UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

WORKSHOP 1

REPORT

Name	: Shazana binti Mohammed Affandi
Course	: BITI
Project Title	: Dental Clinic Management System
Supervisor Name	: Nuzulha Khilwani binti Ibrahim
Evaluator Name	: Dr. Zeratul Izzah binti Mohd Yusoh

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CHAPTER 1

Introduction

Dental Clinic Management System is a system developed to facilitate the employees who is working in dental clinics. This system helps to reduce the problem of losing patients' data and clinical information that occurs when they use system manual. This system provides the facility to record and store patient data more systematically.

Problem Statement

In this era, number of community that stays in Malaysia is increasing day by day. If the clinic still using manual system, this giving difficulties for the employees and patients because the process is unsystematic. Apart from that, it finds hard for employees to search earlier patients' data in fact, they were in risk if the data lost. The manual system also giving difficulties for dentists to know about their appointment.

Objective

The objective of Dental Clinic Management System is designed to assist employees in dental clinics to record, store and update data of patients more systematically. Moreover, this system makes it easier for employees to search for patients when needed rapidly. The information stored is well maintained, as this system provides security such as the admin, nurse and dentist must enter the username and password before opening the application. This project also builds and designs a more systematic dental clinic system and to assess the consistency the use of more advanced system.

Scope

Module to be developed in this system is log in, registration, add, update, and delete staffs' and patients' data. Target user for this system is admin, nurses and dentists.

CHAPTER 2

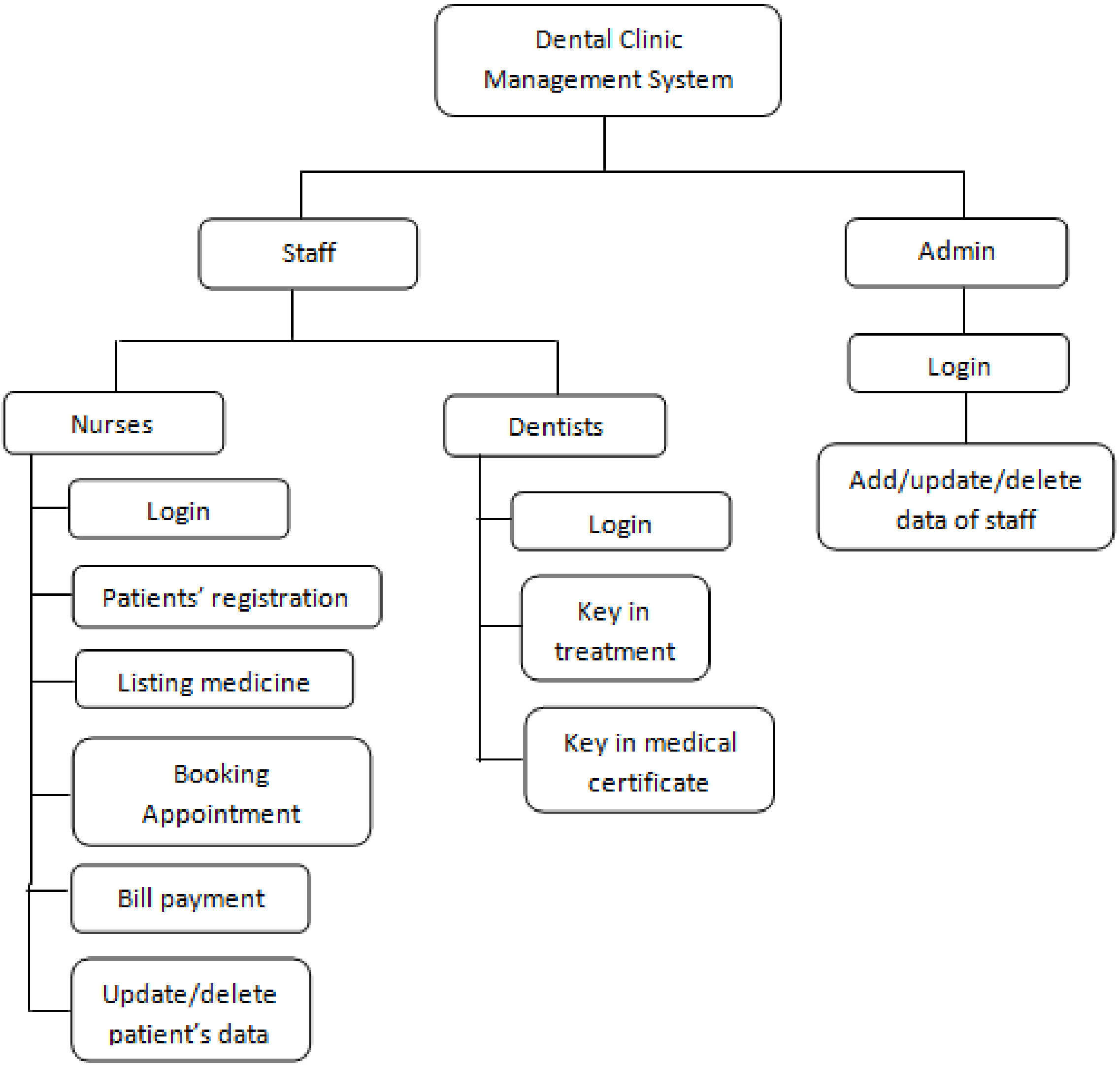
Analysis of Problem

The first problem is difficulties for nurse and dentist to search earlier patients' data. This is because if they still using manual system, there is a lot of file and paper they need to keep, so it found difficult when they want to search for patients' data since they need to one by one. But with this system, they can only search patients' ID, name or identity card number as it also saves more time and make works more systematic.

Other than that, the percentage to losing patients' data quite high since they will forgot where they put the data and the data might be drop out. This will make harder to for the nurses to key in new data and make dentists more problems when they forgot what treatment and medicines they give to the patients. This problem can be solved with this system which it helps them to stored patients' data in one place.

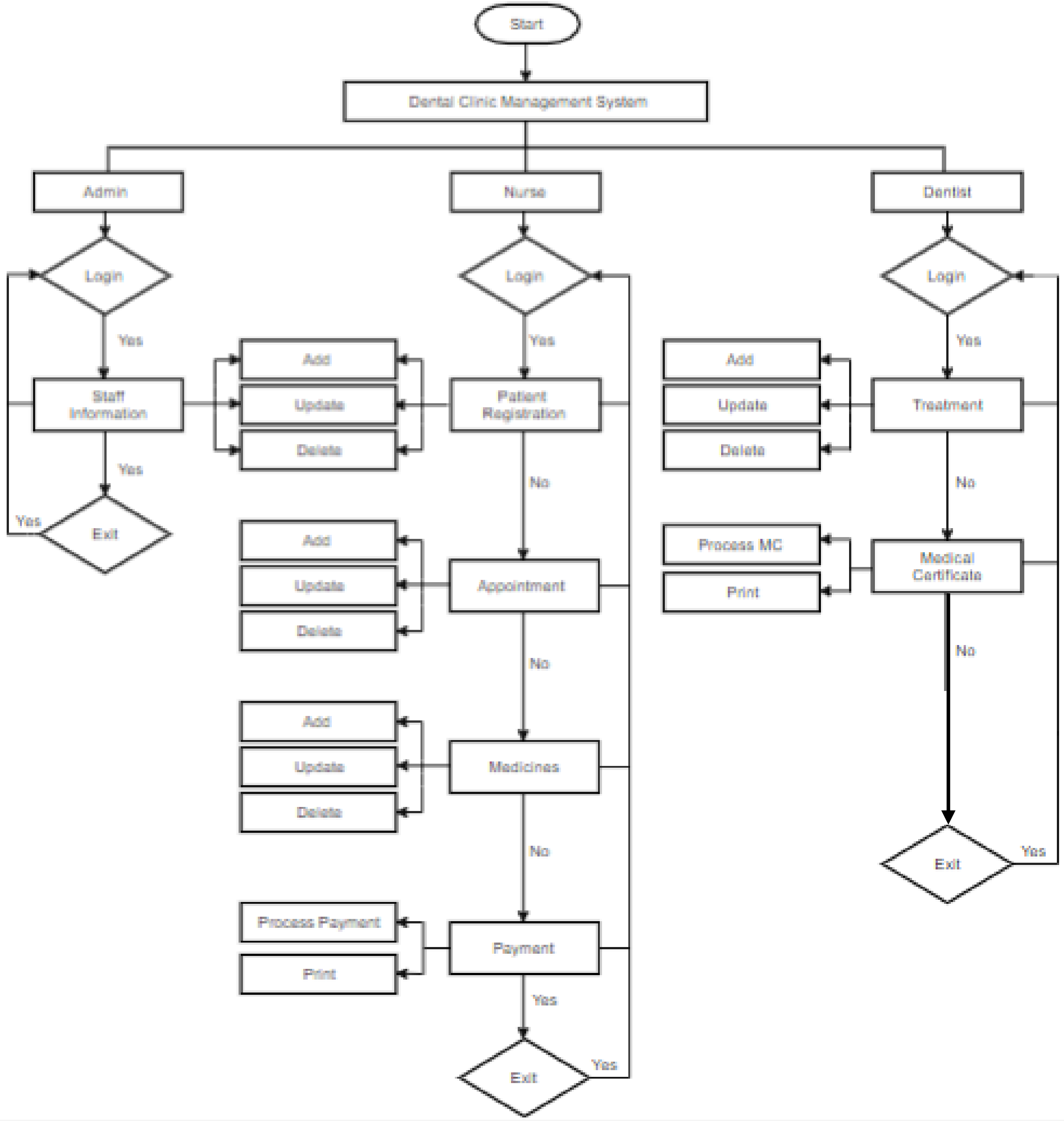
Lastly, it found difficult for dentist for dentists to know about their appointment with patients since nurse should remind them about the appointment. If the nurse also forgot about the appointment, it will be problem to patient that comes on that time. So, with this system, dentists can see their appointment schedule without being reminded by nurse and they can contact their patients if they can't meet on that time.

Structure Chart

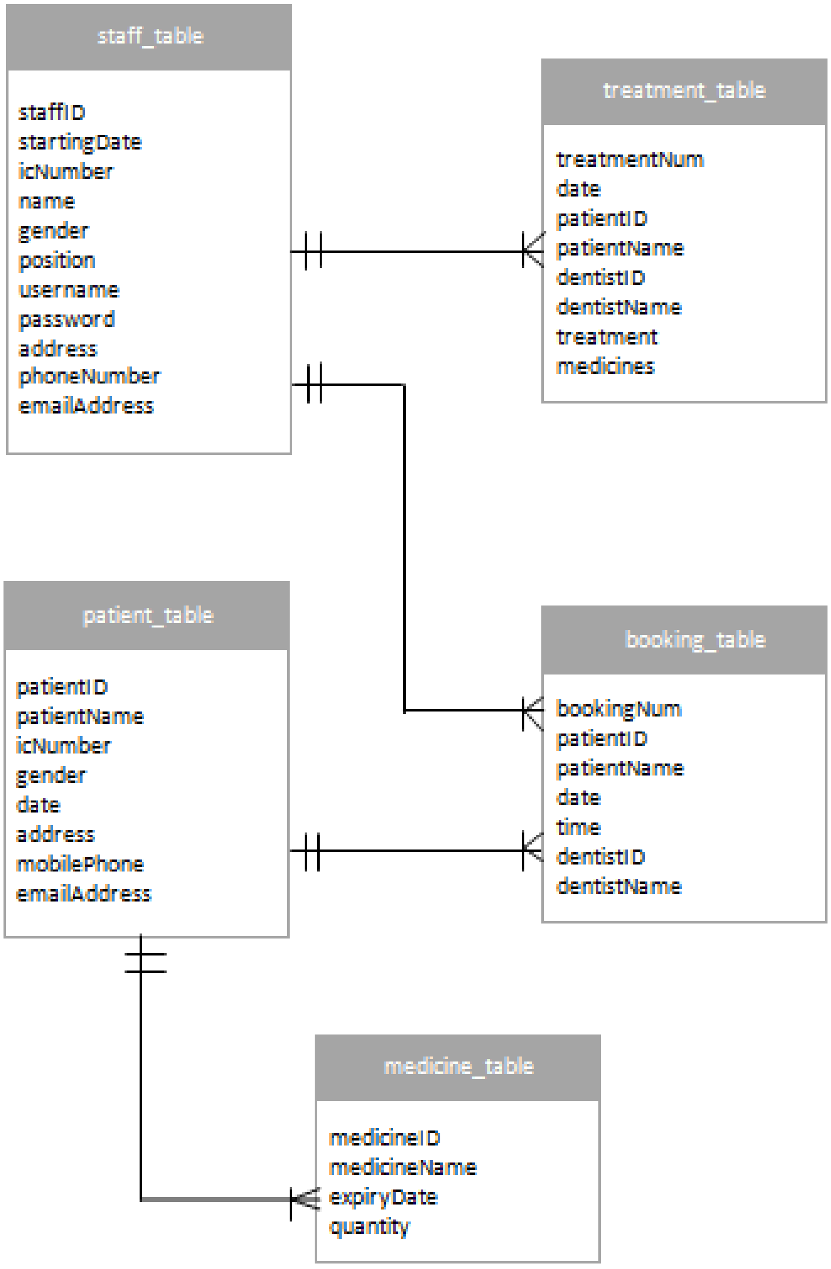


CHAPTER 3

Flowchart



ERD


staff_table
staffID
startingDate
icNumber
name
gender
position
username
password
address
phoneNumber
emailAddress
treatment_table
treatmentNum
date
patientID
patientName
dentistID
dentistName
treatment
medicines
patient_table
patientID
patientName
icNumber
gender
date
address
mobilePhone
emailAddress
booking_table
bookingNum
patientID
patientName
date
time
dentistID
dentistName
medicine_table
medicineID
medicineName
expiryDate
quantity

