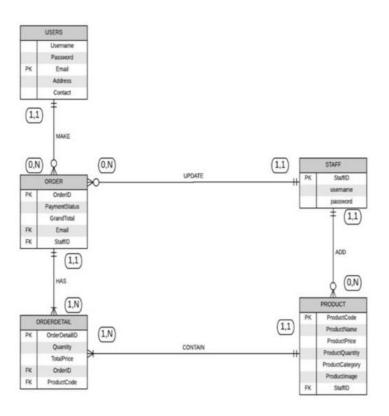
SHOPP

PHP E-Commerce site

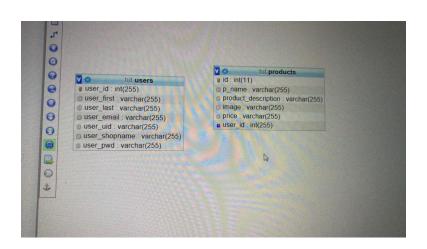
Group 1 - Database design and backend setup

DATABASE DESIGN

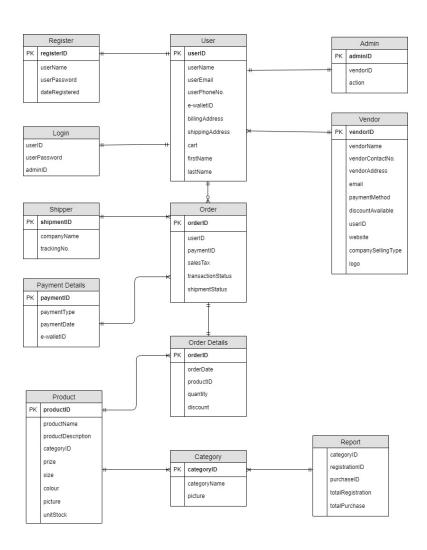
ERD



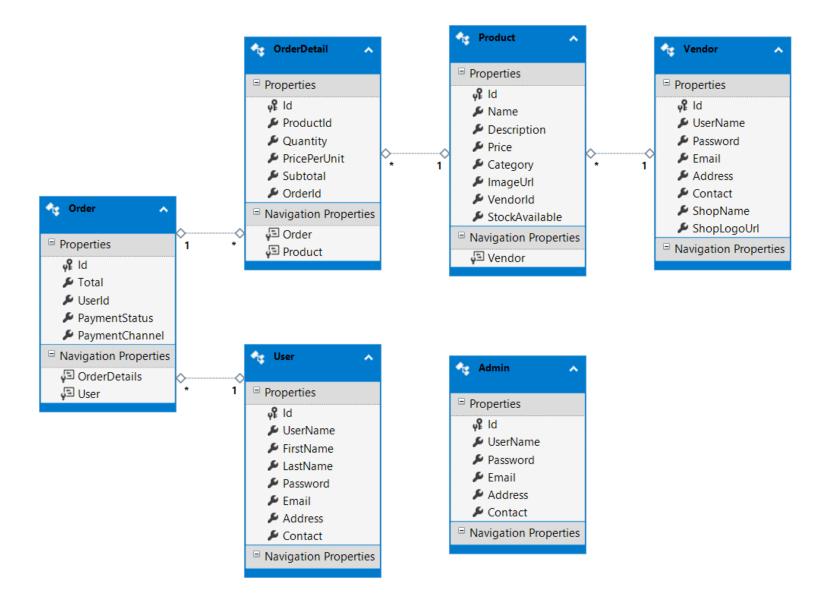
Group Sarmela



Group Nazmi



Group Eugene



RELATIONSHIPS

- 1. each User can have multiple Order
- 2. each Order can have multiple OrderDetail
- 3. each OrderDetail can have one Product
- 4. each Product belongs to one Vendor
- 5. Admin

POSSIBLE EXTENSION POINTS

- 1. persist items in Cart
- 2. choosing Shipment method and tracking status
- 3. displaying Promotion offered by Vendor

any questions/add ons?

