-2212	123	2020-02-23	2020-05-12
Edit Copy Delete	154152	121	3154 S Belt Line Road, Irving, TX	oafiw@gmail.com	972-311-3913	121	2020-03-13	2020-05-13
Edit Copy Delete	154153	200	232 3rd Avenue, New York, NY	oarark@yahoo.com	212-519-2193	200	2020-03-15	2020-05-15
Edit Copy Delete	154154	130	201 Main Street, Ridgefield Park, NJ	laoa409@aol.com	210-440-2131	130	2020-03-15	2020-05-15
Edit Copy Delete	154155	220	76 Summer Street, Boston, MA	alda4@zoho.com	857-441-0131	220	2020-03-26	2020-05-26
Edit Copy Delete	154156	79	44 E Ontario Street, Chicago, IL	laiar9@icloud.com	312-951-6331	79	2020-03-30	2020-05-30
Edit Copy Delete	154157	100	160 12th Street, Elko, NV	aaiq849@yahoo.com	775-331-2914	100	2020-03-31	2030-05-31
Edit Copy Delete	154158	150	3101 W Kootenai Street, Boise, ID	alfaoe921@gmail.com	208-338-9782	150	2020-04-01	2020-07-12

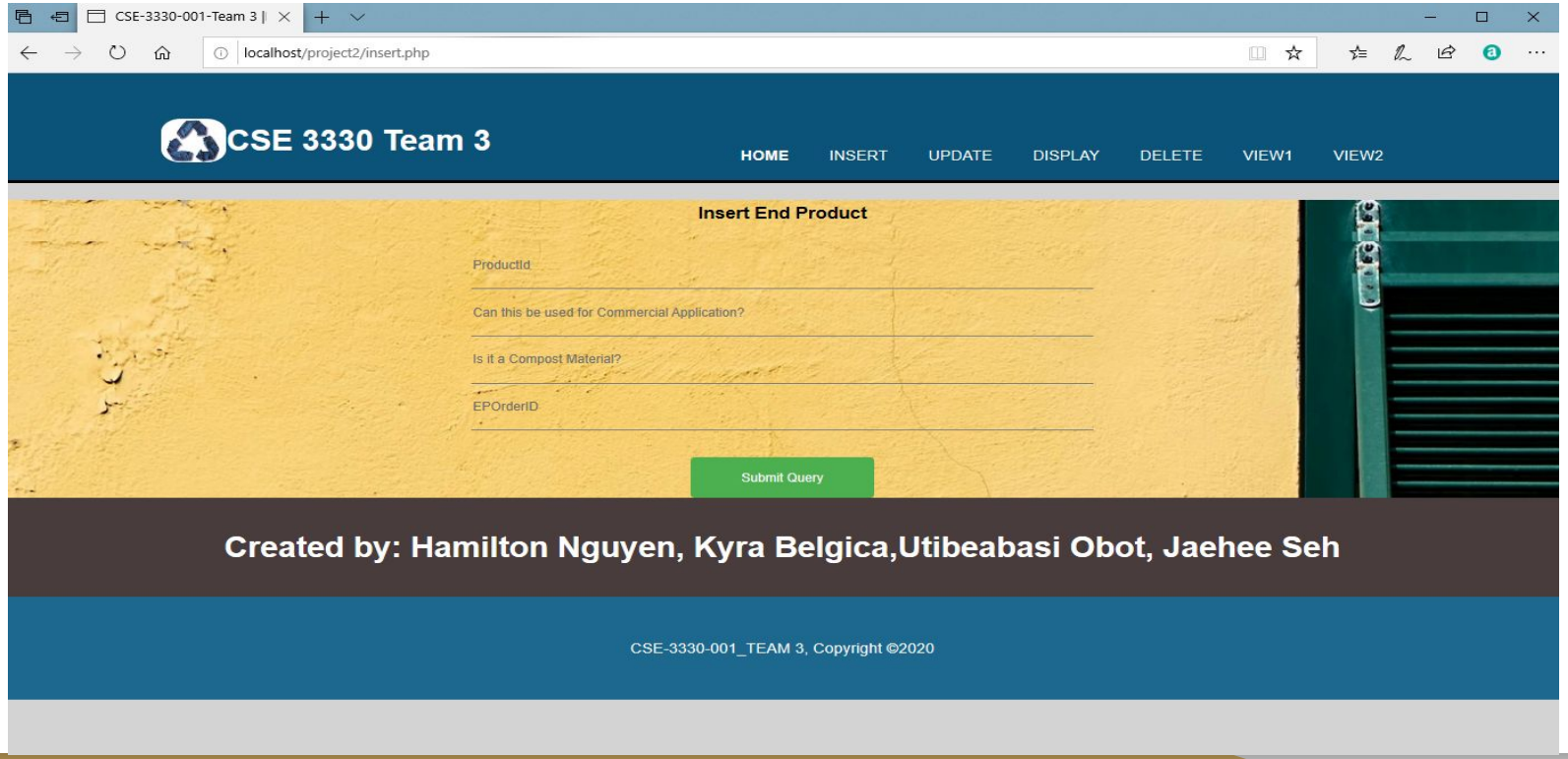
View


localhost / 127.0.0.1 / re
localhost/phpmyadmin/sql.php?db=renim&table=buyer_endproduct_info&pos=0
phpMyAdmin
Recent
Favorites
New
doctoral
information_schema
mysql
performance_schema
phpmyadmin
renim
Tables
New
buyer
buyer_endproduct
customer
end_product
referral
retail_company
warehouse
Views
New
buyer_endproduct_info
test
Server: 127.0.0.1 » Database: renim » View: buyer_endproduct_info
Browse
Structure
SQL
Search
Insert
Export
Privileges
Operations
SELECT * FROM `buyer_endproduct_info`
Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
Show all | Number of rows: 25 Filter rows: Search this table
+ Options
FN LN Items CA CM
Edit Copy Delete Helen Wei 8 No No
Edit Copy Delete Manny Quong 40 YES NO
Edit Copy Delete James Kag 30 NO YES
Edit Copy Delete Sam Lee 29 NO NO
Edit Copy Delete Ben Tuan 30 NO YES
Edit Copy Delete Jon Rak 40 YES YES
Edit Copy Delete Ian Young 10 YES NO
Edit Copy Delete Liliana Yap 19 YES YES
Edit Copy Delete Ron Ward 15 NO YES
Edit Copy Delete Mike King 28 YES NO
Edit Copy Delete Peter Pan 50 NO YES
Edit Copy Delete Alex Lear 31 YES NO
Edit Copy Delete Magen Nguyen 15 NO NO
Edit Copy Delete Dan Fang 30 NO YES
Check all With selected: Edit Copy Delete Export
Show all | Number of rows: 25 Filter rows: Search this table
Console

