

REPORT

Database Management Systems Final Project

Cahlen Dixon, Anthony Tretter, Kyle Voight, Jiahao Ye

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Professor Liu



Adelphi University

1 South Avenue, Garden City, NY, 11530

Part I - *Entity Relationship Model*

The entity relationship data model under the file name “**ProjectTable.mwb**” is where we started our case study. We chose to create the following tables:

- Handler
- Incident
- Person
- Incident_Type
- IP_Address
- Incident_Person

(see figure 1)

We then inserted all of the necessary attributes to each table and proceeded to make it in BCNF form. We then made the following adjustments to the tables:

- a. Relationships on the diagram are all one to many with Handler and Incident_Type being the one to many Incidents, Incident being the one to many IP_Addresses and Incident_Persons, and finally Person being the one to many Incident_Persons. All are non-identifying save for Incident one to IP_Address many.
- b. Incident_Person is used to connect Person to Incident. Handler, IP_Address, and Incident_Type are all connected to Incident as they are all needed attributes for the report.

We also decided to use reverse engineering to help with our SQL Script file “**sql script.sql**”.

This allowed for us to already have names for each attribute and all of the constraints needed for those attributes. For example, in table ***Handler***

- *idHandler* INT NOT NULL,
- emailAdress* VARCHAR(45) NOT NULL,
- PRIMARY KEY (*idHandler*))

This established the two attributes, its data types for inserting and populating, whether or not it can hold null values or not, and the primary key of the table. This is similar formatting for the other 5 tables.

Part II - *Database design and implementation*

Converting the diagram using reverse engineering directly to our database code and adding it to Kyle's database allowed us to add in data, small edits, and removals, which helped to make the code run smoothly. We made sure that all data types were correct along with primary and foreign key constraints for each table. We did the following to ensure the tables and their constraints were checked:

- a. idIncident_Type, idHandler, and idIP_Address are all integers and the primary keys to Incident_Type, Handler, and IP_Address respectively.
 - i. IP_Address also has Incident_idIncident_Info(INT) an integer as a Foreign Key from Incident.
- b. Incident has idIncident_Info(INT) as a Primary key with Incident_Type_idIncident_Type and Handler_idHandler both integers as Foreign Keys
- c. Person has idPerson(INT) as a Primary Key.
 - i. Incident_Person Which connects Person with Incident has idIncident as a Primary Key with Person_idPerson and Incident_Info_idIncident_Info as Foreign Keys all of which are integers.
- d. All of these primary and foreign keys are implemented into the database code.

After finishing with “**sql script.sql**”, we moved onto populating the tables. Within “**project script.sql**”, we used the ‘*INSERT INTO*’ keywords and the characteristics of those keywords to add in all of the ‘*VALUES*’. Then, after calling ‘*SELECT * FROM*’, it would then create a table with the 3 examples under the table name. We did this successfully for all 6 tables.

Part III - Use of HTML/PHP/CSS

For implementing the SQL files into an HTML/PHP file, we used a main file “**test.php**” to put our sql work onto a website. Using \$sql = “select * from” and the “\$” to take the attributes from the SQL and putting it into a working php table. We then proceeded to repeat this process for ID, Last Name , First Name, Job, and Email Address categories. The data is successfully transferred onto a webpage.

For the inserting phase, we only managed to be able to establish a working insert html file for the Person table. In “**personInsert.html**”, we used:

- <form action = "output.php" method = "post">

To make sure that after inputting information, it would move to a presentable format in our “**output.php**” file so that it could be properly inserted back into “**test.php**”. Then, using the ID tag for example, the code looked like:

- ID:

<input type = "text" name = "idPerson">

This was to allow the user to insert custom data into the ‘**Person**’ table. Following up, before the submit button, we have a checkbox that is required to be checked before inserting that data using this code:

- `
<input type = "checkbox" required name= "accept">Are you sure?
`

After clicking submit, the user should be brought to a different screen that goes back to the “**test.php**” file with the newly updated table, featuring the new line added.

Part IV - Conclusions

For our project, we were not able to add insertion to the rest of the tables unfortunately. However, we partially got the insertion for *Insertion* table to work. In the file “**incidentInsert.html**”, the file is similar to that of “**personInsert.html**”, disregarding the specific attributes needed for each table, and when submitting the data, an error pops up.