Data Dictionary

1. staff_table

Data Name	Data Type	Data Description
staffID	Varchar(10)	Staff id
startingDate	Date	Date of starting work
icNumber	Varchar(20)	Staff's identity card number
name	Varchar(50)	Staff's name
gender	Varchar(10)	Staff's gender
position	Varchar(10)	Staff's position
username	Varchar(50)	Staff's username
password	Varchar(50)	Staff's password
address	Varchar(50)	Staff's address
phoneNumber	Varchar(11)	Staff's phone number
emailAddress	Varchar(50)	Staff's email address

2. treatment_table

Data Name	Data Type	Data Description
treatmentNum	Int(11)	Treatment number
date	Date	Date of treatment
patientID	Varchar(10)	Patient's ID
patientName	Varchar(30)	Patient's name
dentistID	Varchar(10)	Dentist's ID
dentistName	Varchar(30)	Dentist's name
treatment	Varchar(10)	Treatment of patients
medicines	Varchar(50)	Medicines for patients

3. patient_table

Data Name	Data Type	Data Description
patientID	Varchar(10)	Patient’s ID
patientName	Varchar(50)	Patient’s name
icNumber	Varchar(20)	Patient’s identity card
gender	Varchar(10)	Patient’s gender
date	date	Date registration
address	Varchar(50)	Patient’s address
mobilePhone	Varchar(11)	Patient’s mobile phone
emailAddress	Varchar(50)	Patient’s email address

4. booking_table

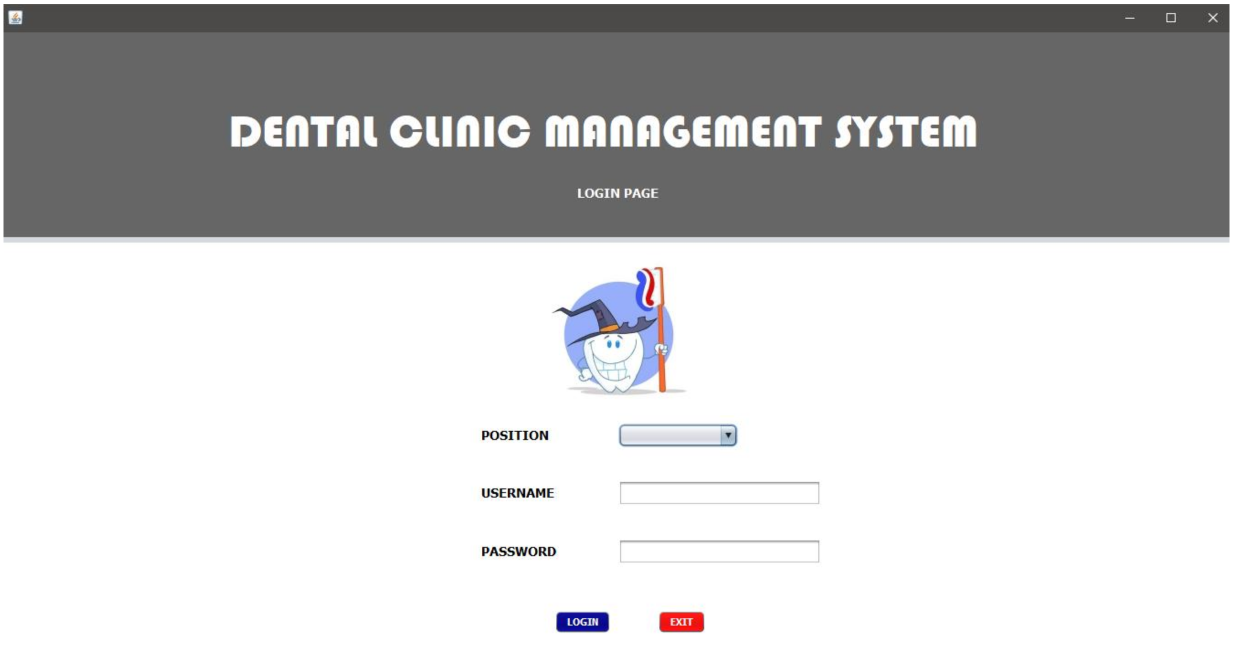
Data Name	Data Type	Data Description
bookingNum	Int(11)	Booking number
patientID	Varchar(10)	Patient’s ID
patientName	Varchar(30)	Patient’s name
date	Date	Date for appointment
time	Time	Time for appointment
dentistID	Varchar(10)	Dentist’s ID
dentistName	Varchar(30)	Dentist’s name

5. medicine_table

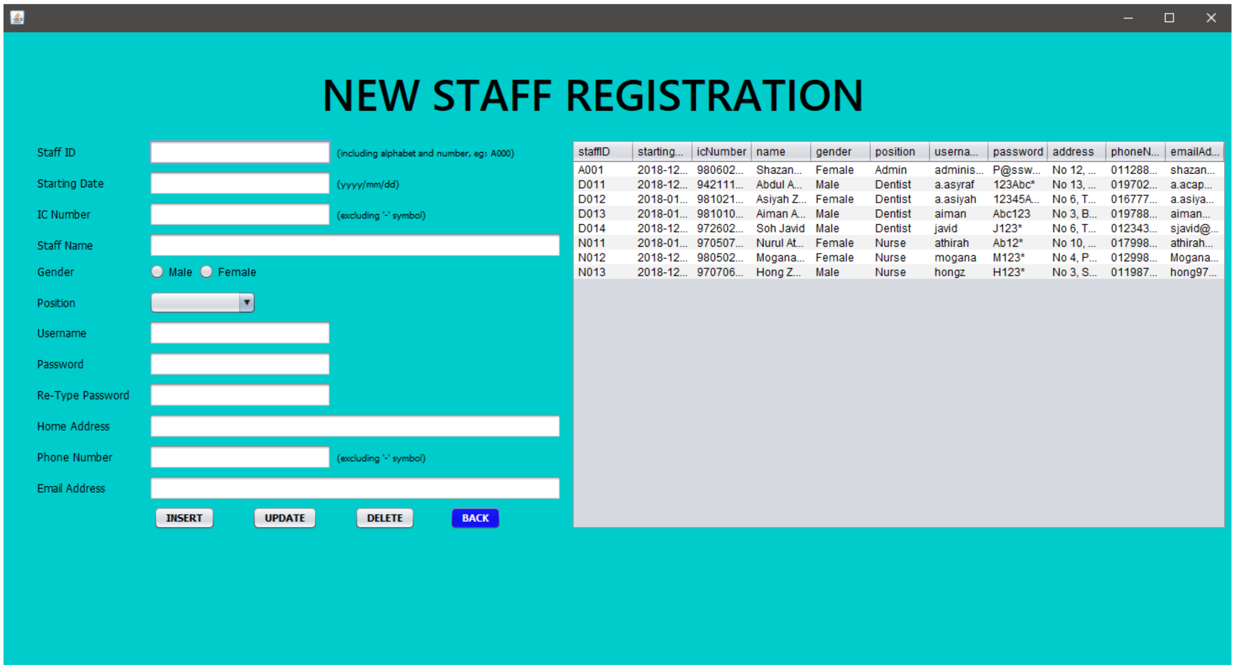
Data Name	Data Type	Data Description
medicineID	Varchar(10)	Medicine’s ID
medicineName	Varchar(50)	Medicine’s name
expiryDate	Date	Expired date for medicine
quantity	Int(10)	Quantity of medicine

User Interface

1. User should choose which position such as admin, dentist or nurse and enter correct username and password before login.

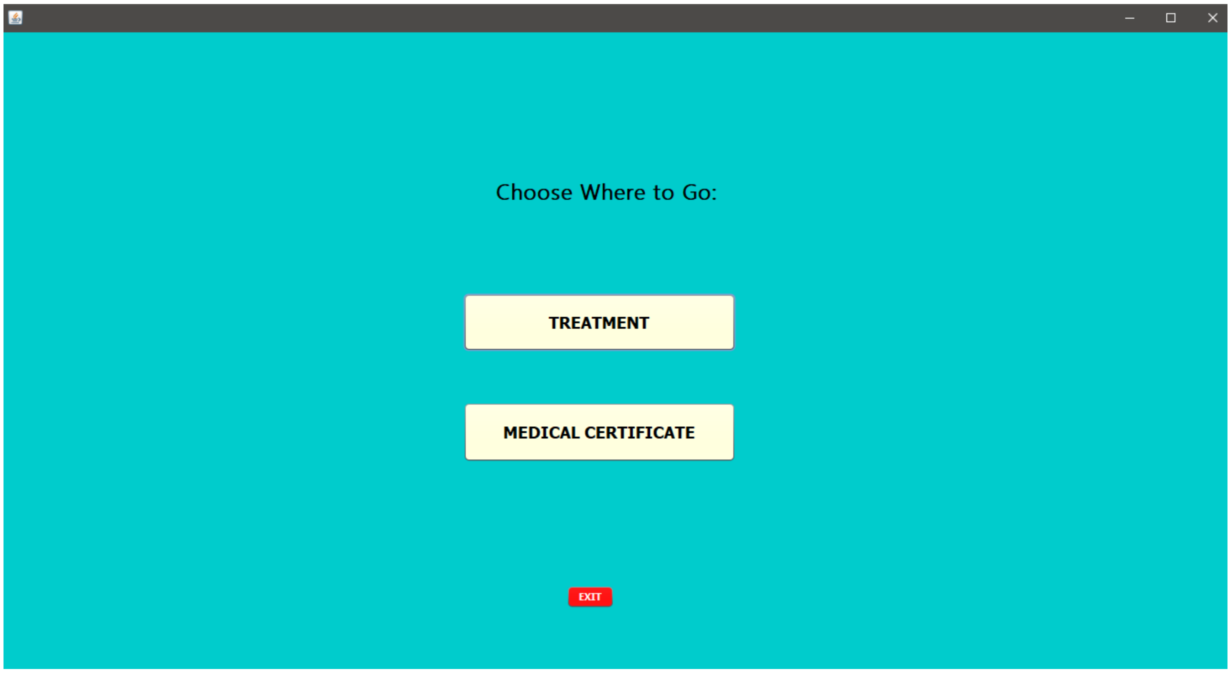


2. This is staffs' infomation table. Only admin can update, delete and insert data of staffs to the table.

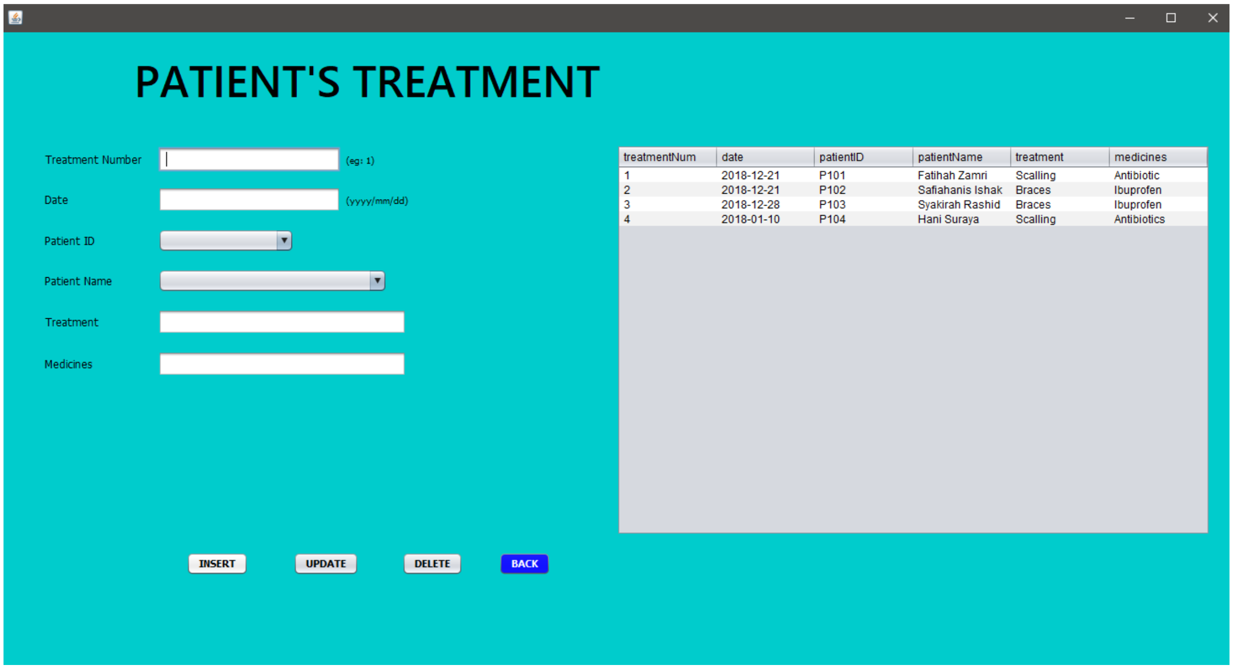


staffID	starting...	icNumber	name	gender	position	userna...	password	address	phoneN...	emailAd...
A001	2018-12...	980602...	Shazan...	Female	Admin	adminis...	P@ssw...	No 12, ...	011288...	shazan...
D011	2018-12...	942111...	Abdul A...	Male	Dentist	a.asyraf	123Abc*	No 13, ...	019702...	a.acap...
D012	2018-01...	981021...	Asiyah Z...	Female	Dentist	a.asiyah	12345A...	No 6, T...	016777...	a.asiya...
D013	2018-01...	981010...	Aiman A...	Male	Dentist	aiman	Abc123	No 3, B...	019788...	aiman...
D014	2018-12...	972602...	Soh Javid	Male	Dentist	javid	J123*	No 6, T...	012343...	sjavid@...
N011	2018-01...	970507...	Nurul At...	Female	Nurse	athirah	Ab12*	No 10, ...	017998...	athirah...
N012	2018-12...	980502...	Mogana...	Female	Nurse	mogana	M123*	No 4, P...	012998...	Mogana...
N013	2018-12...	970706...	Hong Z...	Male	Nurse	hongz	H123*	No 3, S...	011987...	hong97...