Web Interface - Home



Web Interface - Insert



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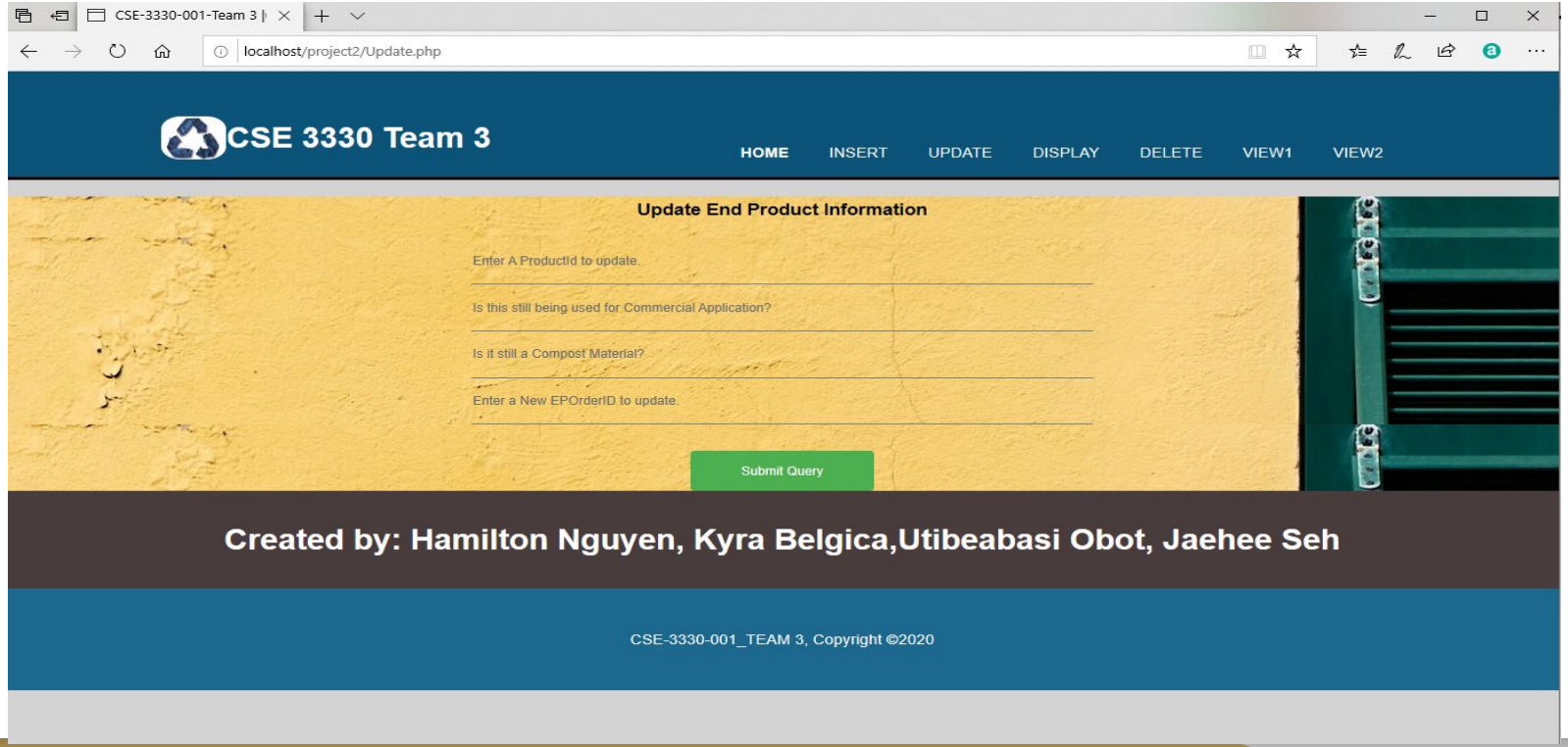
