**DATABASE MANAGEMENT SYSTEM**

**Mini Project on**

**BLOOD BANK MANGEMENT SYSTEM**

**Course Code :**  **CSE – 3102**

**Under the guidance of**

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**BLOOD BANK MANAGEMENT SYSTEM**

**Introduction :**

**Blood Bank Management System (BBMS) is a web based system that can assists the information of blood bag during its handling in the blood bank. With this system, the user of this system can key in the result of blood test that has been conducted to each of the blood bag received by the blood bank**

**Problem Description :**

**Web-based Blood Donation Management System is a management system website that enables individuals who want to donate blood to help the needy. It also enables hospitals to record and store the data for people who want to communicate with them, and it also provides a centralized blood bank database**

**Purpose of Database :**

**The purpose of the blood bank management system is to simplify and automate the process of searching for blood in case of emergency and maintain the records of blood donors, recipients, blood donation programs and blood stocks in the bank.**

**How This Database will help the Patient :**

**In short we can say that blood donation management system is an online web application which helps the blood bank and hospitals to look for the blood donor information and to provide direct link between the donor and recipient/patient.**

**How to develop a BLOOD BANK MANAGEMENT SYSTEM ?**

**Below is a guide on how to start our own blood bank.**

1. **Licensing Policy and Legal framework. A blood bank centre must ensure that it has complied to the legal framework that has been provided in Drugs and Cosmetics Act/Rules published in The Gazette of India.**
2. **Location.**
3. **Equipments.**
4. **Training.**
5. **Learning query (SQL) and Java/PhP et cetera .**
6. **Storage & Transportation.**

**Identifying the Entities :**

**We use many entities on this databases . These are**

1. **Doctor**
2. **Donor**
3. **Blood**
4. **Blood Bank**
5. **Patient**
6. **Blood Delivery**

**Attributes of the entities :**

**We use many attributes under the guidance of an entity .**

**In Doctor entity , we use …**

1. **Doctor\_id**
2. **Doctor\_add**
3. **Doctor\_phn**
4. **Doctor\_name**

**In Blood entity , we also use the attributes**

1. **Blood\_type**
2. **Donor\_id**
3. **Blood\_bank**

**In Donor entity , we also use the attributes like**

1. **Donor\_id**
2. **Donor\_name**
3. **Donor\_add**
4. **Iron\_content**
5. **Gender**
6. **Date of Birth (DOB)**
7. **Weight**
8. **Donar\_phn**

**In Blood Bank entity , we also use these attributes are**

1. **Blood\_bank\_id**
2. **Blood\_bank\_name**
3. **Blood\_bank\_add**

**In Patient entity , we also use these attributes ar**

1. **Patient\_name**
2. **Patient\_add**
3. **Pateint\_phone**
4. **Hospita\_add**

**The Entity-Relationship-Model ( E-R Diagram )**

**Blood dalivery**

donate

**Stored in**

**Patient**

**Blood Bank**

**Donor**

**blood**

**Doctor**

examines

Fig: Blood Donation System

**Schema Diagram :**

**Doctor :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Doctor\_id** | **Doctor\_name** | **Doctor\_add** | **Doctor\_phn** |

**Donor :**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Donor\_id** | **Donar\_naeme** | **Do\_phn** | **DOB** | **gender** | **Do\_add** | **weight** | **Bp** | **ic** | **Doctor\_id** |

**Blood Bank :**

|  |  |  |
| --- | --- | --- |
| **Blood\_bank\_id** | **Blood\_bank\_name** | **Blood\_bank\_add** |

**Blood :**

|  |  |  |
| --- | --- | --- |
| **Blood\_type** | **Donor\_id** | **Blood\_bank\_id** |

**Patient :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Patient\_id** | **Patient\_name** | **Patient\_add** | **Patient\_phn** | **Hospital\_add** |