3. When dentist login their account, it will bring them to dentist page which the dentist need to choose which page they want to go. When they click “EXIT”, the dentist will go to login page.

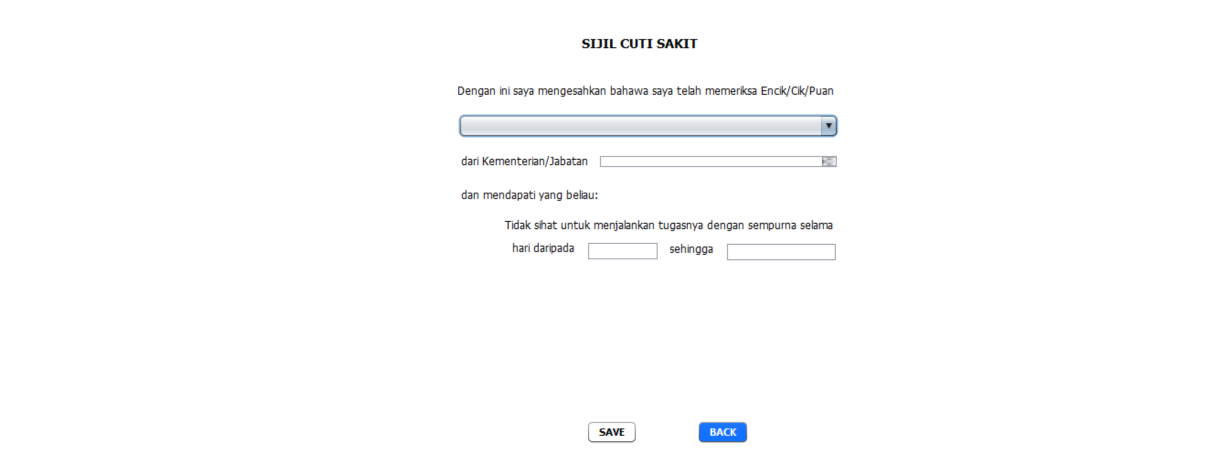


4. When dentist click “TREATMENT” button, they will go to this page which the dentist can insert, update and delete data. The dentist also can see the list of patients’ treatment.



treatmentNum	date	patientID	patientName	treatment	medicines
1	2018-12-21	P101	Fatihah Zamri	Scalling	Antibiotic
2	2018-12-21	P102	Safiahanis Ishak	Braces	Ibuprofen
3	2018-12-28	P103	Syakirah Rashid	Braces	Ibuprofen
4	2018-01-10	P104	Hani Suraya	Scalling	Antibiotics

5. .



SIJIL CUTI SAKIT

Dengan ini saya mengesahkan bahawa saya telah memeriksa Encik/Cik/Puan

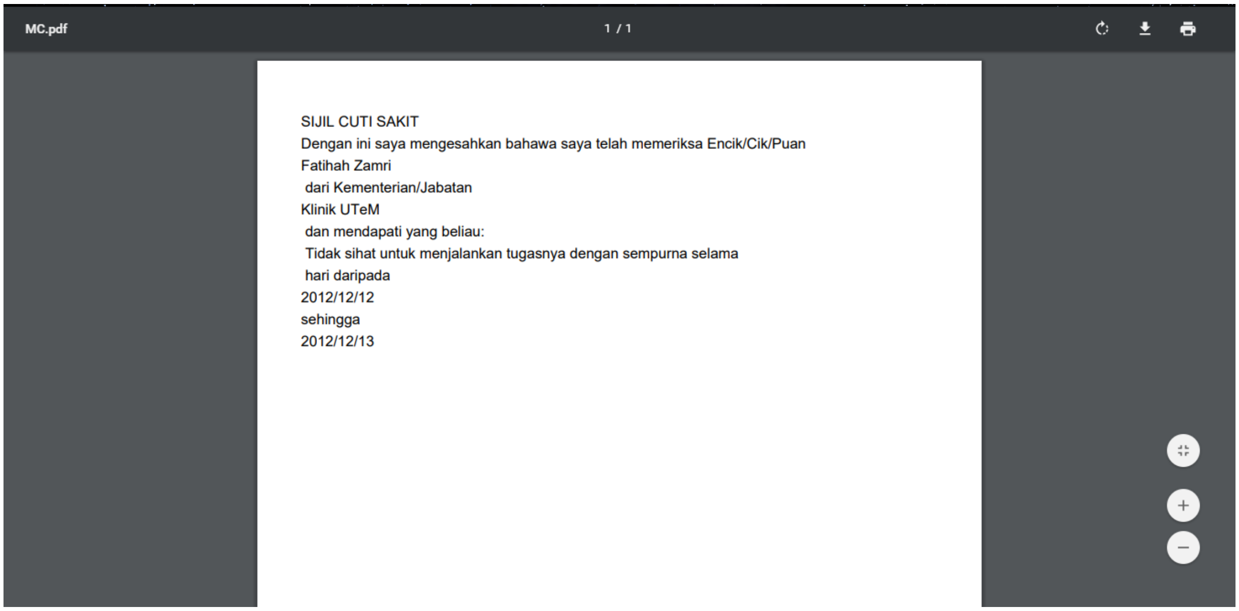
dari Kementerian/Jabatan

dan mendapati yang beliau:

Tidak sihat untuk menjalankan tugasnya dengan sempurna selama

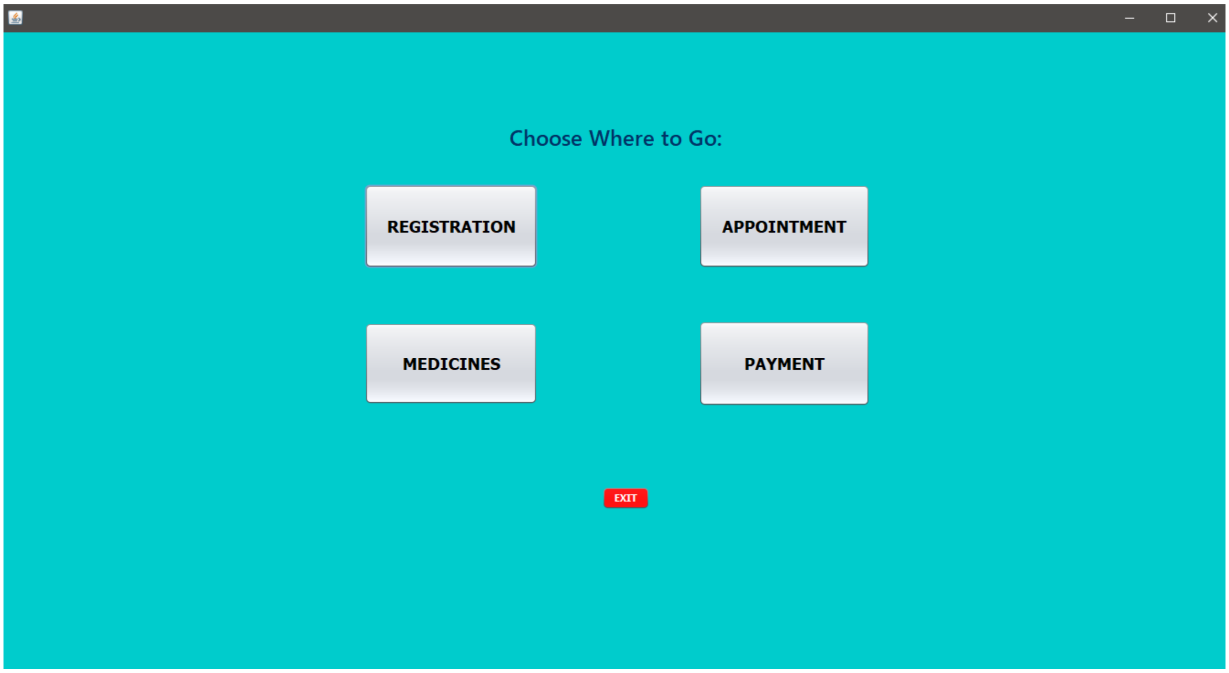
hari daripada sehingga

6. When dentist click “SAVE” button, the mc will save in .pdf file.

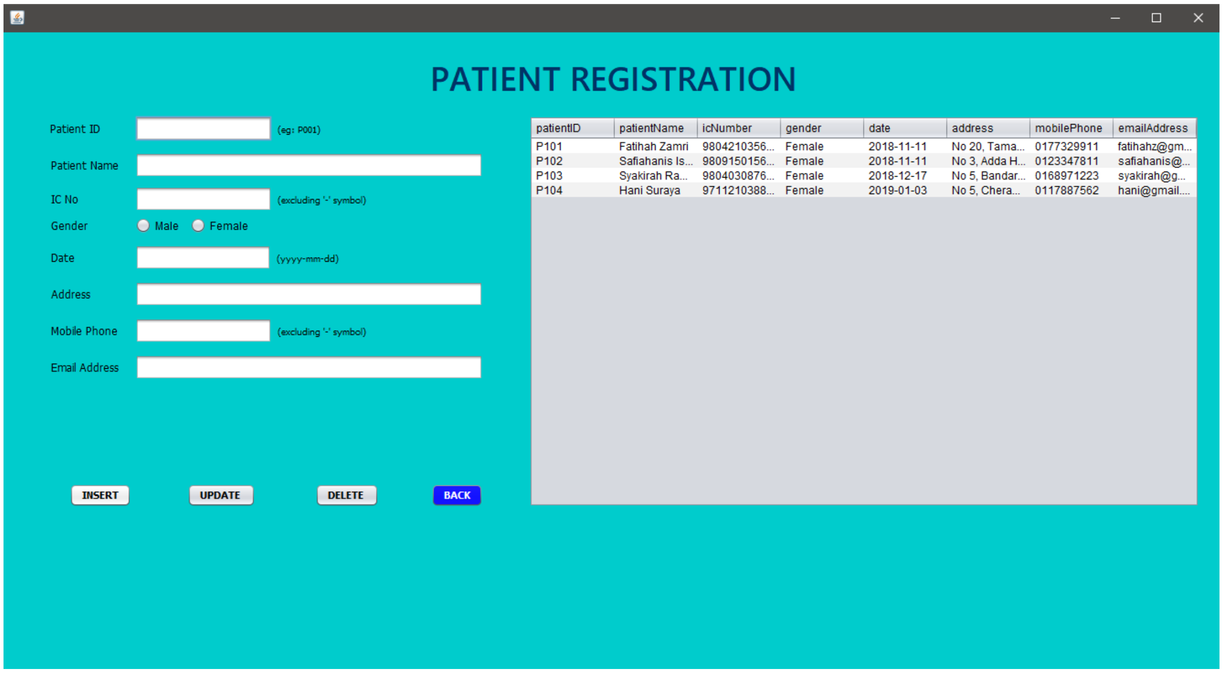


SIJIL CUTI SAKIT
Dengan ini saya mengesahkan bahawa saya telah memeriksa Encik/Cik/Puan
Fatihah Zamri
dari Kementerian/Jabatan
Klinik UTeM
dan mendapati yang beliau:
Tidak sihat untuk menjalankan tugasnya dengan sempurna selama
hari daripada
2012/12/12
sehingga
2012/12/13

7. When nurse login their account, it will bring them to nurse page which the nurse need to choose which page they want to go. When they click “EXIT”, they will go to login page.