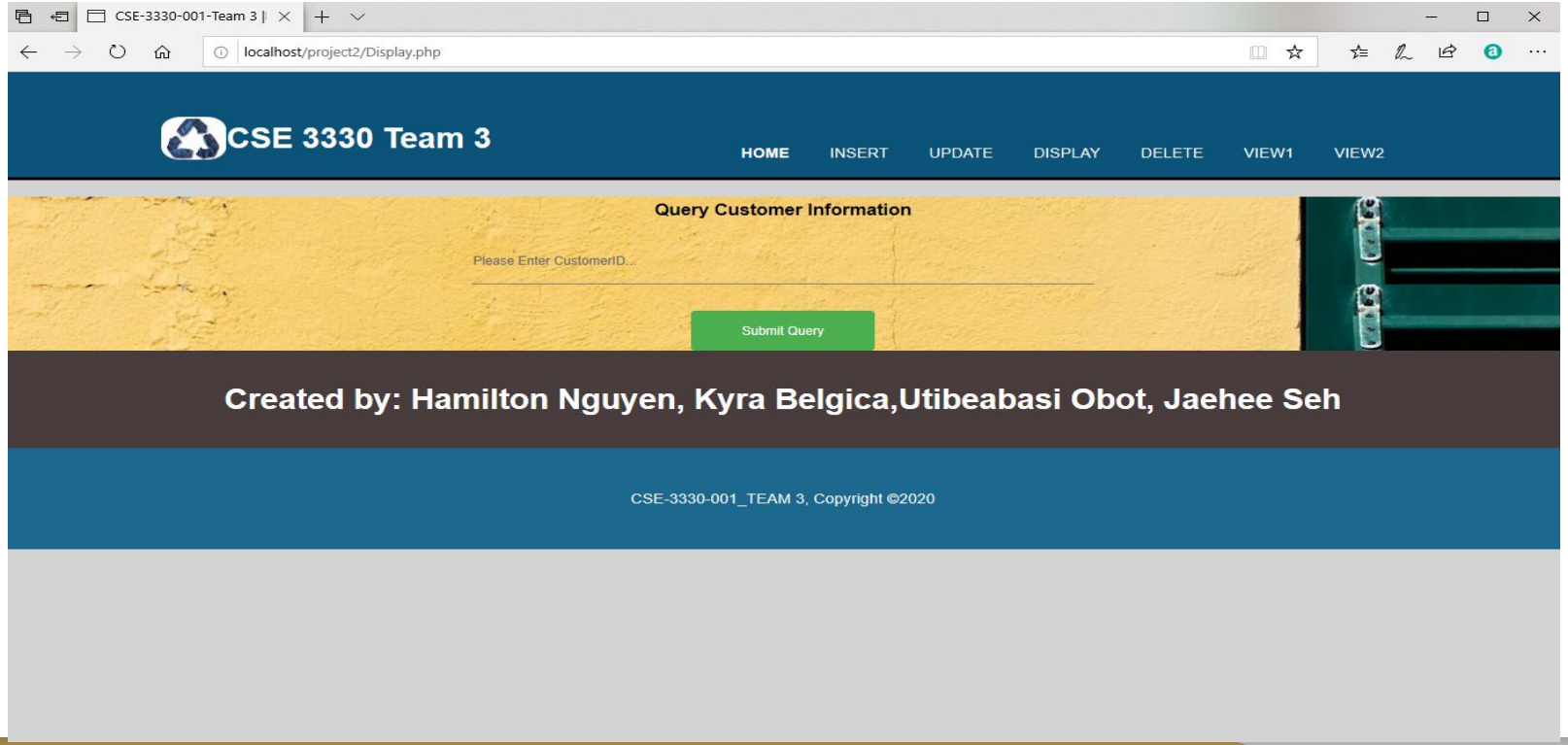
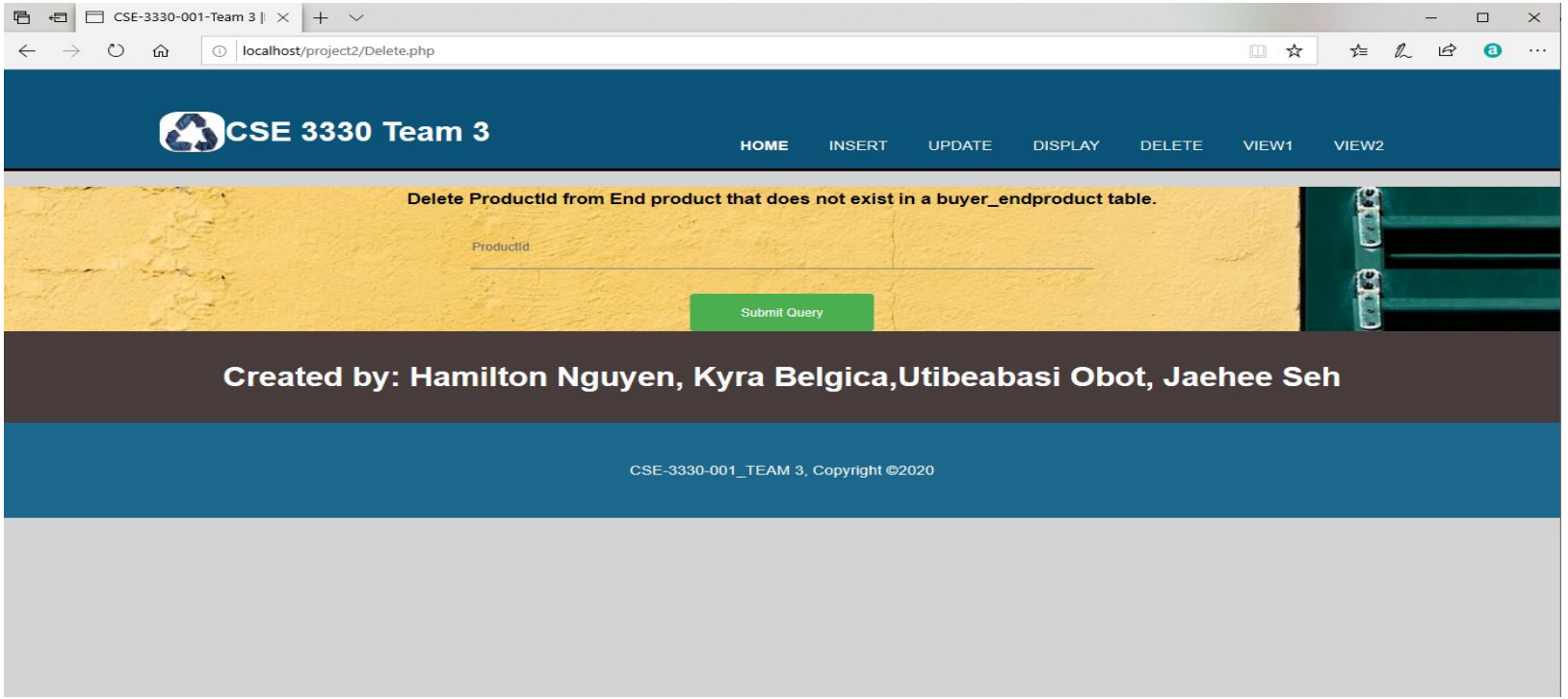
Web Interface - Update