**Blood Delivery :**

|  |  |
| --- | --- |
| **Blood\_bank\_id** | **Patient\_id** |

**Table Structure Query :**

**CREATE TABLE doctor**

**(**

**doctor\_id int ,**

**doctor\_name varchar(20) ,**

**doc\_add varchar(25) ,**

**doc\_phn bigint ,**

**constraint pk1 primary key (doctor\_id)**

**) ;**

**CREATE TABLE donor**

**(**

**donor\_id int ,**

**donor\_name varchar(20) ,**

**donor\_phn bigint ,**

**DOB date ,**

**address varchar(40) ,**

**weight int ,**

**blood\_pressure int ,**

**iron\_content int ,**

**doctor\_id int ,**

**constraint pk2 primary key (donor\_id) ,**

**constraint fk1 foreign key(doctor\_id) references doctor(doctor\_id)**

**);**

**CREATE TABLE blood\_bank**

**(**

**blood\_bank\_id int not null ,**

**blood\_bank\_name varchar(30),**

**bank\_add varchar(50),**

**constraint pk3 primary key (blood\_bank\_id)**

**);**

**CREATE TABLE blood**

**(**

**blood\_type varchar(20),**

**donor\_id int ,**

**blood\_bank\_id int ,**

**Constraint pk5 primary key (donor\_id ) ,**

**Constraint pk5 foreign key (donor\_id) references donor(donor\_id) ,**