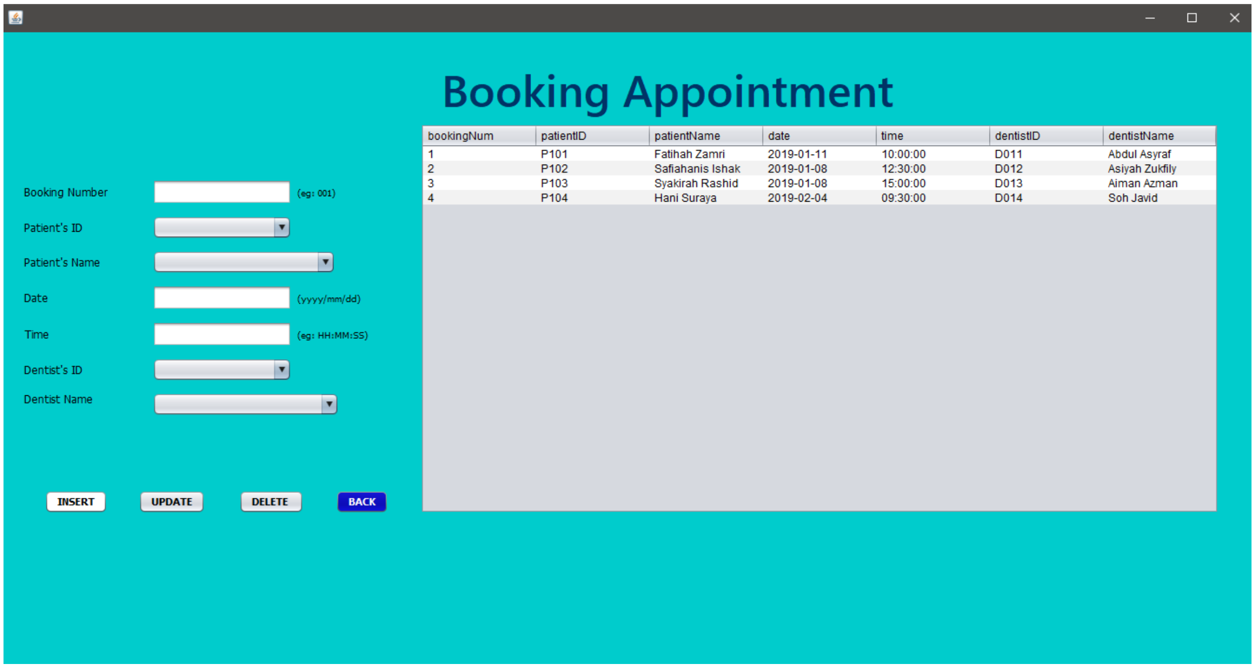


8. When the nurse clicks on “REGISTRATION” button, they will go to this page. Patient’s registration handles by nurses. They will insert, update and delete all information of patients. After clicking save button, the data will appear on patients’ information table



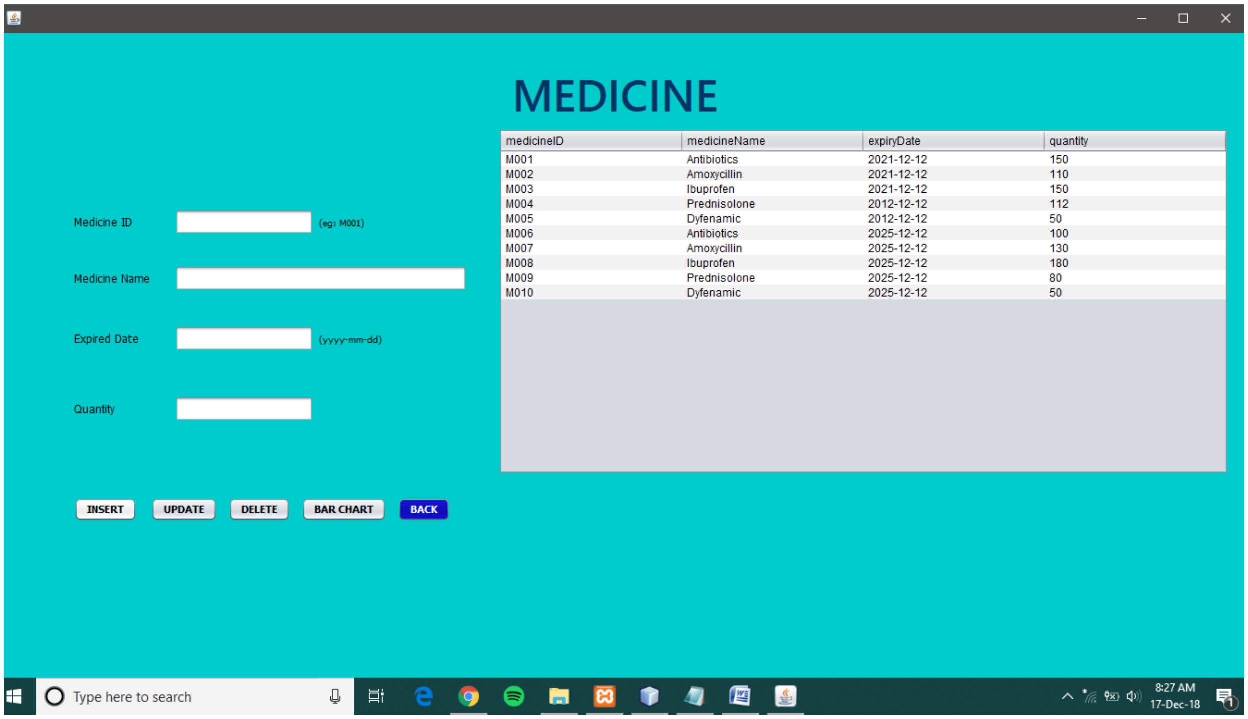
patientID	patientName	icNumber	gender	date	address	mobilePhone	emailAddress
P101	Fatihah Zamri	9804210356...	Female	2018-11-11	No 20, Tama...	0177329911	fatihahz@gm...
P102	Safiahanis Is...	9809150156...	Female	2018-11-11	No 3, Adda H...	0123347811	safiahanis@...
P103	Syakirah Ra...	9804030876...	Female	2018-12-17	No 5, Bandar...	0168971223	syakirah@g...
P104	Hani Suraya	9711210388...	Female	2019-01-03	No 5, Chera...	0117887562	hani@gmail....

9. When the nurse clicks on “APPOINTMENT” button, they will go to this page. They will insert, update and delete all booking information for patients who want to make an appointment with dentist.



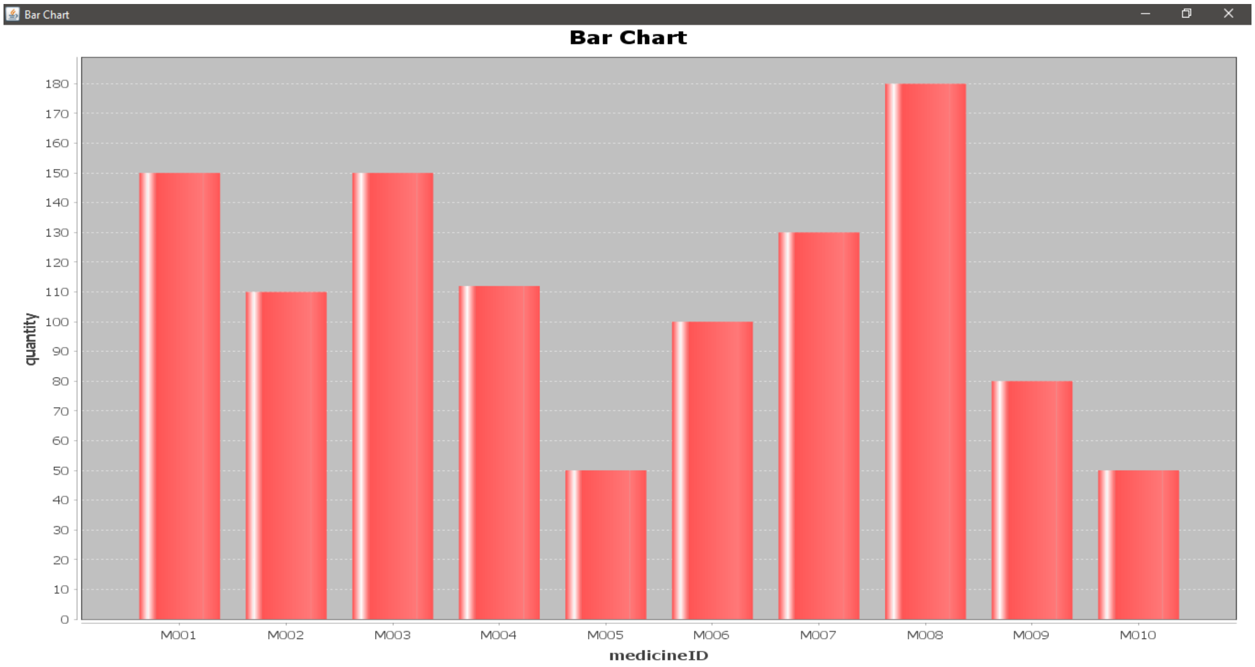
bookingNum	patientID	patientName	date	time	dentistID	dentistName
1	P101	Fatihah Zamri	2019-01-11	10:00:00	D011	Abdul Asyraf
2	P102	Safiahanis Ishak	2019-01-08	12:30:00	D012	Asiyah Zukfily
3	P103	Syakirah Rashid	2019-01-08	15:00:00	D013	Aiman Azman
4	P104	Hani Suraya	2019-02-04	09:30:00	D014	Soh Javid

10. When the nurse clicks on “MEDICINE” button, they will go to this page. They will insert, update and delete all information about medicines.

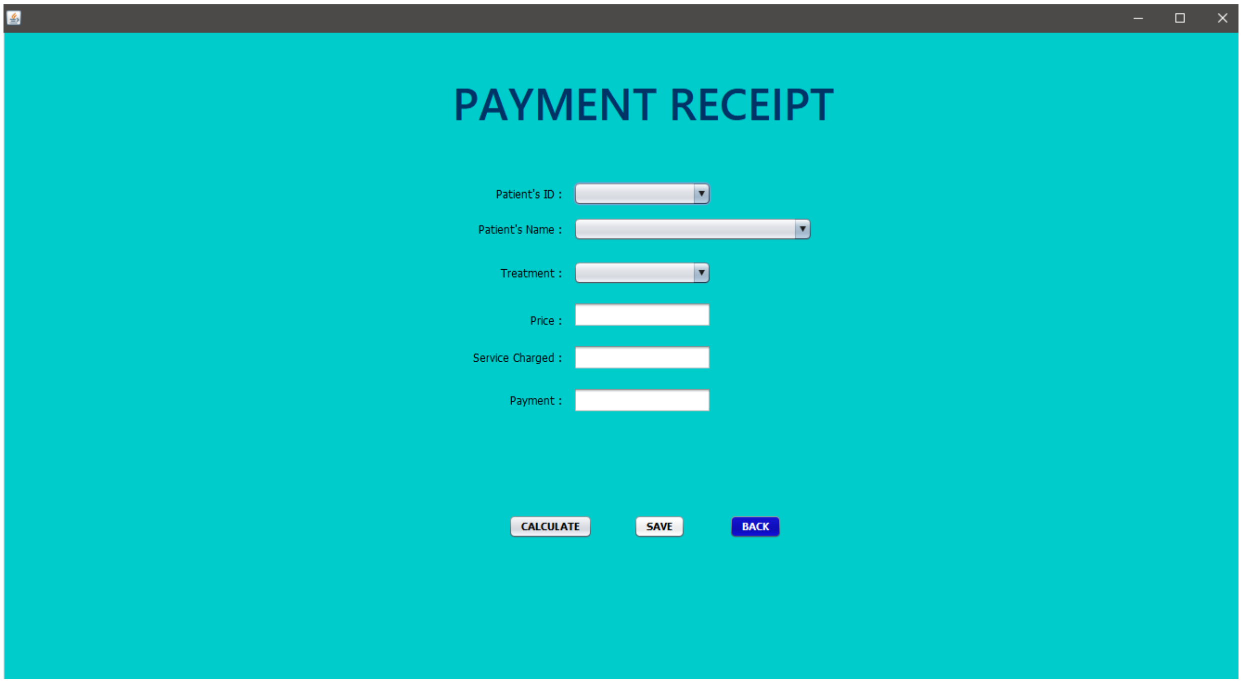


medicineID	medicineName	expiryDate	quantity
M001	Antibiotics	2021-12-12	150
M002	Amoxycillin	2021-12-12	110
M003	Ibuprofen	2021-12-12	150
M004	Prednisolone	2012-12-12	112
M005	Dyfenamic	2012-12-12	50
M006	Antibiotics	2025-12-12	100
M007	Amoxycillin	2025-12-12	130
M008	Ibuprofen	2025-12-12	180
M009	Prednisolone	2025-12-12	80
M010	Dyfenamic	2025-12-12	50

11. When the nurse click on “BAR CHAT”, it will pop up this page.



12. This page is where the nurse click on “PAYMENT” button which it will key in by nurse and print it to give to patients


PAYMENT RECEIPT

Patient's ID :

Patient's Name :