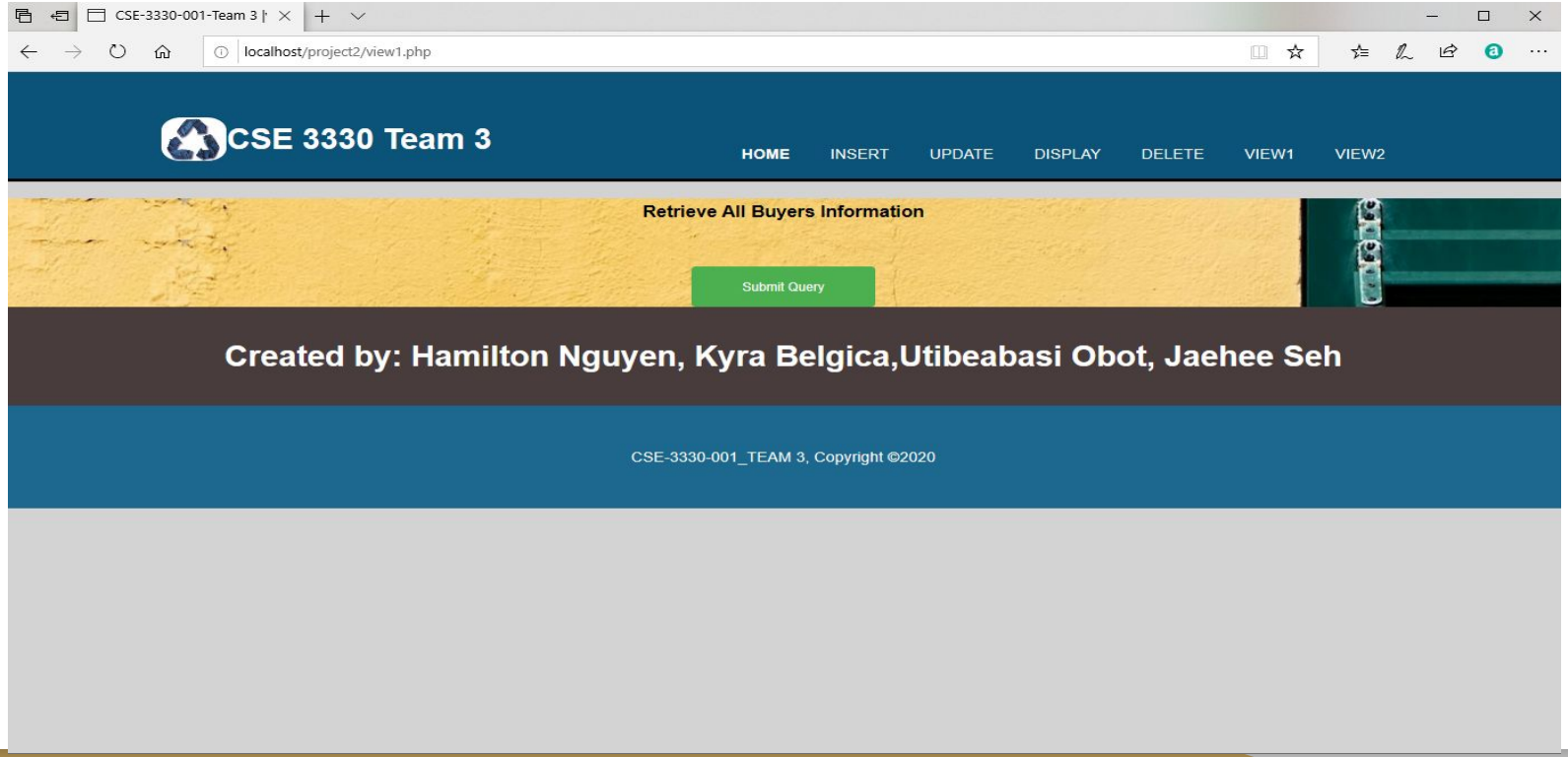
Web Interface - Display



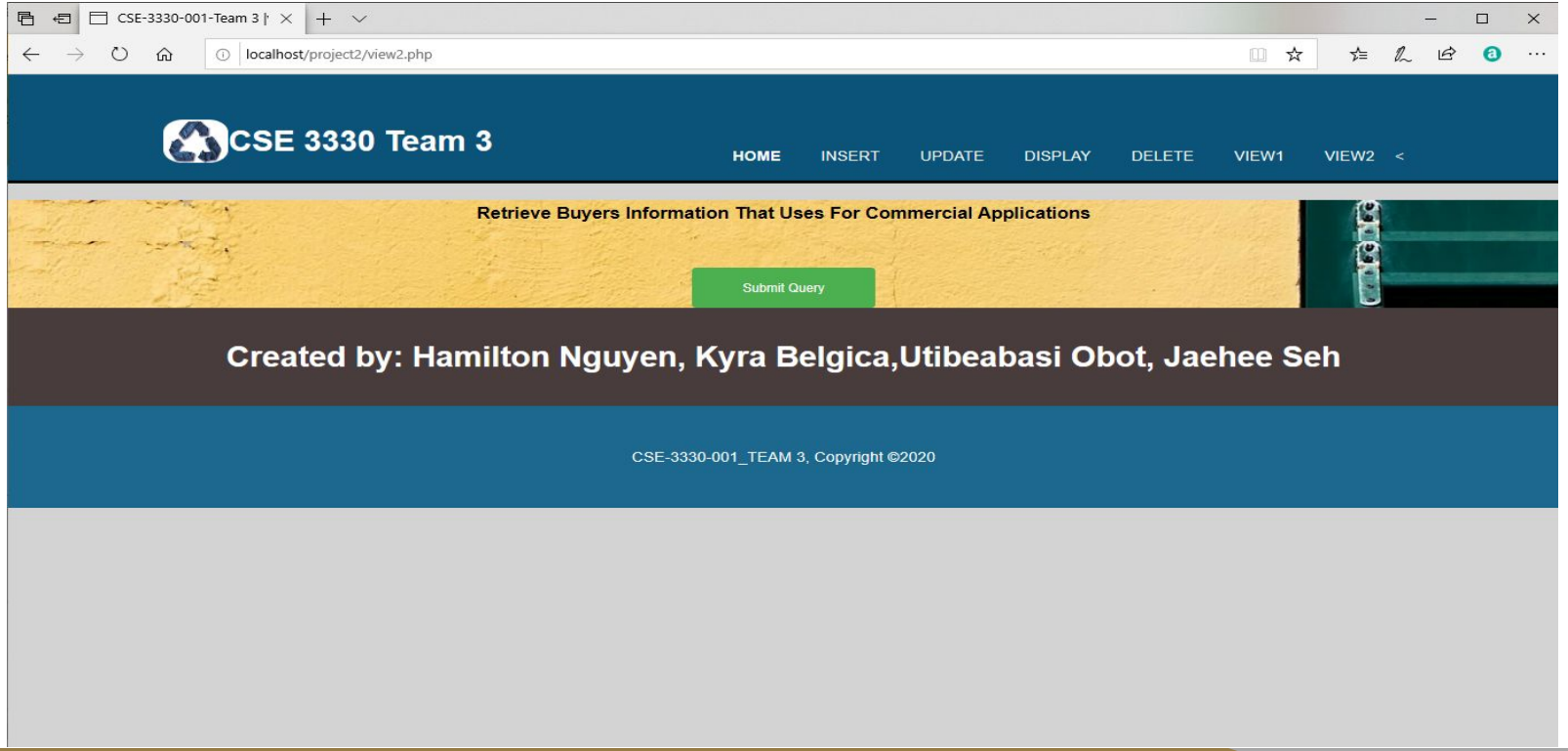
Web Interface - Delete



Web Interface - View1



Web Interface - View2



SQL Queries to Create Our Database

Creating Table for Customer

```sql
CREATE TABLE `customer` (
  `CustomerID` varchar(6) NOT NULL,
  `NoOfItems` int(255) NOT NULL,
  `Email` varchar(500) NOT NULL,
  `Phone` varchar(12) NOT NULL,
  `Address` varchar(100) NOT NULL,
  `FName` varchar(20) NOT NULL,
  `LName` varchar(20) NOT NULL,
  `RefID` varchar(6) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `customer`
--

INSERT INTO `customer` (`CustomerID`, `NoOfItems`, `Email`, `Phone`, `Address`, `FName`, `LName`, `RefID`) VALUES
('1', 8, 'koh@gmail.com', '213-455-9001', '8101 Moss Street, Los Angeles, CA', 'Karen', 'Oh', '114'),
('10', 19, 'kairaork@gmail.com', '479-319-4191', '3400 Rogers Avenue, Ft. Smith, AR', 'Kanda', 'Roka', '109'),
('11', 28, 'maari@gmail.com', '313-273-1931', '3435 2nd Avenue, Detroit, MI', 'Mari', 'Kari', '105'),
('12', 19, 'jaurai@yahoo.com', '206-713-1419', '3820 Rainier Avenue, Seattle, WA', 'Juan', 'Nari', '110'),
('13', 37, 'hanai@yahoo.com', '808-581-1411', '05500 Lanikuhana Avenue, Milani, HI', 'Hanai', 'Loni', '103'),
('14', 48, 'juiaen@yahoo.com', '617-882-3184', '31 Phillips Street, Boston, MA', 'June', 'Lane', '101'),
('15', 38, 'kaifajmr@aol.com', '207-883-0814', '335 Brighton Avenue, Portland, ME', 'Kaifa', 'Jari', '102'),
('16', 27, 'afnakr@zoho.com', '603-441-1841', '36 Clinton Street, Concord, NH', 'Afar', 'Nakar', '106'),
('17', 34, 'hyaua@yahoo.com', '802-716-6417', '68 Strongs Avenue, Rutland, VT', 'Hyuna', 'Yuna', '104'),