**constraint pk7 foreign key (blood\_bank\_id) references blood\_bank (blood\_bank\_id)**

**);**

**CREATE TABLE patient**

**(**

**patient\_id int ,**

**patient\_name varchar(20),**

**p\_phn bigint ,**

**hospital\_add varchar(50) ,**

**p\_add varchar(50) ,**

**constraint pk4 primary key(patient\_id)**

**);**

**CREATE TABLE blood\_delivery**

**(**

**blood\_bank\_id int ,**

**patient\_id int ,**

**constraint pk6 primary key (blood\_bank\_id , patient\_id) ,**

**constraint fk3 foreign key (blood\_bank\_id) references blood\_bank (blood\_bank\_id) ,**

**constraint fk4 foreign key (patient\_id) references patient (patient\_id)**

**);**

**Stored Procedure :**

**Create procedure main @no int , @value varchar(20)**

**as**

**begin**

**select blood\_type , count (blood\_type) as count1**

**from blood b1**

**where blood\_type = @value**

**and exist ( select blood\_bank\_id**

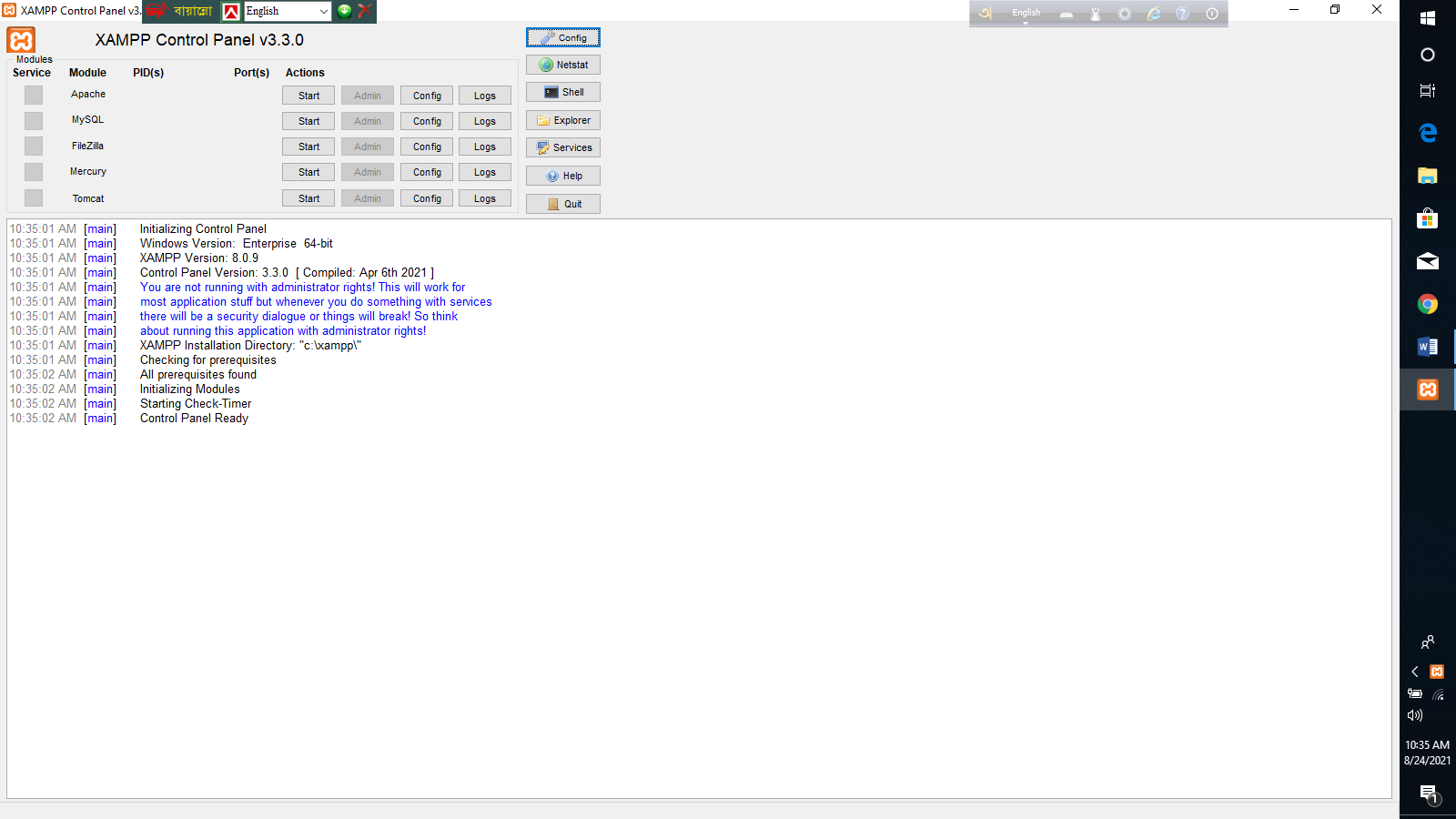
**From blood \_bank b2**

**Where blood\_bank\_id = @no**

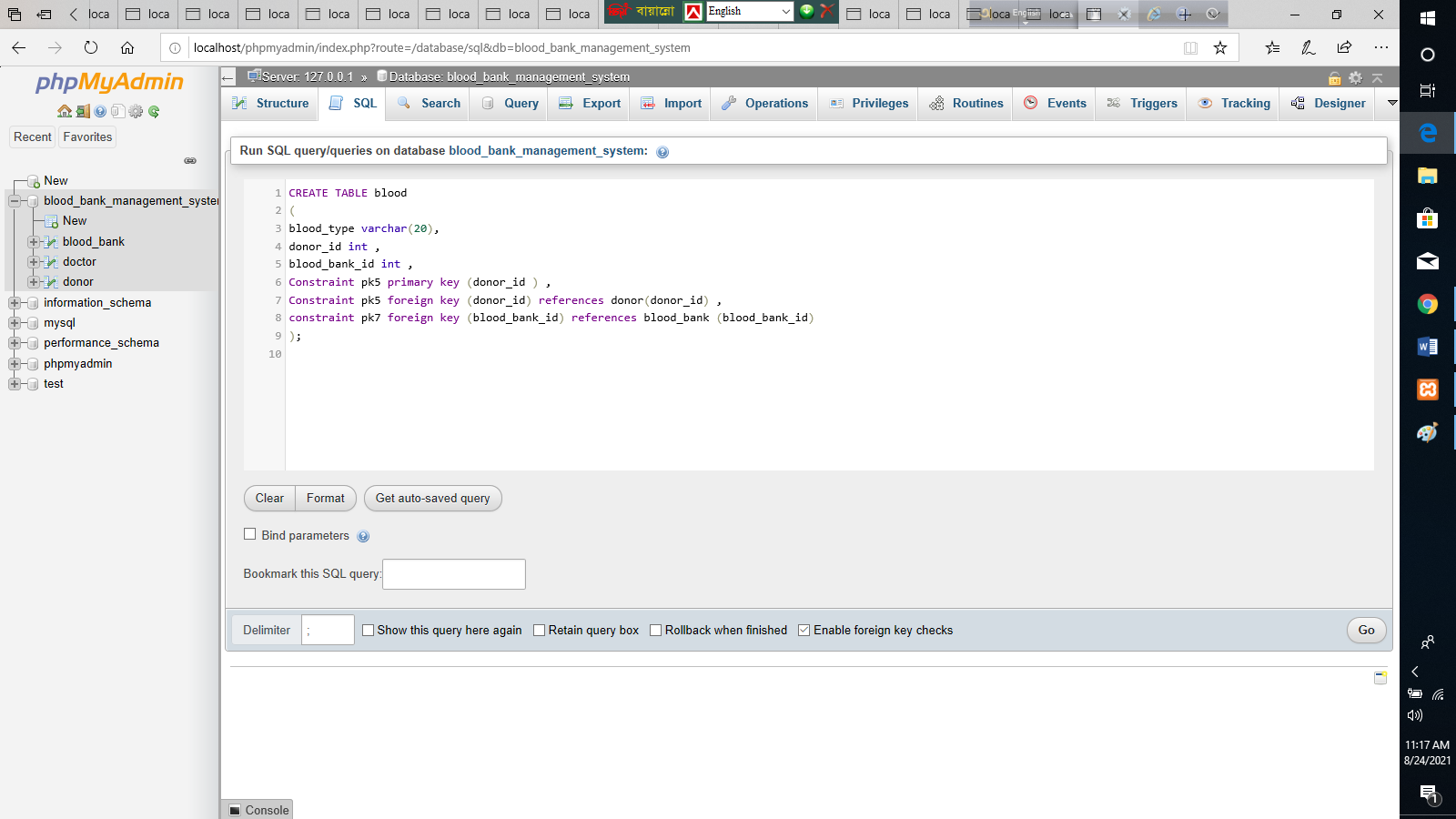
**And b1.blood\_bank\_id = b2.blood\_bank\_id )**