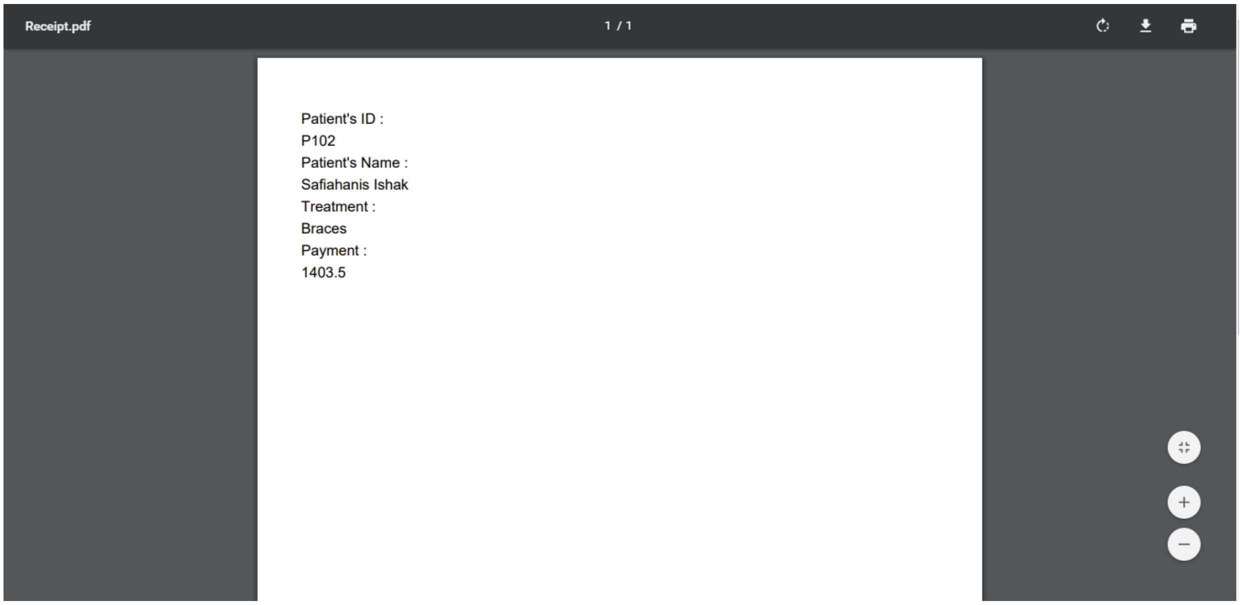
Treatment :

Price :

Service Charged :

Payment :

13. When nurse click “SAVE” button, the mc will save in .pdf file.



Patient's ID :
P102
Patient's Name :
Safiahanis Ishak
Treatment :
Braces
Payment :
1403.5

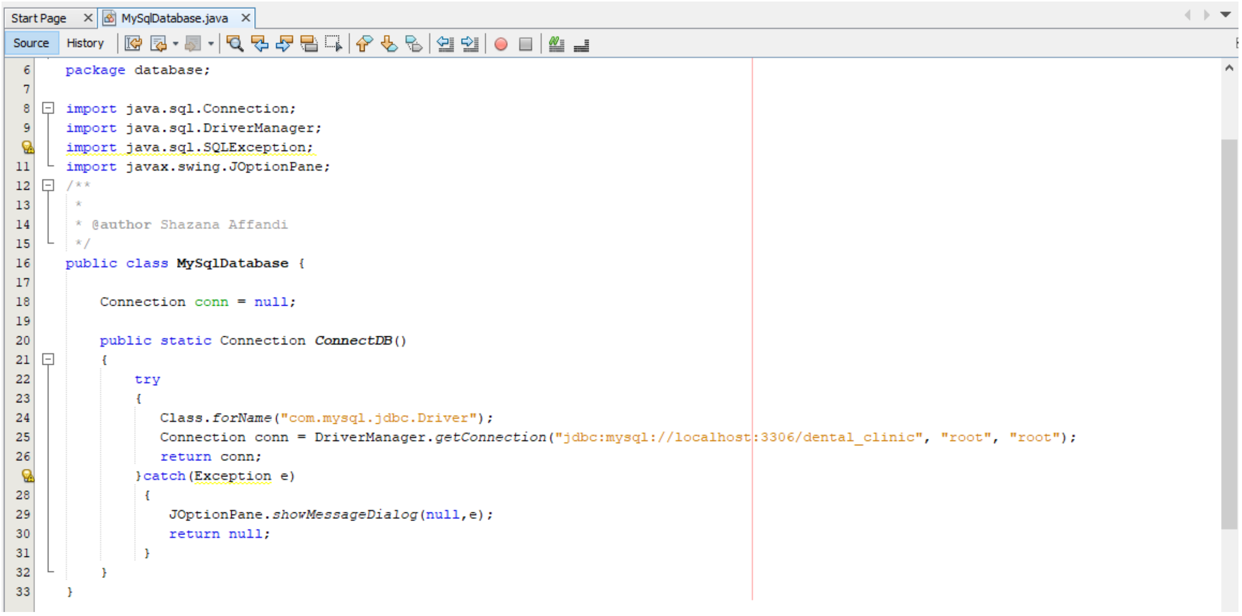
CHAPTER 4

Introduction

This Dental Clinic Management System is using Java SE and NetBeans IDE 8.2 in order to build the interface and system. The database used is MySQL.

Coding

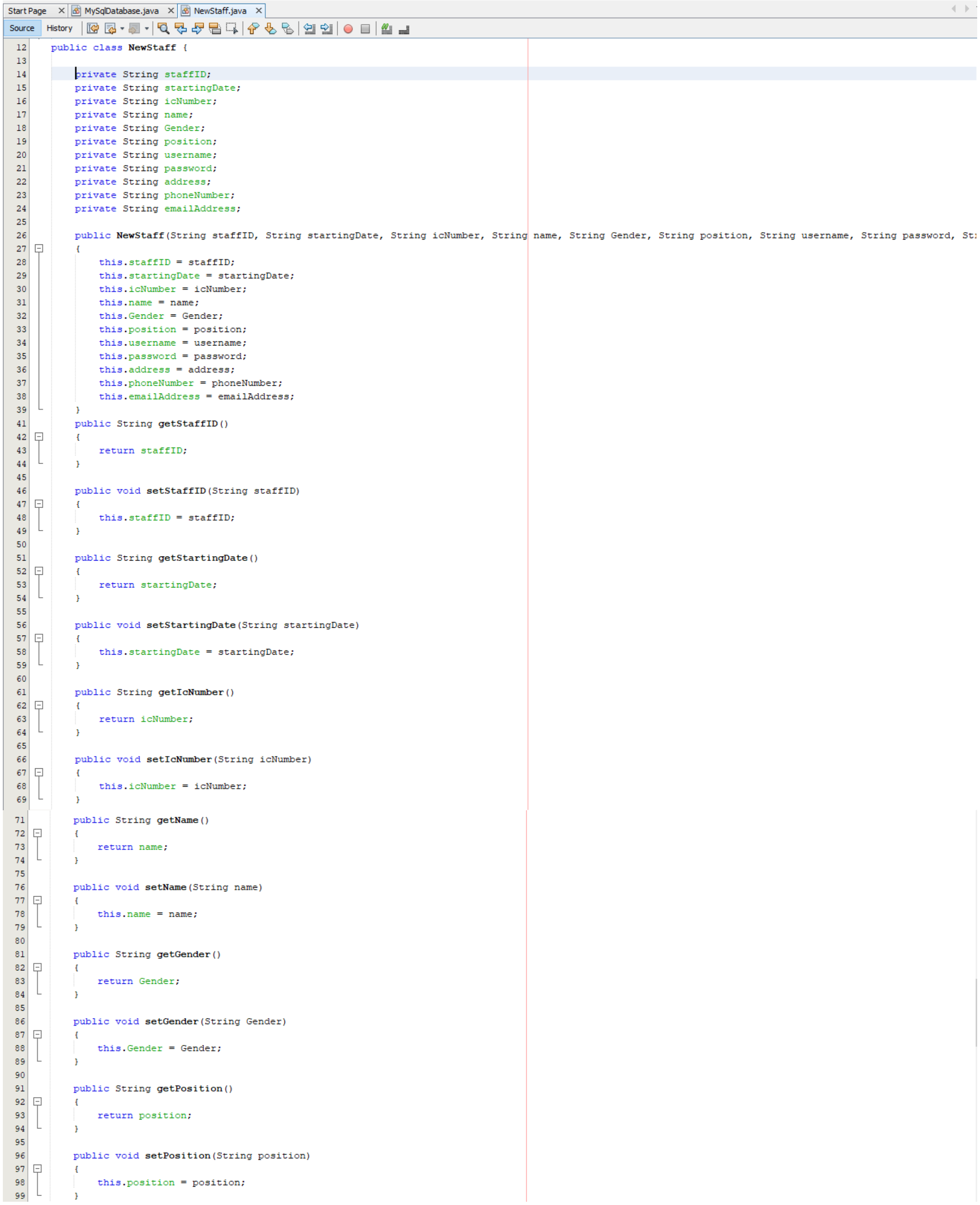
1. Database connection



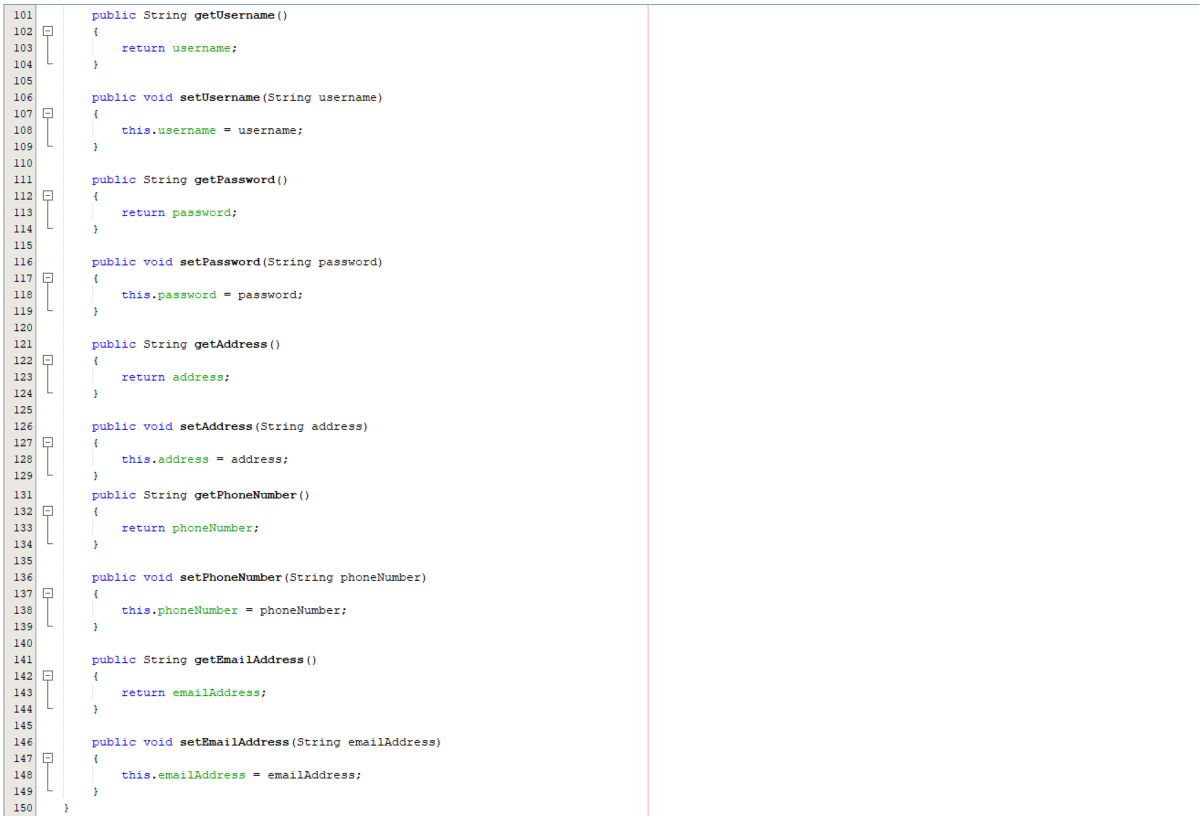
```
package database;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
import javax.swing.JOptionPane;
/**
 *
 * @author Shazana Affandi
 */
public class MySqlDatabase {

    Connection conn = null;

    public static Connection ConnectDB()
    {
        try
        {
           Class.forName("com.mysql.jdbc.Driver");
           Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/dental_clinic", "root", "root");
           return conn;
        }catch(Exception e)
         {
            JOptionPane.showMessageDialog(null,e);
            return null;
         }
    }
}
```