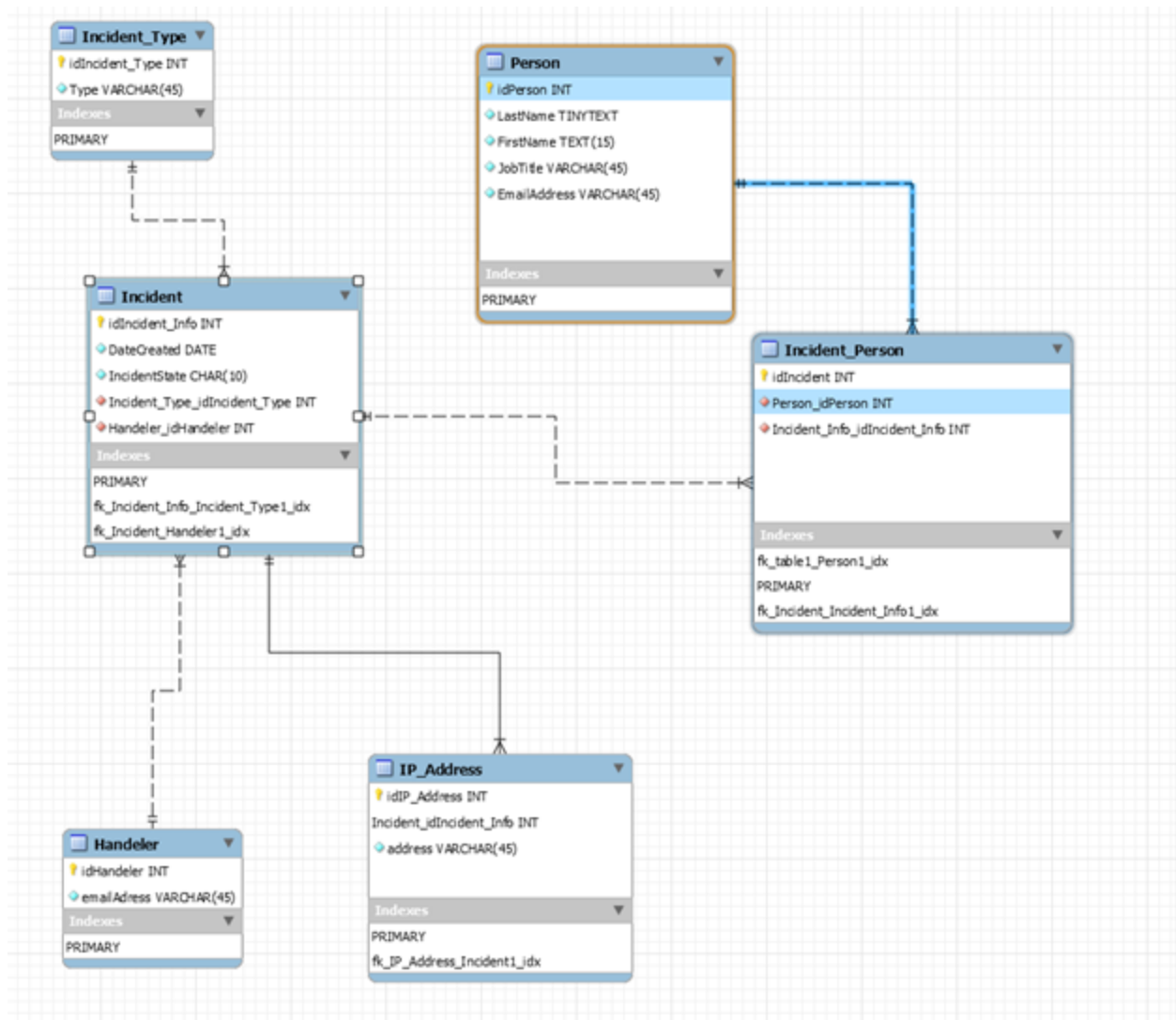
- Cannot add or update a child row: a foreign key constraint fails (`kylevoight`.`incident`, CONSTRAINT `fk_Incident_Info_Incident_Type` FOREIGN KEY (`Incident_Type_idIncident_Type`) REFERENCES `incident_type` (`idincident_type`))

We were not able to solve this issue and could not figure out the reasoning for it.