**end**

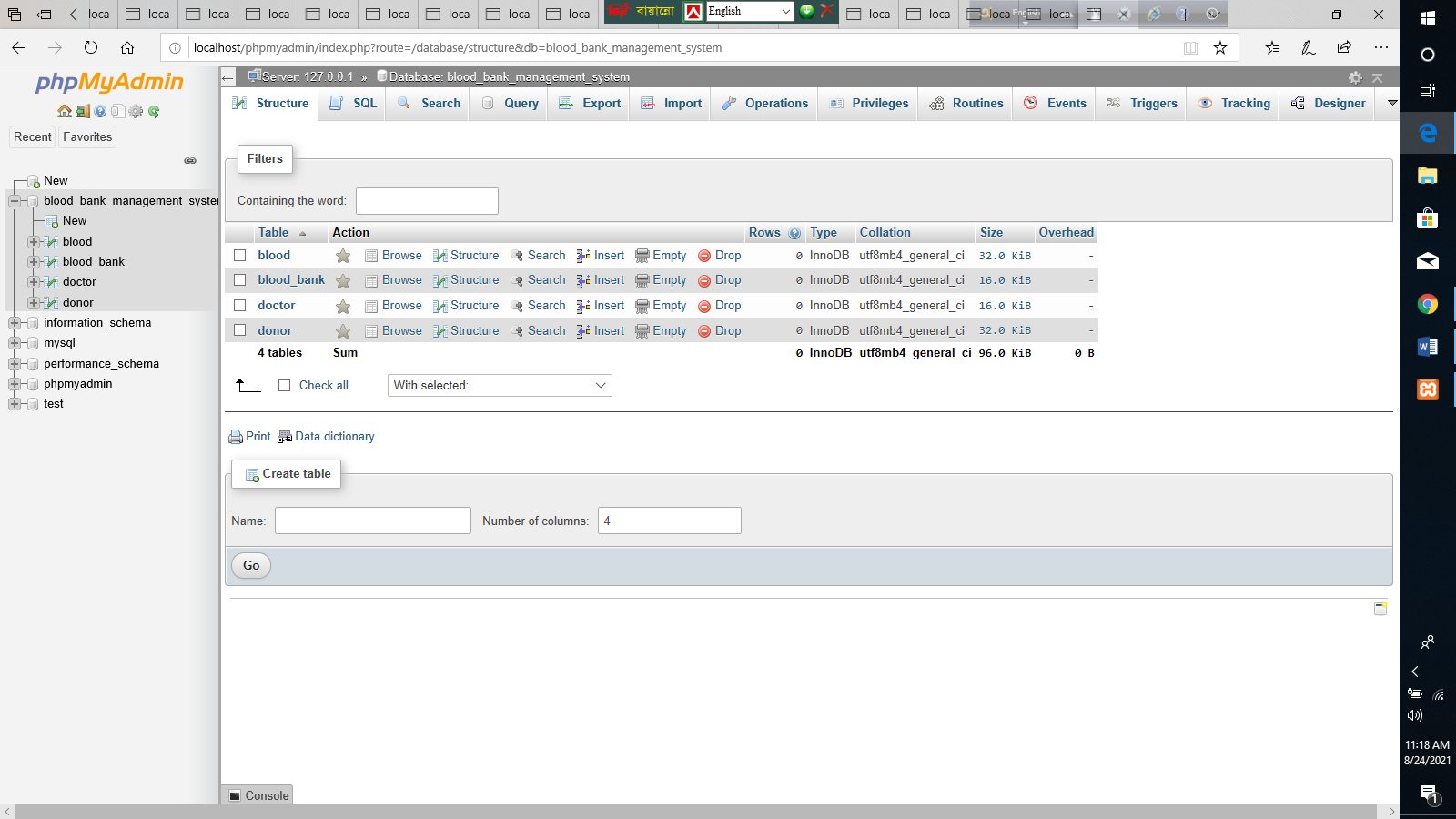
**Picture 1 :**