2. Java Class

a) NewStaff.java

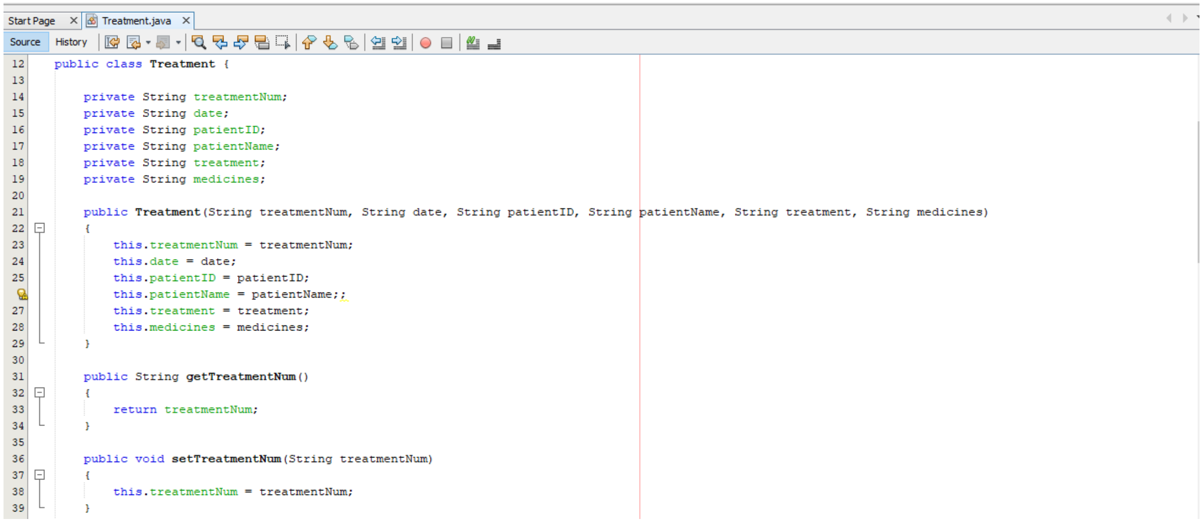


```java
public class NewStaff {

    private String staffID;
    private String startingDate;
    private String icNumber;
    private String name;
    private String Gender;
    private String position;
    private String username;
    private String password;
    private String address;
    private String phoneNumber;
    private String emailAddress;

    public NewStaff(String staffID, String startingDate, String icNumber, String name, String Gender, String position, String username, String password, St
    {
        this.staffID = staffID;
        this.startingDate = startingDate;
        this.icNumber = icNumber;
        this.name = name;
        this.Gender = Gender;
        this.position = position;
        this.username = username;
        this.password = password;
        this.address = address;
        this.phoneNumber = phoneNumber;
        this.emailAddress = emailAddress;
    }
    public String getStaffID()
    {
        return staffID;
    }

    public void setStaffID(String staffID)
    {
        this.staffID = staffID;
    }

    public String getStartingDate()
    {
        return startingDate;
    }

    public void setStartingDate(String startingDate)
    {
        this.startingDate = startingDate;
    }

    public String getIcNumber()
    {
        return icNumber;
    }

    public void setIcNumber(String icNumber)
    {
        this.icNumber = icNumber;
    }
    public String getName()
    {
        return name;
    }

    public void setName(String name)
    {
        this.name = name;
    }

    public String getGender()
    {
        return Gender;
    }

    public void setGender(String Gender)
    {
        this.Gender = Gender;
    }

    public String getPosition()
    {
        return position;
    }

    public void setPosition(String position)
    {
        this.position = position;
    }
```

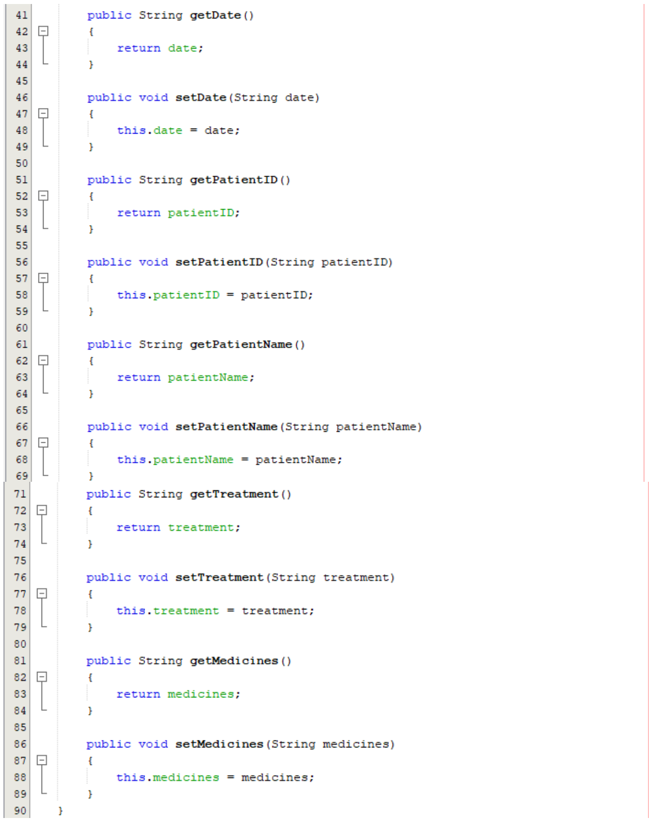


```
    public String getUsername()
    {
        return username;
    }

    public void setUsername(String username)
    {
        this.username = username;
    }

    public String getPassword()
    {
        return password;
    }

    public void setPassword(String password)
    {
        this.password = password;
    }

    public String getAddress()
    {
        return address;
    }

    public void setAddress(String address)
    {
        this.address = address;
    }
    public String getPhoneNumber()
    {
        return phoneNumber;
    }

    public void setPhoneNumber(String phoneNumber)
    {
        this.phoneNumber = phoneNumber;
    }

    public String getEmailAddress()
    {
        return emailAddress;
    }

    public void setEmailAddress(String emailAddress)
    {
        this.emailAddress = emailAddress;
    }
}
```

b) Treatment.java

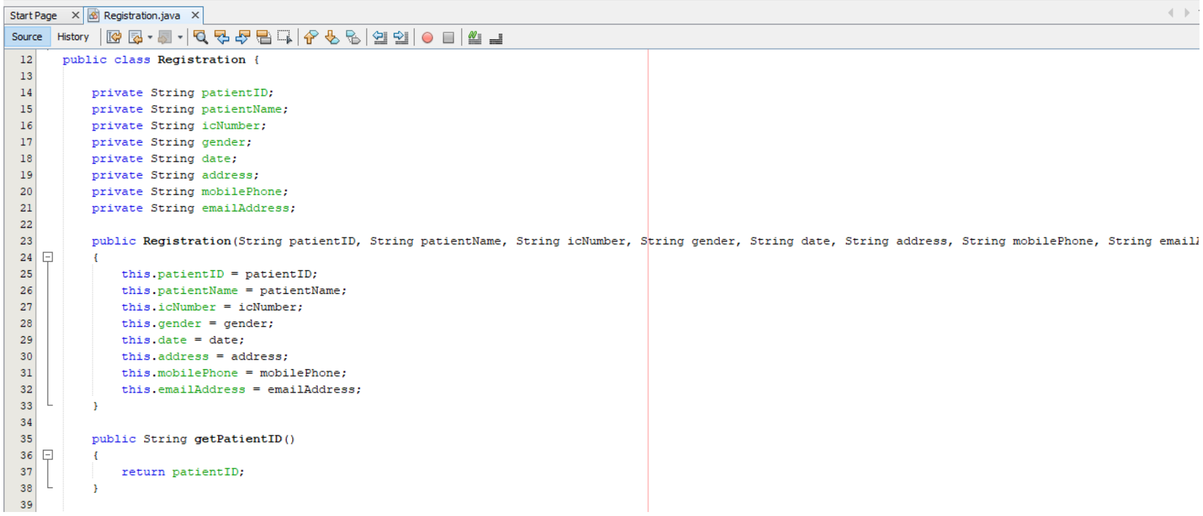


```
public class Treatment {

    private String treatmentNum;
    private String date;
    private String patientID;
    private String patientName;
    private String treatment;
    private String medicines;

    public Treatment(String treatmentNum, String date, String patientID, String patientName, String treatment, String medicines)
    {
        this.treatmentNum = treatmentNum;
        this.date = date;
        this.patientID = patientID;
        this.patientName = patientName;;
        this.treatment = treatment;
        this.medicines = medicines;
    }

    public String getTreatmentNum()
    {
        return treatmentNum;
    }

    public void setTreatmentNum(String treatmentNum)
    {
        this.treatmentNum = treatmentNum;
    }
```

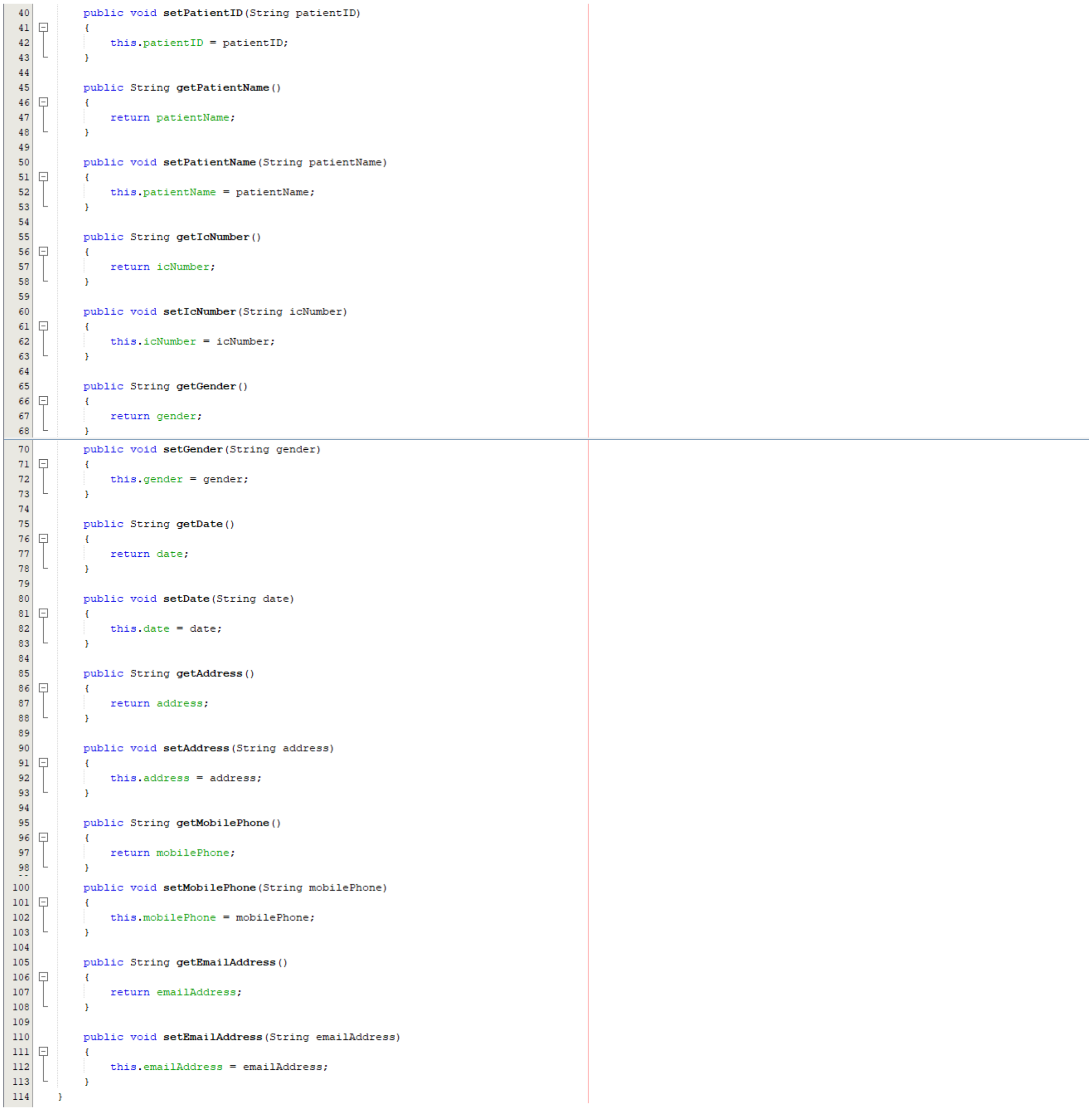


```java
    public String getDate()
    {
        return date;
    }

    public void setDate(String date)
    {
        this.date = date;
    }

    public String getPatientID()
    {
        return patientID;
    }

    public void setPatientID(String patientID)
    {
        this.patientID = patientID;
    }

    public String getPatientName()
    {
        return patientName;
    }

    public void setPatientName(String patientName)
    {
        this.patientName = patientName;
    }
    public String getTreatment()
    {
        return treatment;
    }

    public void setTreatment(String treatment)
    {
        this.treatment = treatment;
    }

    public String getMedicines()
    {
        return medicines;
    }

    public void setMedicines(String medicines)
    {
        this.medicines = medicines;
    }
}
```