As for running the entire project accordingly, the *instructions* are as follows:

1. Run “**sql script.sql**”, then run “**project script.sql**” - This should successfully make the tables
2. Go to <http://compsci.adelphi.edu/~kylevoight/test.php> to see the working tables.
3. To test out the Person insertion, go to <http://compsci.adelphi.edu/~kylevoight/personInsert.html> and insert custom data. Make sure that ID is INT. Last Name, First Name, Job, Email and be text.
4. Click enter and you should see “New record created successfully”. Go back to “**test.php**” and you should see your successfully inserted data in the table!

Part V - Figures



Logic/Assumptions made on relationships: There is one handler assigned to many incidents and one incident type assigned to many different incidents but one Incident can have many IP addresses. While one person is normally connected with one incident many people can have the same incident and vice-versa along with one person having many incidents and vice-versa.

Logic/Assumptions On table content:

- Handlers each have an ID assigned to them for identification and each have an email for clients to contact them.
- Each Incident Type has an ID associated with it and a description of what exactly it is.
- Each Person(Client) Has an ID associated with them for records and identification each of them giving their full name for further identification and email for contact with job descriptions for knowledge on what their computer is for/how it's used.
- Each individual Incident has an ID associated with it, a Date created for record purposes and the current state of the incident whether it's been solved or not. For this to work it also needs a handler and the incident type taking the IDs of both for full records.
- IP Addresses are assigned IDs for security and identification, taking incident ID to determine which incident is associated with which IP.
- In order to connect an Incident with a Person Incident_Person was created with its own ID taking the ID of Person and Incident to connect the two.

ENTER INFORMATION HERE

ID:

Last Name:

First Name:

Job:

Email:

☐ Are you sure?

Figure 2: “personInsert.html” screen. Used for inserting data into the `Person` table.

Person

idPerson	LastName	FirstName	JobTitle	EmailAddress
974	Maxwel	Jamie	Manager	word@mail.net
975	Johnson	Evan	Accountant	evan@gmail.com
976	Mercer	Matthew	Facilities Management	MMercer@gmail.com

Incident

idIncident_Info	DateCreated	IncidentState	Incident_Type_idIncident_Type	Handler_idHandler
3134	2010-05-30	Solved	101	701
3299	2015-10-15	Solved	102	702
3500	2017-02-02	Unsolved	103	703

Handler

idHandler	emailAddress
701	smithjohn@gmail.com
702	janedoe@gmail.com
703	andrewdwyer@gmail.com

Incident_Person

idIncident	Person_idPerson	Incident_Info_idIncident_Info
101	974	3134
102	975	3299
103	976	3500

IP_Address

idIP_Address	Incident_idIncident_Info	Address
21302	3299	29 Wisconsin Way
52465	3134	15 Washington Lane
97841	3500	45 Colorado Road

Incident_Type

idIncident_Type	Type
101	Broken Processor
102	Tech support
103	Customer service

Figure 3: “test.php” data tables. Accessed via <http://compsci.adelphi.edu/~kylevoight/test.php>

New record created successfully

The result has 4 rows.

777	Voight	Kyle	IT	voightkyle@gmail.com
974	Maxwel	Jamie	Manager	word@mail.net
975	Johnson	Evan	Accountant	evan@gmail.com
976	Mercer	Matthew	Facilities Management	MMercer@gmail.com

Figure 4: Successful insertion after using “personInsert.html”