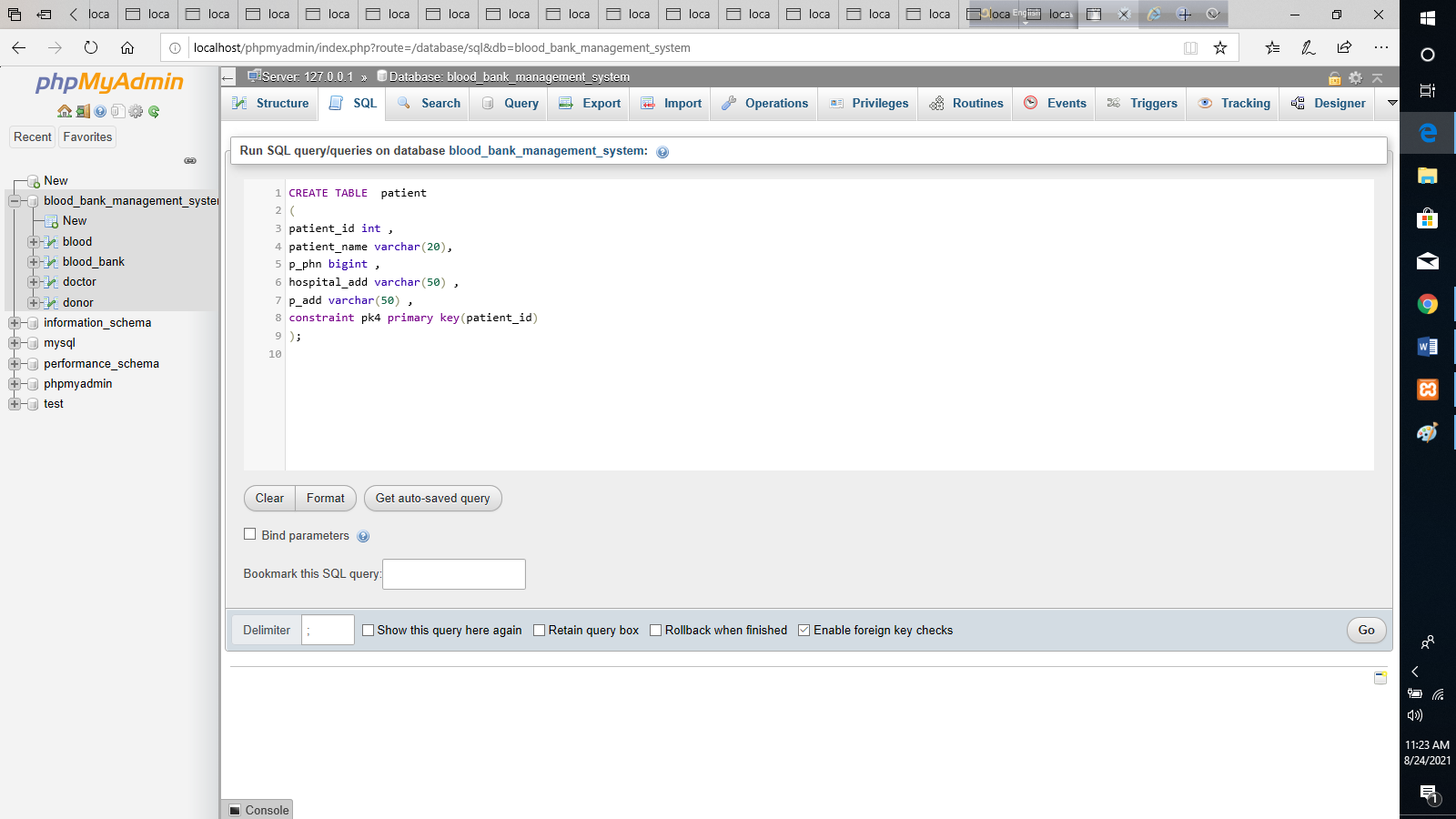
**Picture 2 :**



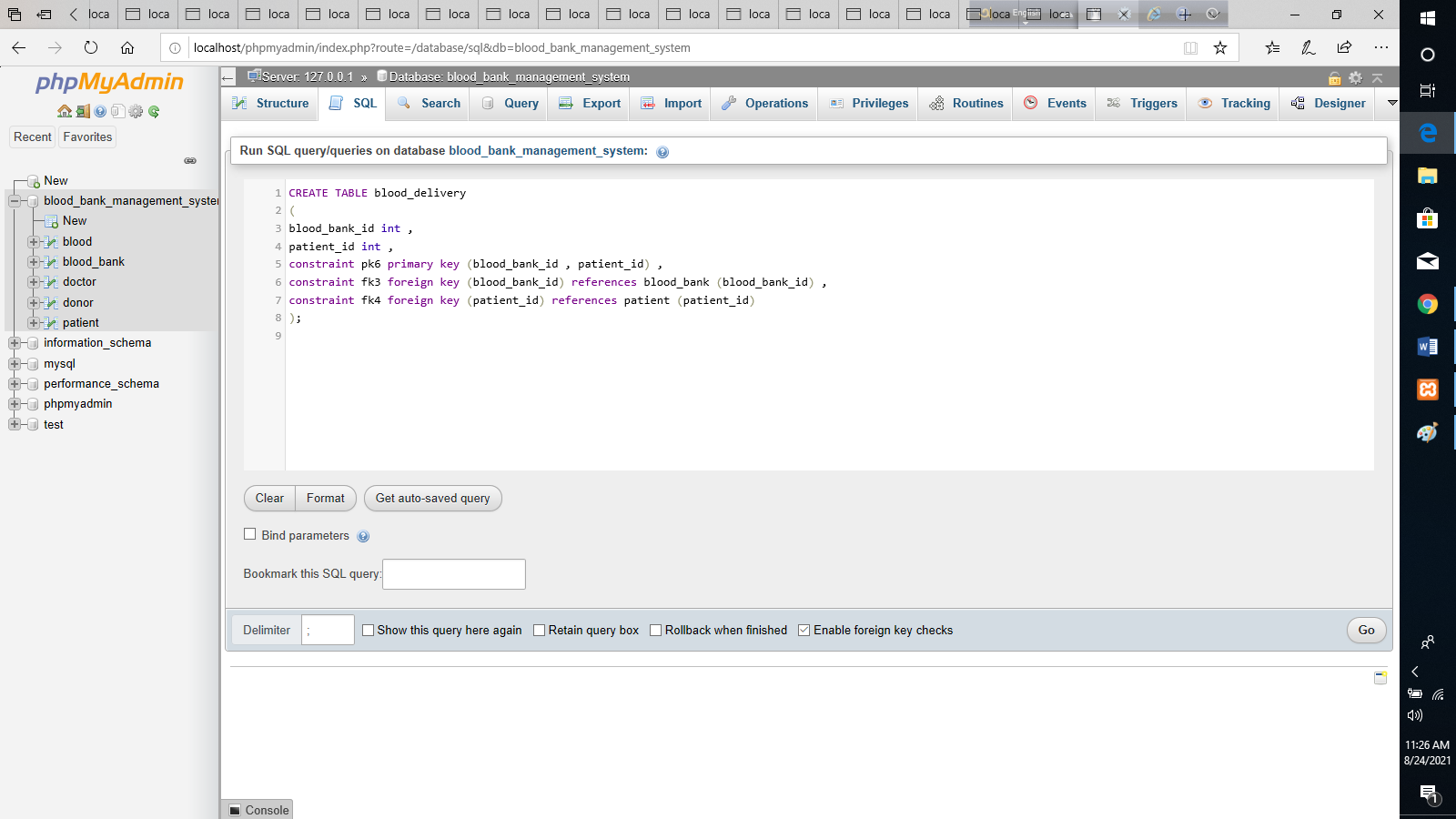