c) Registration.java

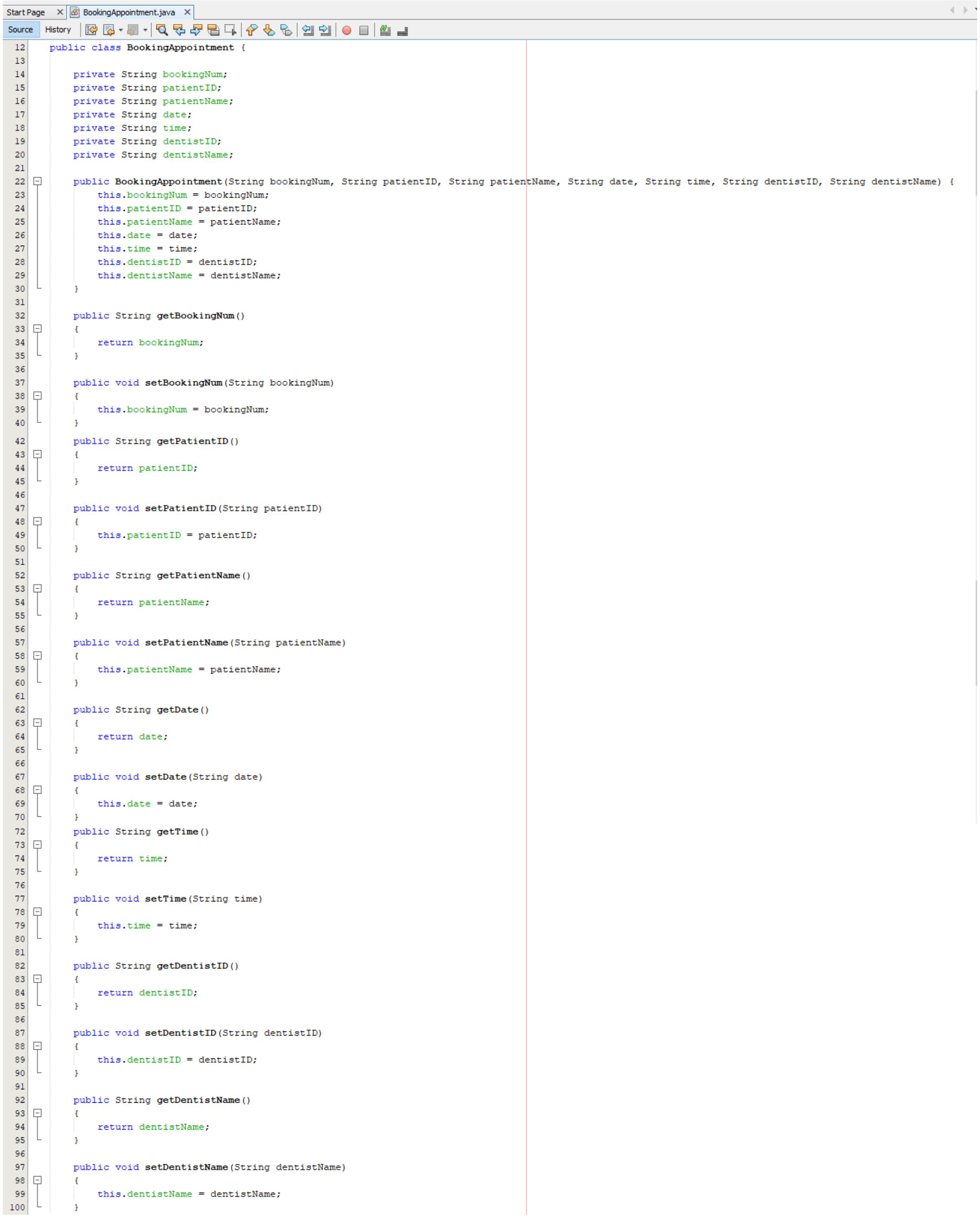


```java
public class Registration {

    private String patientID;
    private String patientName;
    private String icNumber;
    private String gender;
    private String date;
    private String address;
    private String mobilePhone;
    private String emailAddress;

    public Registration(String patientID, String patientName, String icNumber, String gender, String date, String address, String mobilePhone, String emailA
    {
        this.patientID = patientID;
        this.patientName = patientName;
        this.icNumber = icNumber;
        this.gender = gender;
        this.date = date;
        this.address = address;
        this.mobilePhone = mobilePhone;
        this.emailAddress = emailAddress;
    }

    public String getPatientID()
    {
        return patientID;
    }

```



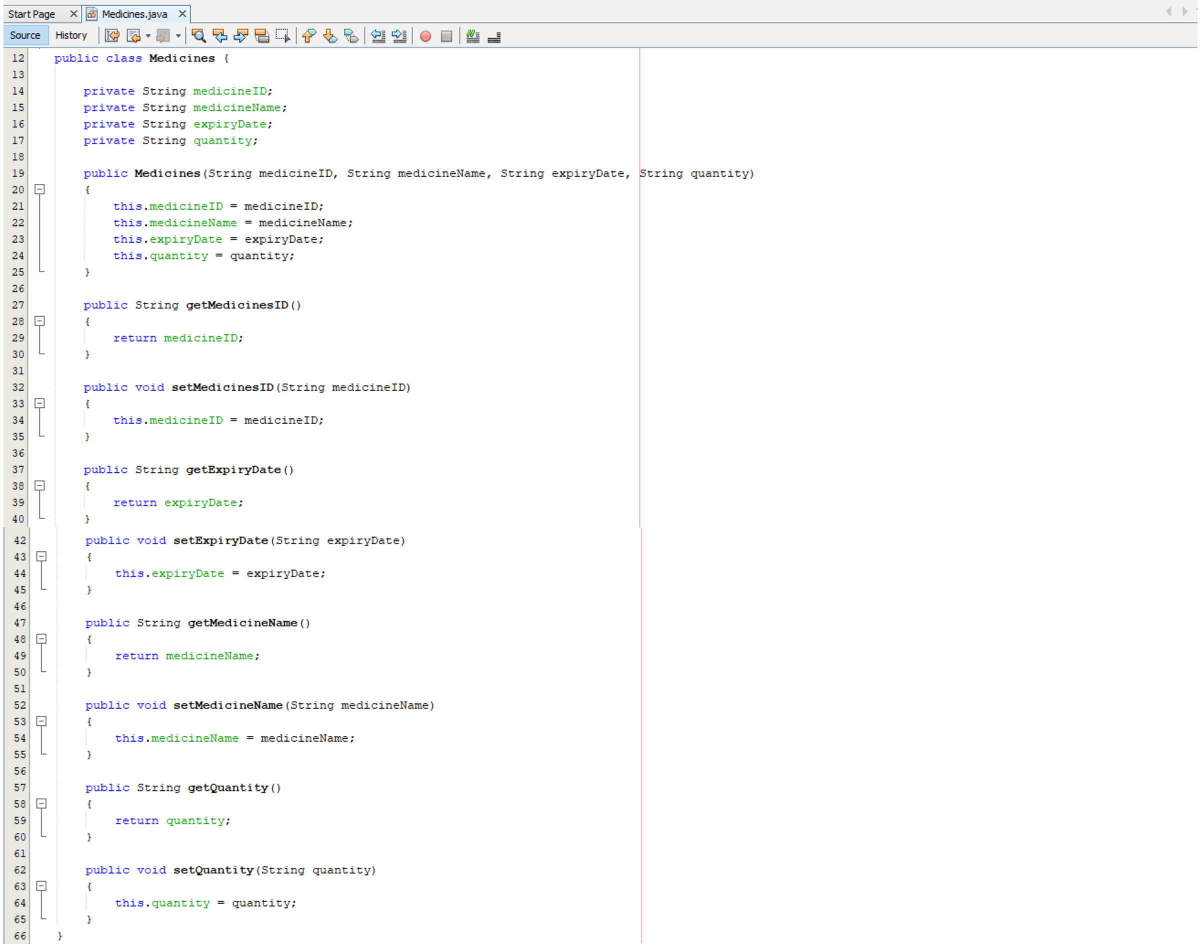
```java
    public void setPatientID(String patientID)
    {
        this.patientID = patientID;
    }

    public String getPatientName()
    {
        return patientName;
    }

    public void setPatientName(String patientName)
    {
        this.patientName = patientName;
    }

    public String getIcNumber()
    {
        return icNumber;
    }

    public void setIcNumber(String icNumber)
    {
        this.icNumber = icNumber;
    }

    public String getGender()
    {
        return gender;
    }
    public void setGender(String gender)
    {
        this.gender = gender;
    }

    public String getDate()
    {
        return date;
    }

    public void setDate(String date)
    {
        this.date = date;
    }

    public String getAddress()
    {
        return address;
    }

    public void setAddress(String address)
    {
        this.address = address;
    }

    public String getMobilePhone()
    {
        return mobilePhone;
    }
    public void setMobilePhone(String mobilePhone)
    {
        this.mobilePhone = mobilePhone;
    }

    public String getEmailAddress()
    {
        return emailAddress;
    }

    public void setEmailAddress(String emailAddress)
    {
        this.emailAddress = emailAddress;
    }
}
```

d) BookingAppointment.java



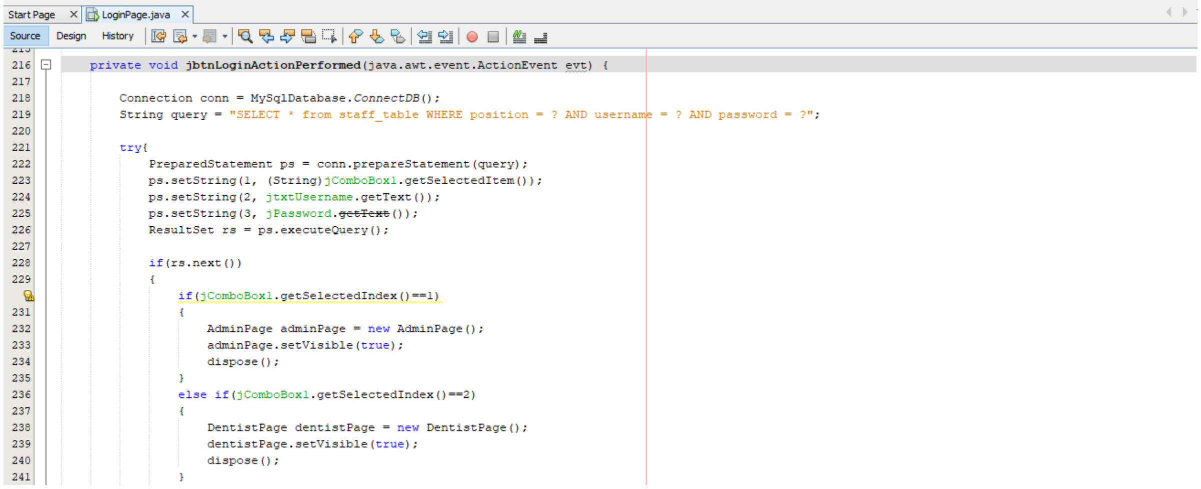
```java
public class BookingAppointment {

    private String bookingNum;
    private String patientID;
    private String patientName;
    private String date;
    private String time;
    private String dentistID;
    private String dentistName;

    public BookingAppointment(String bookingNum, String patientID, String patientName, String date, String time, String dentistID, String dentistName) {
        this.bookingNum = bookingNum;
        this.patientID = patientID;
        this.patientName = patientName;
        this.date = date;
        this.time = time;
        this.dentistID = dentistID;
        this.dentistName = dentistName;
    }

    public String getBookingNum()
    {
        return bookingNum;
    }

    public void setBookingNum(String bookingNum)
    {
        this.bookingNum = bookingNum;
    }
    public String getPatientID()
    {
        return patientID;
    }

    public void setPatientID(String patientID)
    {
        this.patientID = patientID;
    }

    public String getPatientName()
    {
        return patientName;
    }

    public void setPatientName(String patientName)
    {
        this.patientName = patientName;
    }

    public String getDate()
    {
        return date;
    }

    public void setDate(String date)
    {
        this.date = date;
    }
    public String getTime()
    {
        return time;
    }

    public void setTime(String time)
    {
        this.time = time;
    }

    public String getDentistID()
    {
        return dentistID;
    }

    public void setDentistID(String dentistID)
    {
        this.dentistID = dentistID;
    }

    public String getDentistName()
    {
        return dentistName;
    }

    public void setDentistName(String dentistName)
    {
        this.dentistName = dentistName;
    }
```

e) Medicines.java

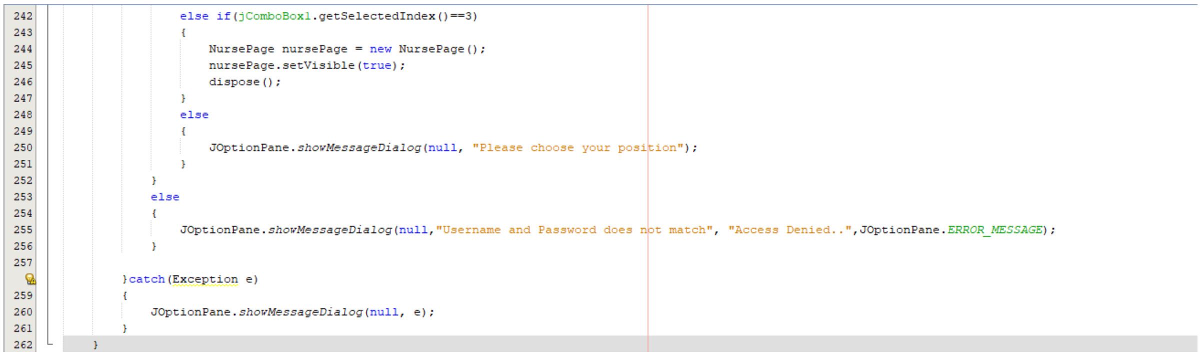


```java
public class Medicines {

    private String medicineID;
    private String medicineName;
    private String expiryDate;
    private String quantity;

    public Medicines(String medicineID, String medicineName, String expiryDate, String quantity)
    {
        this.medicineID = medicineID;
        this.medicineName = medicineName;
        this.expiryDate = expiryDate;
        this.quantity = quantity;
    }

    public String getMedicinesID()
    {
        return medicineID;
    }

    public void setMedicinesID(String medicineID)
    {
        this.medicineID = medicineID;
    }

    public String getExpiryDate()
    {
        return expiryDate;
    }
    public void setExpiryDate(String expiryDate)
    {
        this.expiryDate = expiryDate;
    }

    public String getMedicineName()
    {
        return medicineName;
    }

    public void setMedicineName(String medicineName)
    {
        this.medicineName = medicineName;
    }

    public String getQuantity()
    {
        return quantity;
    }

    public void setQuantity(String quantity)
    {
        this.quantity = quantity;
    }
}
```