('4', 7, 'sanira@gmail.com', '512-814-1930', '1000 Exposition Street, Austin, TX', 'Sandra', 'Ira', '115'),
('5', 10, 'ltorres@yahoo.com', '604-271-3914', '421 N Phillis Avenue, Sioux Fall, SD', 'Linda', 'Torres', '113'),
('6', 19, 'ikahi@gmail.com', '907-551-1481', '4800 Cordova Street, Anchorage, AK', 'Ida', 'Kahi', '108'),
('7', 20, 'janie@aol.com', '302-914-1341', '14 E Loockermann Street, Dover, DE', 'Janie', 'Kane', '107'),
('8', 14, 'kashini@gmail.com', '817-224-1491', '101 S Center Street, Arlington, TX', 'Ivan', 'Kashi', '112'),
('9', 15, 'quandk@gmail.com', '580-381-1491', '119 W Main Street, Ada, OK', 'Quan', 'Dak', '111');

-- --------------------------------------------------------
```

Creating Table for Referral

```
-- Table structure for table `referral`
--

CREATE TABLE `referral` (
  `FName` varchar(15) NOT NULL,
  `LName` varchar(15) NOT NULL,
  `ReferalID` varchar(6) NOT NULL,
  `CustomerID` varchar(6) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `referral`
--

INSERT INTO `referral` (`FName`, `LName`, `ReferalID`, `CustomerID`) VALUES
('Cathal', 'Dalby', '101', '14'),
('Anisa', 'Rogers', '102', '15'),
('Sally', 'Hughes', '103', '13'),
('Aleah', 'Lin', '104', '17'),
('Steffan', 'Lott', '105', '11'),
('Ava-Mae', 'Stacey', '106', '16'),
('Milton', 'Jenkins', '107', '7'),
('Benedict', 'Brad', '108', '6'),
('Syndey', 'Ali', '109', '10'),
('Devin', 'Kane', '110', '12'),
('Deborah', 'Shaw', '111', '9'),
('Casper', 'Clegg', '112', '8'),
('Manraj', 'Adamson', '113', '5'),
('Raisa', 'House', '114', '1'),
('Eadie', 'Nieves', '115', '4');

-- --------------------------------------------------------
```