**Picture 3 :**



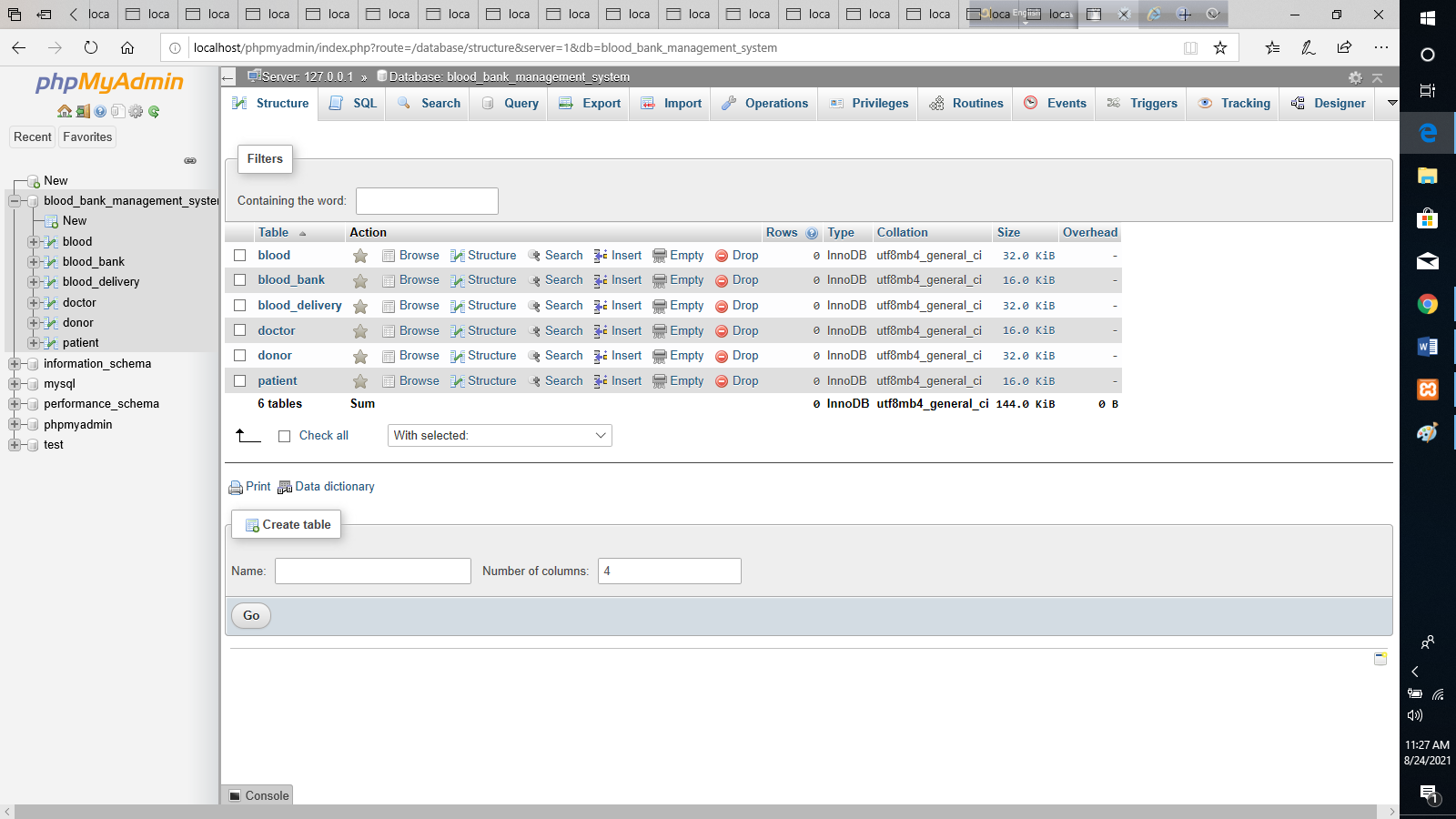
**Picture 4 :**



**Picture 5 :**



**Picture 6 :**



**Picture 7 :**