Part VI - Code**“Sql script.sql”**

```
-- MySQL Script generated by MySQL Workbench
-- Tue Nov 27 09:57:35 2018
-- Model: New Model   Version: 1.0
-- MySQL Workbench Forward Engineering

SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS,
FOREIGN_KEY_CHECKS=0;
SET @OLD_SQL_MODE=@@SQL_MODE,
SQL_MODE='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,
NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';

-----
-- Schema kylevoight
-----

-----
-- Schema kylevoight
-----
-- CREATE SCHEMA IF NOT EXISTS `kylevoight` DEFAULT CHARACTER SET utf8 ;
USE `kylevoight` ;

-----
-- Table `kylevoight`.`Incident_Type`
-----
DROP TABLE IF EXISTS `kylevoight`.`Incident_Type` ;

CREATE TABLE IF NOT EXISTS `kylevoight`.`Incident_Type` (
  `idIncident_Type` INT NOT NULL,
  `Type` VARCHAR(45) NOT NULL,
  PRIMARY KEY (`idIncident_Type`))
ENGINE = InnoDB;

-----
-- Table `kylevoight`.`Handler`
-----
DROP TABLE IF EXISTS `kylevoight`.`Handler` ;

CREATE TABLE IF NOT EXISTS `kylevoight`.`Handler` (
  `idHandler` INT NOT NULL,
```

```
`emailAdress` VARCHAR(45) NOT NULL,
PRIMARY KEY (`idHandler`))
ENGINE = InnoDB;
```

```
-- -----
-- Table `kylevoight`.`Incident`
-- -----
```

```
DROP TABLE IF EXISTS `kylevoight`.`Incident` ;
```

```
CREATE TABLE IF NOT EXISTS `kylevoight`.`Incident` (
  `idIncident_Info` INT NOT NULL,
  `DateCreated` DATE NOT NULL,
  `IncidentState` CHAR(10) NOT NULL,
  `Incident_Type_idIncident_Type` INT NOT NULL,
  `Handler_idHandler` INT NOT NULL,
  PRIMARY KEY (`idIncident_Info`),
  INDEX `fk_Incident_Info_Incident_Type1_idx` (`Incident_Type_idIncident_Type` ASC) ,
  INDEX `fk_Incident_Handler1_idx` (`Handler_idHandler` ASC) ,
  CONSTRAINT `fk_Incident_Info_Incident_Type`
    FOREIGN KEY (`Incident_Type_idIncident_Type`)
      REFERENCES `kylevoight`.`Incident_Type` (`idIncident_Type`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk_Incident_Handler1`
    FOREIGN KEY (`Handler_idHandler`)
      REFERENCES `kylevoight`.`Handler` (`idHandler`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;
```

```
-- -----
-- Table `kylevoight`.`Person`
-- -----
```

```
DROP TABLE IF EXISTS `kylevoight`.`Person` ;
```

```
CREATE TABLE IF NOT EXISTS `kylevoight`.`Person` (
  `idPerson` INT NOT NULL,
  `LastName` TINYTEXT NOT NULL,
  `FirstName` TEXT(15) NOT NULL,
  `JobTitle` VARCHAR(45) NOT NULL,
  `EmailAddress` VARCHAR(45) NOT NULL,
  PRIMARY KEY (`idPerson`))
ENGINE = InnoDB;
```

```
-- -----
-- Table `kylevoight`.`Incident_Person`
-- -----
```

```
DROP TABLE IF EXISTS `kylevoight`.`Incident_Person` ;
```

```
CREATE TABLE IF NOT EXISTS `kylevoight`.`Incident_Person` (
  `idIncident` INT NOT NULL,
  `Person_idPerson` INT NOT NULL,
  `Incident_Info_idIncident_Info` INT NOT NULL,
  INDEX `fk_table1_Person1_idx` (`Person_idPerson` ASC),
  PRIMARY KEY (`idIncident`),
  INDEX `fk_Incident_Incident_Info1_idx` (`Incident_Info_idIncident_Info` ASC),
  CONSTRAINT `fk_table1_Person1`
    FOREIGN KEY (`Person_idPerson`)
      REFERENCES `kylevoight`.`Person` (`idPerson`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION,
  CONSTRAINT `fk_Incident_Incident_Info1`
    FOREIGN KEY (`Incident_Info_idIncident_Info`)
      REFERENCES `kylevoight`.`Incident` (`idIncident_Info`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;
```

```
-- -----
-- Table `kylevoight`.`IP_Address`
-- -----
```

```
DROP TABLE IF EXISTS `kylevoight`.`IP_Address` ;
```

```
CREATE TABLE IF NOT EXISTS `kylevoight`.`IP_Address` (
  `idIP_Address` INT NOT NULL,
  `Incident_idIncident_Info` INT NOT NULL,
  `address` VARCHAR(45) NOT NULL,
  PRIMARY KEY (`idIP_Address`, `Incident_idIncident_Info`),
  INDEX `fk_IP_Address_Incident1_idx` (`Incident_idIncident_Info` ASC),
  CONSTRAINT `fk_IP_Address_Incident1`
    FOREIGN KEY (`Incident_idIncident_Info`)
      REFERENCES `kylevoight`.`Incident` (`idIncident_Info`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;
```

```
SET SQL_MODE=@OLD_SQL_MODE;
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

“Project script.sql”