Creating Table for Buyer

```sql
CREATE TABLE `buyer` (
  `BuyerID` varchar(6) NOT NULL,
  `NoOfItems` int(255) NOT NULL,
  `Address` varchar(500) NOT NULL,
  `Email` varchar(500) NOT NULL,
  `Phone` varchar(12) NOT NULL,
  `FName` varchar(100) NOT NULL,
  `LName` varchar(100) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `buyer`
--

INSERT INTO `buyer` (`BuyerID`, `NoOfItems`, `Address`, `Email`, `Phone`, `FName`, `LName`) VALUES
('154120', 19, '300 Congress Avenue, Austin, TX', 'lilianas@yahoo.com', '512-371-2381', 'Liliana', 'Yap'),
('154121', 15, '1000 Pacific Avenue, Beachwood, NJ', 'raomi@gmail.com', '732-505-1293', 'Ron', 'Ward'),
('154122', 28, '124 Sheridan Avenue, Albany, NY', 'mike923@gmail.com', '518-381-2313', 'Mike', 'King'),
('154125', 50, '151850 Akeakamai Loop, Pahoa, HI', 'paofaie@gmail.com', '808-941-2144', 'Peter', 'Pan'),
('154141', 31, '55220 Kulani Street, Laie, HI', 'asiear@yahoo.com', '808-441-2139', 'Alex', 'Lear'),
('154148', 8, '123 Aloha Street, Psasadena, CA', 'hwhwhw@gmail.com', '213-445-3201', 'Helen', 'Wei'),
('154149', 10, '101 Center Street, Arlington, TX', 'aiario@gmail.com', '817-381-4812', 'Ian', 'Young'),
('154155', 15, '3481 Elgin Street, Houston, TX', 'maigan3@gmail.com', '713-401-3914', 'Magen', 'Nguyen'),
('161717', 30, '2200 Simon Bolivar Avenue, New Orleans, LA', 'daifka@yahoo.com', '504-841-2138', 'Dan', 'Fang'),
('161719', 40, '1121 Quarrier Street, Charlston, WV', 'mafaoq@aol.com', '304-841-1314', 'Manny', 'Quong'),
('161813', 30, '1700 Peach Street, Erie, PA', 'jiakae@gmail.com', '814-911-1481', 'James', 'Kag'),
('181910', 29, '163 Center Street, Provo, UT', 'samair@yahoo.com', '801-319-1401', 'Sam', 'Lee'),
('181911', 30, '616 Crook Avenue, Cheyenne, WY', 'biaga@gmail.com', '307-223-1391', 'Ben', 'Tuan'),
('192310', 40, '966 Getwell Road, Memphis, TN', 'jiaoratk@gmail.com', '901-381-1491', 'Jon', 'Rak');
```

Setting PK and UK for Retail Company Table

```
--
ALTER TABLE `retail_company`
  ADD PRIMARY KEY (`ClientID`),
  ADD UNIQUE KEY `RCCustomerID` (`RCCustomerID`),
  ADD UNIQUE KEY `RCOrderID` (`RCOrderID`),
  ADD KEY `Name` (`Name`),
  ADD KEY `Address` (`Address`),
  ADD KEY `RCUsedDenim` (`RCUsedDenim`);

--
-- Indexes for table `warehouse`
--
ALTER TABLE `warehouse`
  ADD PRIMARY KEY (`OrderID`),
  ADD KEY `OrderDate` (`OrderDate`),
  ADD KEY `Deadline` (`Deadline`),
  ADD KEY `Email` (`Email`),
  ADD KEY `Phone` (`Phone`),
  ADD KEY `Amount` (`Amount`),
  ADD KEY `Address` (`Address`),
  ADD KEY `InBulk` (`InBulk`);

--
```

Data Files

Customer

```
CustomerID,NoOfItems,Email,Phone,Address,FName,LName,RefID
14,48,juiaen@yahoo.com,617-882-3184,"31 Phillips Street, Boston, MA",June,Lane,101
15,38,kaifajmr@aol.com,207-883-0814,"335 Brighton Avenue, Portland, ME",Kaifa,Jari,102
13,37,hanai@yahoo.com,808-581-1411,"05500 Lanikuhana Avenue, Milani, HI",Hanai,Loni,103
17,34,hyaua@yahoo.com,802-716-6417,"68 Strongs Avenue, Rutland, VT",Hyuna,Yuna,104
11,28,maari@gmail.com,313-273-1931,"3435 2nd Avenue, Detroit, MI",Mari,Kari,105
16,27,afnakr@zoho.com,603-441-1841,"36 Clinton Street, Concord, NH",Afar,Nakar,106
7,20,janie@aol.com,302-914-1341,"14 E Loockermann Street, Dover, DE",Janie,Kane,107
6,19,ikahi@gmail.com,907-551-1481,"4800 Cordova Street, Anchorage, AK",Ida,Kahi,108
10,19,kairaork@gmail.com,479-319-4191,"3400 Rogers Avenue, Ft. Smith, AR",Kanda,Roka,109
12,19,jaurai@yahoo.com,206-713-1419,"3820 Rainier Avenue, Seattle, WA",Juan,Nari,110
9,15,quandk@gmail.com,580-381-1491,"119 W Main Street, Ada, OK",Quan,Dak,111
8,14,kashini@gmail.com,817-224-1491,"101 S Center Street, Arlington, TX",Ivan,Kashi,112
5,10,ltorres@yahoo.com,604-271-3914,"421 N Phillis Avenue, Sioux Fall, SD",Linda,Torres,113
1,8,koh@gmail.com,213-455-9001,"8101 Moss Street, Los Angeles, CA",Karen,Oh,114
4,7,sanira@gmail.com,512-814-1930,"1000 Exposition Street, Austin, TX",Sandra,Ira,115
```

Referral

```
Fname,Lname,ReferalID,CustomerID
Cathal,Dalby,101,14
Anisa,Rogers,102,15
Sally,Hughes,103,13
Aleah,Lin,104,17
Steffan,Lott,105,11
Ava-Mae,Stacey,106,16
Milton,Jenkins,107,7
Benedict,Brad,108,6
Syndey,Ali,109,10
Devin,Kane,110,12
Deborah,Shaw,111,9
Casper,Clegg,112,8
Manraj,Adamson,113,5
Raisa,House,114,1
Eadie,Nieves,115,4
```