CONNECTING PHP AND MYSQL

config.php

stores variables related to the database

```
<!php

$DB_HOST = 'mysql';

// $DB_HOST = 'localhost'

$DB_NAME = 'shopp';

$DB_USER = 'shopp';

$DB_PASSWORD = 'shopp';

?>
```

```
if you are using XAMPP,
replace $DB_HOST = 'mysql';
with $DB_HOST = 'localhost';
```

main.php

a barebone example of connecting to MySQL and retrieve some Products

```
require_once 'config.php';
```

include the file config.php so that we can use the variables defined inside

```
class Product
{
    public $Id;
    public $Name;
    public $Price;
    public $Category;
    public $ImageUrl;
}
```

define a class that will be used to hold the result coming back from the database

```
try {
    $connection = new PDO("mysql:host=$DB_HOST;dbname=$DB_NAME
} catch (PDOException $e) {
    die("Unable to connect to database $DB_NAME at $DB_HOST\n"
}
```

establish a connection to the MySQL database using PDO (PHP Data Objects) using the variables defined in config.php

if it fails, print the error message and exit

```
$sql = 'SELECT *
        FROM Products';
$products = $connection->query($sql);
```

constructs and executes the SQL query to get all Products from the database

you should use

1. prepare

2. execute

to prevent SQL injection

https://phpdelusions.net/pdo#prepared

```
// ...
<?php while ($product = $products->fetchObject('Product')) {
    echo '';
    echo '' . $product->Name . '';
    echo '' . $product->Price . '';
    echo '' . $product->Category . '';
    echo '' . $product->Category . '';
    echo '< img src="' . $product->ImageUrl . '&sig=' . $pecho '
}
// ...
```

loop through all the rows and construct a table from it

before jumping into the demo

FOLDERS ARE STRUCTURED

```
-docs
  ∟erd
           Shopp.png
-slides
-sql
     Shopp.sql
   -database-init
-src
     -database-init
       ∟<sub>Shopp</sub>
    -web
           config.php
           main.php
          -laradock
```

instead of using XAMPP, I used laradock
if you have docker installed, you can just run one
command to get the same development
environment as mine

which eliminates the problem of "it-works-on-my-machine!"

docker

can be seen as a lightweight virtual machine, or a container

https://www.docker.com/

laradock

a PHP development environment for docker

https://laradock.io/

BUT...

you can still use XAMPP if you want to

DEMO

GETTING THE CODE

by either git cloning, or just copy from the cd

https://github.com/garyng/Shopp

CLONING FROM GITHUB

git clone git@github.com:garyng/Shopp.git

STARTING THE DEVELOPMENT ENVIRONMENT

- 1. mysql
- 2. apache2

the same thing if you are using XAMPP, but you will need to copy this folder into your XAMPP folder

pushd src\web\laradock
docker-compose up apache2 mysql

main.php

my server is running at port 8080, change it according to your XAMPP settings

http://localhost:8080/main.php

CREATING AND SEEDING THE DATABASE

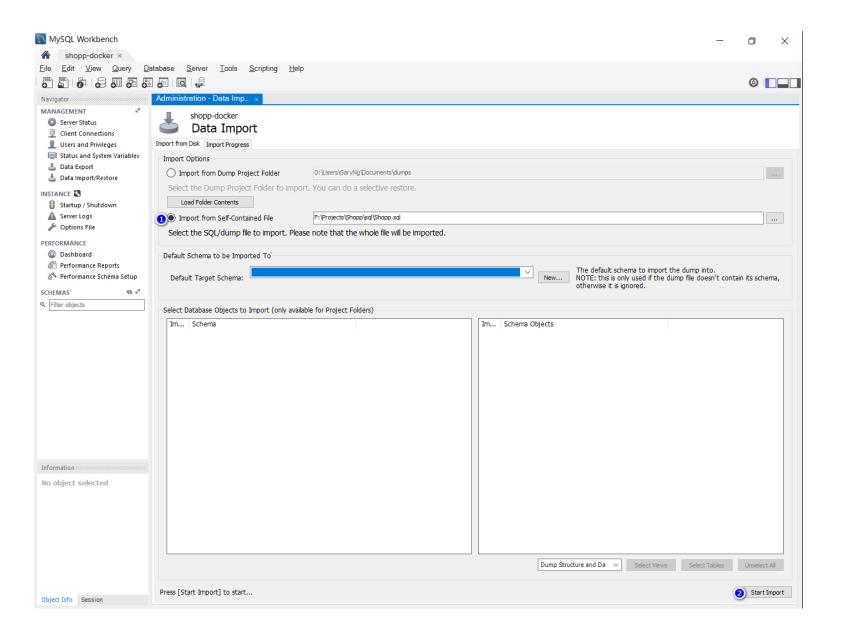
you can import the Shopp.sql file, or use the application under database-init.

database-init

pushd sql\database-init
Shopp.exe

Shopp.sql

import it with PHPMyAdmin or MySQL Workbench



CHECKING THE DATABASE

with MySQL Workbench or PHP My Admin

DONE!

http://localhost:8080/main.php

THANKS!