```
INSERT INTO `Incident_Type`
  (idIncident_Type, Type) VALUES
  ('101', 'Broken Processor'),
  ('102', 'Tech support'),
  ('103', 'Customer service');
SELECT * FROM Incident_Type;
```

```
INSERT INTO `Handler`
  (idHandler, emailAdress) VALUES
  ('701', 'smithjohn@gmail.com'),
  ('702', 'janedoe@gmail.com'),
  ('703', 'andrewdwyer@gmail.com');
SELECT * FROM Handler;
```

```
INSERT INTO `Incident`
  (idIncident_Info, DateCreated, IncidentState, Incident_Type_idIncident_Type,
  Handler_idHandler) VALUES
  ('3134', '2010-5-30', 'Solved', '101', '701'),
  ('3299', '2015-10-15', 'Solved', '102', '702'),
  ('3500', '2017-2-2', 'Unsolved', '103', '703');
SELECT * FROM Incident;
```

```
INSERT INTO `Person`
  (idPerson, LastName, FirstName, JobTitle, EmailAddress) VALUES
  ('974', 'Maxwel', 'Jamie', 'Manager', 'word@mail.net'),
  ('975', 'Johnson', 'Evan', 'Accountant', 'evan@gmail.com'),
  ('976', 'Mercer', 'Matthew', 'Facilities Management', 'MMercer@gmail.com');
SELECT * FROM Person;
```

```
INSERT INTO `Incident_Person`
  (idIncident, Person_idPerson, Incident_Info_idIncident_Info) VALUES
  ('101', '974', '3134'),
  ('102', '975', '3299'),
  ('103', '976', '3500');
SELECT * FROM Incident_Person;
```

```

INSERT INTO `IP_Address`
(idIP_Address, Incident_idIncident_Info, Address ) VALUES
('52465','3134','15 Washington Lane'),
('21302','3299','29 Wisconsin Way'),
('97841','3500','45 Colorado Road');
SELECT * FROM IP_Address;

```

“test.php”

```

<!DOCTYPE html>
<html>
    <head>
        <title>Database</title>
    </head>

    <body>
        <p>Person</p>
        <table style ='text-align:left;border='1'>
            <tr><th>idPerson</th><th>LastName</th>
                <th>FirstName</th><th>JobTitle</th>
                <th>EmailAddress</th></tr>

                <?php require'conn.php';
                $sql = "select * from Person";
                $result = $db->query($sql);
                $datarow = mysqli_num_rows($result);
                for($i=0;$i<$datarow;$i++){
                $result_arr = mysqli_fetch_assoc($result);
                $idPerson = $result_arr['idPerson'];
                $LastName = $result_arr['LastName'];
                $FirstName = $result_arr['FirstName'];
                $JobTitle = $result_arr['JobTitle'];
                $EmailAddress = $result_arr['EmailAddress'];
                echo"<tr><th>$idPerson</th> <th>$LastName</th>
                <th>$FirstName</th><th>$JobTitle</th>
                <th>$EmailAddress</th></tr>";
                }
                ?>

            </table>

            <br>

            <p>Incident</p>
            <table style ='text-align:left;border='1'>
                <tr><th>idIncident_Info</th><th>DateCreated</th>

```



```

<th>IncidentState</th><th>Incident_Type_idIncident_Type</th>
<th>Handler_idHandler</th>

<?php require'conn.php';
$sql = "select * from Incident";
$result = $db->query($sql);
$datarow = mysqli_num_rows($result);
for($i=0;$i<$datarow;$i++){
    $result_arr = mysqli_fetch_assoc($result);
    $idIncident_Info = $result_arr['idIncident_Info'];
    $DateCreated = $result_arr['DateCreated'];
    $IncidentState = $result_arr['IncidentState'];
    $Incident_Type_idIncident_Type =
$result_arr['Incident_Type_idIncident_Type'];
    $Handler_idHandler = $result_arr['Handler_idHandler'];
    echo"<tr><th>$idIncident_Info</th> <th>$DateCreated</th>
<th>$IncidentState</th><th>$Incident_Type_idIncident_Type</th>
<th>$Handler_idHandler</th></tr>";
}
?>
</table>