Retail_Company

```
ClientId,Name,Address,RCCustomerId,RCOrderID,RCUsedDenim
9203,Levis,"9091 Cotton Blvd, San Francisco,CA",14,154148,149
9204,Madewell,"2380 Industrial Way,Los Angeles,CA",15,154149,84
9205,Gap,"4828 Eagles Nest Drive,Redding,CA",13,154150,2
9206,Everlane,"3163 Wilson Street,Bishop,CA",17,154151,20
9207,Asos,"3670 Duck Creek Road,Palo Alto,CA",11,154152,200
9208,Dawson,"4653 Fairfax Drive,City Of Commerce,CA",16,154153,45
9209,Huit,"3675 Canis Heights Drive,Los Angeles,CA",7,154154,23
9210,GoodAmerican,"3617 Jim Rosa Lane,Dublin,CA",6,154155,56
9211,Jbrand,"2888 Ashcraft Court,El Cajon,CA",4,154156,65
9212,Wrangler,"4005 Norman Street,Los Angeles,CA",10,154157,12
9213,Calvin Klein,"4174 Locust Court,Norwalk,CA",12,154158,190
9214,Diesel,"215 Angie Drive,Burbank,CA",9,154159,22
9215,Guess,"2245 Wayside Lane,San Leandro,CA",8,154160,55
9216,Balmain,"3436 Center Avenue,Fresno,CA",5,154161,33
9217,Smith,"243 Canterbury Street,Pheonix,AZ",1,154162,48
```

Buyer_Endproduct

```
BEBuyerID,BEProductID
154148,1
154149,2
154120,3
154121,4
154122,5
154125,6
154141,7
154155,8
161717,9
161719,10
161813,11
181910,12
181911,13
192310,14
192311,15
```

Warehouse

```
OrderID,Amount,Address,Email,Phone,InBulk,OrderDate,Deadline
154148,149,"894 Sierra Street, San Francisco, CA",renim1@renim.global.net,415-231-2356,149,20200110,20200301
154149,84,"221 Tango Road, Los Angeles, CA",renim2@renim.global.net,213-220-0012,84,20200123,20200320
154150,129,"3000 Cooper Street, Arlington, TX",ringo123@gmail.com,817-332-3192,129,20200223,20200423
154151,123,"1000 Corn Valley Road, Grand Prairie, TX",duoal@aol.com,972-331-2212,123,20200223,20200512
154152,121,"3154 S Belt Line Road, Irving, TX",oafiw@gmail.com,972-311-3913,121,20200313,20200513
154153,200,"232 3rd Avenue, New York, NY",oarark@yahoo.com,212-519-2193,200,20200315,20200515
154154,130,"201 Main Street, Ridgefield Park, NJ",laoa409@aol.com,210-440-2131,130,20200315,20200515
154155,220,"76 Summer Street, Boston, MA",alda4@zoho.com,857-441-0131,220,20200326,20200526
154156,79,"44 E Ontario Street, Chicago, IL",laiar9@icloud.com,312-951-6331,79,20200330,20200530
154157,100,"160 12th Street, Elko, NV",aaiq849@yahoo.com,775-331-2914,100,20200331,20300531
154158,150,"3101 W Kootenai Street, Boise, ID",alfaoe921@gmail.com,208-338-9782,150,20200401,20200712
154159,312,"215 E Palm Avenue, Tampa, FL",iafia@gmail.com,813-991-2911,312,20200430,20200730
154160,80,"14798 E Iliff Avenue, Aurora, CO",kadjair@yahoo.com,303-728-4183,80,20200409,20200709
154161,150,"900 State Street, Salem, OR",marifar@gmail.com,503-813-2139,150,20200411,20200711
154162,200,"1918 E Yesler Way, Seattle, WA",afuaei@gmail.com,206-841-2913,200,20200415,20200715
```

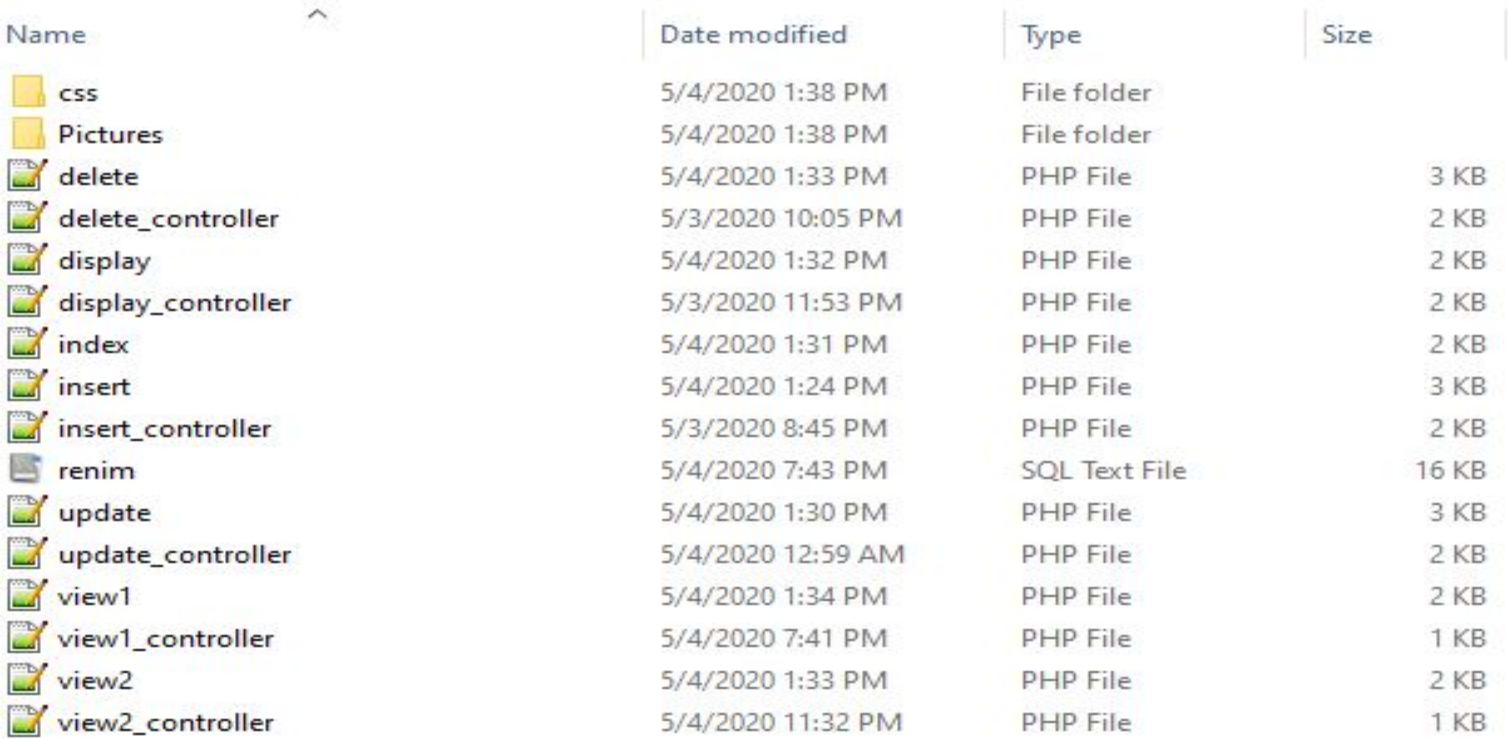
End_Product

```
ProductID,CommercialApplication,CompostMaterial,EPOrderID
1,NO,YES,154148
2,YES,NO,154149
3,YES,YES,154150
4,NO,YES,154151
5,YES,NO,154152
6,NO,YES,154153
7,YES,NO,154154
8,NO,NO,154155
9,NO,YES,154156
10,YES,NO,154157
11,NO,YES,154158
12,NO,NO,154159
13,NO,YES,154160
14,YES,YES,154161
15,NO,YES,154162
```

Buyer

```
BuyerID,NoOfItems,Address,Email,Phone,Fname,Lname
154148,8,"123 Aloha Street, Psasadena, CA",hwhwhw@gmail.com,213-445-3201,Helen,Wei
154149,10,"101 Center Street, Arlington, TX",aiario@gmail.com,817-381-4812,Ian,Young
154120,19,"300 Congress Avenue, Austin, TX",lilianas@yahoo.com,512-371-2381,Liliana,Yap
154121,15,"1000 Pacific Avenue, Beachwood, NJ",raomi@gmail.com,732-505-1293,Ron,Ward
154122,28,"124 Sheridan Avenue, Albany, NY",mike923@gmail.com,518-381-2313,Mike,King
154125,50,"151850 Akeakamai Loop, Pahoa, HI",paofaie@gmail.com,808-941-2144,Peter,Pan
154141,31,"55220 Kulani Street, Laie, HI",asiear@yahoo.com,808-441-2139,Alex,Lear
154155,15,"3481 Elgin Street, Houston, TX",maigan3@gmail.com,713-401-3914,Magen,Nguyen
161717,30,"2200 Simon Bolivar Avenue, New Orleans, LA",daifka@yahoo.com,504-841-2138,Dan,Fang
161719,40,"1121 Quarrier Street, Charlston, WV",mafaoq@aol.com,304-841-1314,Manny,Quong
161813,30,"1700 Peach Street, Erie, PA",jiakae@gmail.com,814-911-1481,James,Kag
181910,29,"163 Center Street, Provo, UT",samair@yahoo.com,801-319-1401,Sam,Lee
181911,30,"616 Crook Avenue, Cheyenne, WY",biaga@gmail.com,307-223-1391,Ben,Tuan
192310,40,"966 Getwell Road, Memphis, TN",jiaoratk@gmail.com,901-381-1491,Jon,Rak
192311,38,"2101 Division Street, St. Louis, MO",naiakrgm@aol.com,314-819-1381,Nancy,King
```

PHP Based Scripts
To handle Client-Side requests
from Renim Database



Name	Date modified	Type	Size
css	5/4/2020 1:38 PM	File folder	
Pictures	5/4/2020 1:38 PM	File folder	
delete	5/4/2020 1:33 PM	PHP File	3 KB
delete_controller	5/3/2020 10:05 PM	PHP File	2 KB
display	5/4/2020 1:32 PM	PHP File	2 KB
display_controller	5/3/2020 11:53 PM	PHP File	2 KB
index	5/4/2020 1:31 PM	PHP File	2 KB
insert	5/4/2020 1:24 PM	PHP File	3 KB
insert_controller	5/3/2020 8:45 PM	PHP File	2 KB
renim	5/4/2020 7:43 PM	SQL Text File	16 KB
update	5/4/2020 1:30 PM	PHP File	3 KB
update_controller	5/4/2020 12:59 AM	PHP File	2 KB
view1	5/4/2020 1:34 PM	PHP File	2 KB
view1_controller	5/4/2020 7:41 PM	PHP File	1 KB
view2	5/4/2020 1:33 PM	PHP File	2 KB
view2_controller	5/4/2020 11:32 PM	PHP File	1 KB

Our Database's Influence on our Business

- **We've built our database based on the business process of our system. Renim's database tracks all information from beginning, with the referrals that lead customers to our program all the way to the end, with the buyer who purchases our recycled denim products.**

- **Our web interface makes it easy for our representatives to adjust the information in the database if a problem arises. They have the ability to update, delete, insert, and view certain informations.**

- **Having this Web application, supported by a MariaDB type, allows us to stay abreast with current technologies and significantly support Renim logistical operations.**

Conclusion

- Renim's purpose is to relieve companies of their returned and unwanted denim.

- Our services include processing denim materials for companies and selling composite material for commercial application or composting.

- The reuse and recycling of denim will help reduce landfill issues and extend the life cycle of denim products.

[5]

Q+A

Thank you for your time.

References

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[2]https://sourcingjournal.com/denim/denim-business/oko-test-magazine-womens-jeans-dirty-chemicals-industry-disagrees-levis-boyish-168338/

[3]https://sourcingjournal.com/topics/sustainability/post-consumer-textile-recycling-gains-momentum-in-apparel-sector-69406/

[4]https://www.quora.com/How-much-water-do-we-need-to-make-a-pair-of-jeans

[5]http://www.lang-co.com/fashionable-denim-recycling/#.XrDTNKhKhPY

References

[6] https://www.apachefriends.org/index.html

[7] https://notepad-plus-plus.org/