<br>

```

```

<p>Handler</p>
<table style ='text-align:left;'border='1'>
    <tr><th>idHandler</th><th>emailAdress</th>

```

```

    <?php require'conn.php';
    $sql = "select * from Handler";
    $result = $db->query($sql);
    $datarow = mysqli_num_rows($result);
    for($i=0;$i<$datarow;$i++){
        $result_arr = mysqli_fetch_assoc($result);
        $idHandler = $result_arr['idHandler'];
        $emailAdress = $result_arr['emailAdress'];
        echo"<tr><th>$idHandler</th><th>$emailAdress</th></tr>";
    }
    ?>
</table>

<br>

```

```

<p>Incident_Person</p>
<table style ='text-align:left;'border='1'>
    <tr><th>idIncident</th><th>Person_idPerson</th>

```

```

<th>Incident_Info_idIncident_Info</th>

<?php require'conn.php';
$sql = "select * from Incident_Person";
$result = $db->query($sql);
$num_rows = mysqli_num_rows($result);
for($i=0;$i<$num_rows;$i++){
    $result_arr = mysqli_fetch_assoc($result);
    $idIncident = $result_arr['idIncident'];
    $Person_idPerson = $result_arr['Person_idPerson'];
    $Incident_Info_idIncident_Info =
$result_arr['Incident_Info_idIncident_Info'];
    echo"<tr><th>$idIncident</th><th>$Person_idPerson</th>
<th>$Incident_Info_idIncident_Info</th></tr>";
}
?>

</table>

<br>

<p>IP_Address</p>
<table style='text-align:left;border='1'>
    <tr><th>idIP_Address</th><th>Incident_idIncident_Info</th>
    <th>Address</th>

    <?php require'conn.php';
    $sql = "select * from IP_Address";
    $result = $db->query($sql);
    $num_rows = mysqli_num_rows($result);
    for($i=0;$i<$num_rows;$i++){
        $result_arr = mysqli_fetch_assoc($result);
        $idIP_Address = $result_arr['idIP_Address'];
        $Incident_idIncident_Info = $result_arr['Incident_idIncident_Info'];
        $address = $result_arr['address'];
        echo"<tr><th>$idIP_Address</th><th>$Incident_idIncident_Info</th>
        <th>$address</th></tr>";
    }
    ?>

</table>

<br>

<p>Incident_Type</p>
<table style='text-align:left;border='1'>
    <tr><th>idIncident_Type</th><th>Type</th>

    <?php require'conn.php';

```

```

        $sql = "select * from Incident_Type";
        $result = $db->query($sql);
        $datarow = mysqli_num_rows($result);
        for($i=0;$i<$datarow;$i++){
            $result_arr = mysqli_fetch_assoc($result);
            $idIncident_Type= $result_arr['idIncident_Type'];
            $Type= $result_arr['Type'];
            echo"<tr><th>$idIncident_Type</th><th>$Type</th></tr>";
        }
        ?>
    </table>

    <br>

</body>

</html>

```

“personInsert.html”

```

<!DOCTYPE html>
<html>
<body>
    <center><h1>ENTER INFORMATION HERE</h1>
    <form action = "output.php" method = "post">
        ID: <br>
        <input type = "text" name = "idPerson"><br>
        Last Name: <br>
        <input type = "text" name = "LastName"><br>
        First Name: <br>
        <input type = "text" name = "FirstName"><br>
        Job: <br>
        <input type = "text" name = "JobTitle"><br>
        Email: <br>
        <input type = "text" name = "EmailAddress"><br>
        <br><input type = "checkbox" required name= "accept">Are you sure?<br>
        <br><input type = "submit" value = "Submit!"></center>
    </form>
</body>
</html>

```

“incidentInsert.html”

```

<!DOCTYPE html>
<html>
<body>
    <center><h1>ENTER INFORMATION HERE</h1>
    <form action = "output2.php" method = "post">
        Incident ID: <br>
        <input type = "text" name = "idIncident_Info"><br>
        Date Created: <br>
        <input type = "text" name = "DateCreated"><br>
        Incident State: <br>
        <input type = "text" name = "IncidentState"><br>
        Incident Type: <br>
        <input type = "text" name = "Incident_Type_idIncident_Type"><br>
        Handler ID: <br>
        <input type = "text" name = "Handler_idHandler"><br>
        <br><input type = "checkbox" required name= "accept">Are you sure?<br>
        <br><input type = "submit" value = "Submit!"></center>
    </form>
</body>
</html>

```

“Output.php”

```

<?php
    $host = "127.0.0.1";
    $user = "kylevoight";
    $pw = "";
    $database = "kylevoight";

    $db = new mysqli($host, $user, $pw, $database);
    if ($db->connect_errno) {
        echo "Connect failed: ". $db->connect_error;
        exit();
    }

    if(isset($_REQUEST['idPerson'])){ $idPerson=$_REQUEST['idPerson']; }
    if(isset($_REQUEST['LastName'])){ $LastName=$_REQUEST['LastName']; }
    if(isset($_REQUEST['FirstName'])){ $FirstName=$_REQUEST['FirstName']; }
    if(isset($_REQUEST['JobTitle'])){ $JobTitle=$_REQUEST['JobTitle']; }
    if(isset($_REQUEST['EmailAddress'])){
$EmailAddress=$_REQUEST['EmailAddress']; }

```

```

        if(isset($_REQUEST['idPerson'])){
            $sql = "INSERT INTO `Person` (idPerson, LastName, FirstName, JobTitle,
EmailAddress)
                VALUES ('$idPerson', '$LastName', '$FirstName', '$JobTitle',
'$EmailAddress');";
            if ($db->query($sql) === TRUE) {
                echo "New record created successfully";
            } else {
                echo "Error: " . $sql . "<br>" . $db->error;
            }
        }

        $sql = "SELECT * FROM `Person`";
        $result = $db->query($sql);
        if(!$result){
            echo "Bummer! " . $db->error;
        }
        else{
            echo "<br>The result has " . $result->num_rows. " rows.";

            //two methods
            $table = $result->fetch_all();
            //var_dump($table);
            echo "<table border = '1'>";
            foreach($table as $row){
                echo "<tr>";
                foreach($row as $value){
                    echo "<td>$value</td>";
                }
                echo "</tr>";
            }
        }

    ?>

```

“Output2.php”

```

<?php
    $host = "127.0.0.1";
    $user = "kylevoight";

```

```

$pw = "";
$databse = "kylevoight";

$db = new mysqli($host, $user, $pw, $databse);
if ($db->connect_errno) {
    echo "Connect failed: ". $db->connect_error;
    exit();
}

if(isset($_REQUEST['idIncident_Info'])){
$idIncident_Info=$_REQUEST['idIncident_Info']; }
if(isset($_REQUEST['DateCreated'])){
$DateCreated=$_REQUEST['DateCreated']; }
if(isset($_REQUEST['IncidentState'])){ $IncidentState=$_REQUEST['IncidentState'];
}

if(isset($_REQUEST['Incident_Type_idIncident_Type'])){
$Incident_Type_idIncident_Type=$_REQUEST['Incident_Type_idIncident_Type']; }
if(isset($_REQUEST['Handler_idHandler'])){
$Handler_idHandler=$_REQUEST['Handler_idHandler']; }

if(isset($_REQUEST['idIncident_Info'])){
    $sql2 = "INSERT INTO `Incident` (idIncident_Info, DateCreated, IncidentState,
Incident_Type_idIncident_Type, Handler_idHandler)
        VALUES ('$idIncident_Info', '$DateCreated', '$IncidentState',
'$Incident_Type_idIncident_Type', '$Handler_idHandler');";
    if ($db->query($sql2) === TRUE) {
        echo "New record created successfully";
    } else {
        echo "Error: " . $sql2 . "<br>" . $db->error;
    }
}

$sql2 = "SELECT * FROM `Incident`";
$result = $db->query($sql2);
if(!$result){
    echo "Bummer! " . $db->error;
}
else{
    echo "<br>The result has " . $result->num_rows. " rows.";

//two methods
$table = $result->fetch_all();
//var_dump($table);

```

```
echo "<table border = '1'>";
foreach($table as $row){
    echo "<tr>";
    foreach($row as $value){
        echo "<td>$value</td>";
    }
    echo "</tr>";
}

?>
```