3. Login

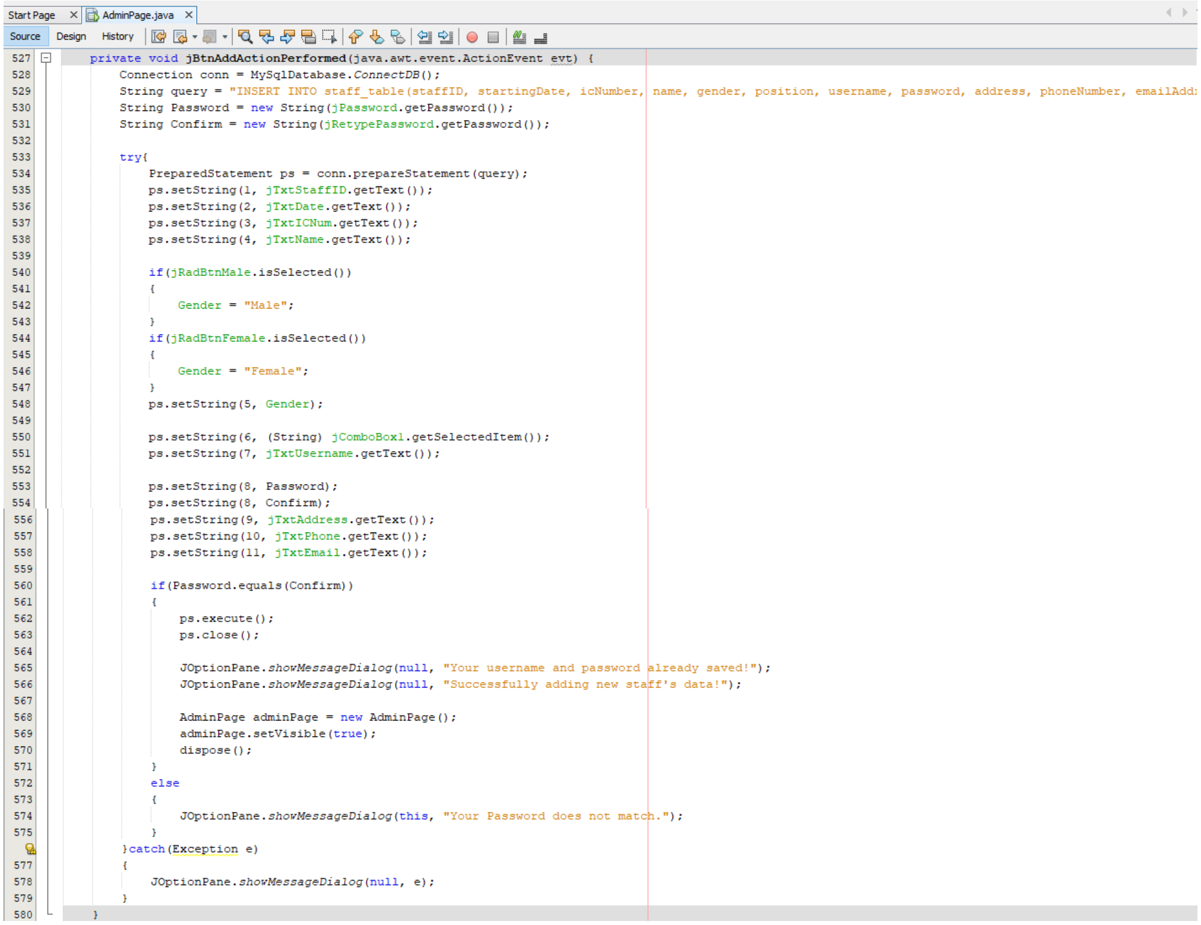


```java
    private void jbtnLoginActionPerformed(java.awt.event.ActionEvent evt) {

        Connection conn = MySqlDatabase.ConnectDB();
        String query = "SELECT * from staff_table WHERE position = ? AND username = ? AND password = ?";

        try{
            PreparedStatement ps = conn.prepareStatement(query);
            ps.setString(1, (String)jComboBox1.getSelectedItem());
            ps.setString(2, jtxtUsername.getText());
            ps.setString(3, jPassword.~~getText~~());
            ResultSet rs = ps.executeQuery();

            if(rs.next())
            {
                if(jComboBox1.getSelectedIndex()==1)
                {
                    AdminPage adminPage = new AdminPage();
                    adminPage.setVisible(true);
                    dispose();
                }
                else if(jComboBox1.getSelectedIndex()==2)
                {
                    DentistPage dentistPage = new DentistPage();
                    dentistPage.setVisible(true);
                    dispose();
                }
```

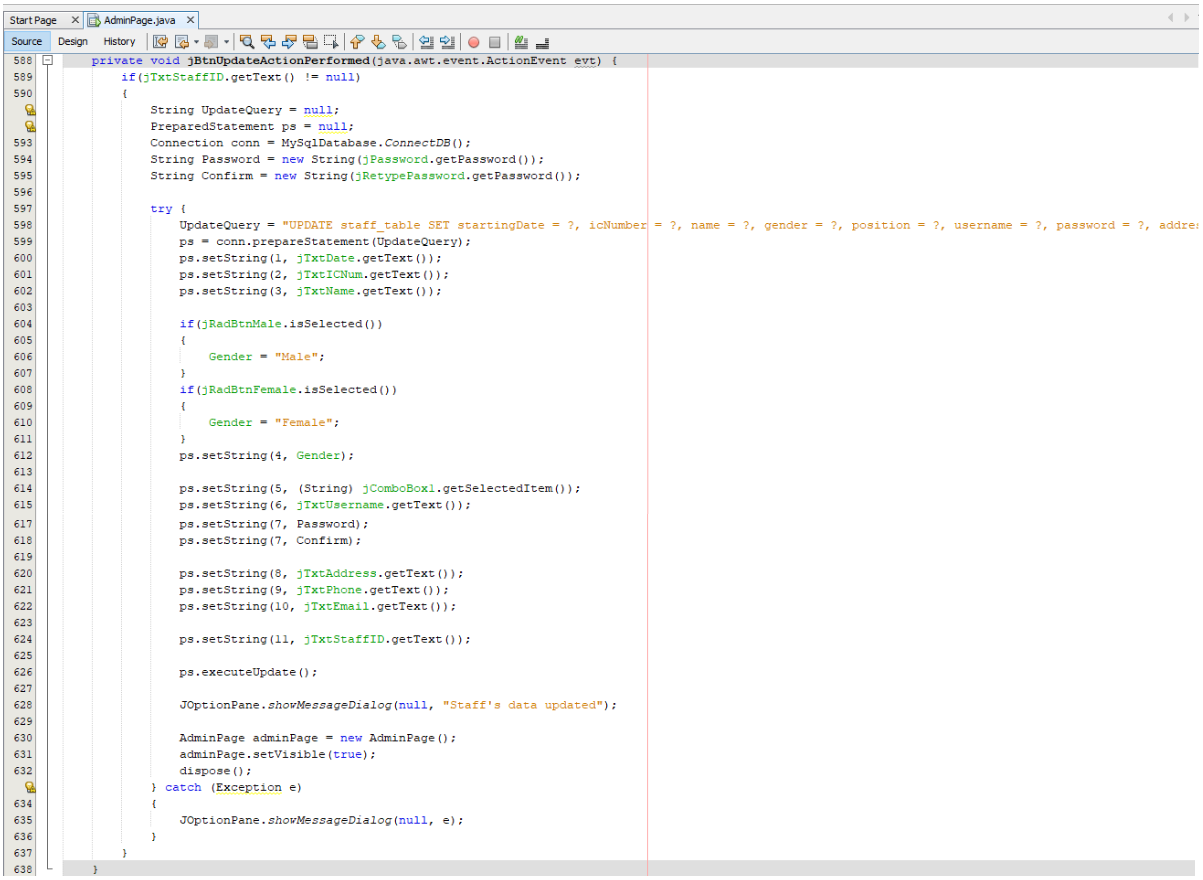


```java
                else if(jComboBox1.getSelectedIndex()==3)
                {
                    NursePage nursePage = new NursePage();
                    nursePage.setVisible(true);
                    dispose();
                }
                else
                {
                    JOptionPane.showMessageDialog(null, "Please choose your position");
                }
            }
            else
            {
                JOptionPane.showMessageDialog(null,"Username and Password does not match", "Access Denied..",JOptionPane.ERROR_MESSAGE);
            }

        }catch(Exception e)
        {
            JOptionPane.showMessageDialog(null, e);
        }
    }
```

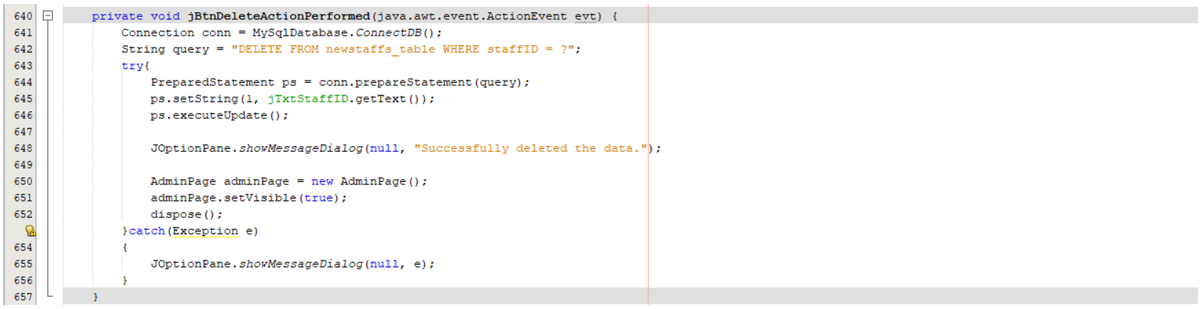
4. Insert, Update, Delete.



```java
    private void jBtnAddActionPerformed(java.awt.event.ActionEvent evt) {
        Connection conn = MySqlDatabase.ConnectDB();
        String query = "INSERT INTO staff_table(staffID, startingDate, icNumber, name, gender, position, username, password, address, phoneNumber, emailAdd
        String Password = new String(jPassword.getPassword());
        String Confirm = new String(jRetypePassword.getPassword());

        try{
            PreparedStatement ps = conn.prepareStatement(query);
            ps.setString(1, jTxtStaffID.getText());
            ps.setString(2, jTxtDate.getText());
            ps.setString(3, jTxtICNum.getText());
            ps.setString(4, jTxtName.getText());

            if(jRadBtnMale.isSelected())
            {
                Gender = "Male";
            }
            if(jRadBtnFemale.isSelected())
            {
                Gender = "Female";
            }
            ps.setString(5, Gender);

            ps.setString(6, (String) jComboBox1.getSelectedItem());
            ps.setString(7, jTxtUsername.getText());

            ps.setString(8, Password);
            ps.setString(8, Confirm);
            ps.setString(9, jTxtAddress.getText());
            ps.setString(10, jTxtPhone.getText());
            ps.setString(11, jTxtEmail.getText());

            if(Password.equals(Confirm))
            {
                ps.execute();
                ps.close();

                JOptionPane.showMessageDialog(null, "Your username and password already saved!");
                JOptionPane.showMessageDialog(null, "Successfully adding new staff's data!");

                AdminPage adminPage = new AdminPage();
                adminPage.setVisible(true);
                dispose();
            }
            else
            {
                JOptionPane.showMessageDialog(this, "Your Password does not match.");
            }
        }catch(Exception e)
        {
            JOptionPane.showMessageDialog(null, e);
        }
    }
```

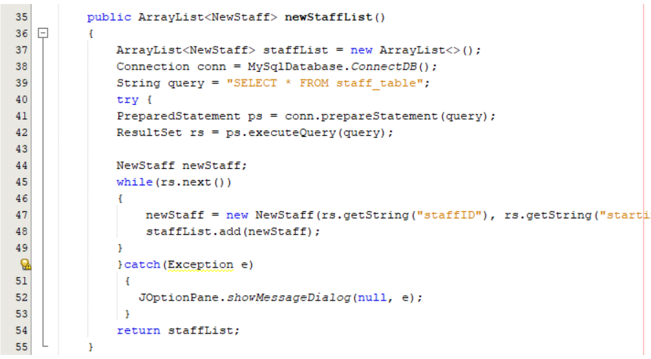


```
    private void jBtnUpdateActionPerformed(java.awt.event.ActionEvent evt) {
        if(jTxtStaffID.getText() != null)
        {
            String UpdateQuery = null;
            PreparedStatement ps = null;
            Connection conn = MySqlDatabase.ConnectDB();
            String Password = new String(jPassword.getPassword());
            String Confirm = new String(jRetypePassword.getPassword());

            try {
                UpdateQuery = "UPDATE staff_table SET startingDate = ?, icNumber = ?, name = ?, gender = ?, position = ?, username = ?, password = ?, addre
                ps = conn.prepareStatement(UpdateQuery);
                ps.setString(1, jTxtDate.getText());
                ps.setString(2, jTxtICNum.getText());
                ps.setString(3, jTxtName.getText());

                if(jRadBtnMale.isSelected())
                {
                    Gender = "Male";
                }
                if(jRadBtnFemale.isSelected())
                {
                    Gender = "Female";
                }
                ps.setString(4, Gender);

                ps.setString(5, (String) jComboBox1.getSelectedItem());
                ps.setString(6, jTxtUsername.getText());
                ps.setString(7, Password);
                ps.setString(7, Confirm);

                ps.setString(8, jTxtAddress.getText());
                ps.setString(9, jTxtPhone.getText());
                ps.setString(10, jTxtEmail.getText());

                ps.setString(11, jTxtStaffID.getText());

                ps.executeUpdate();

                JOptionPane.showMessageDialog(null, "Staff's data updated");

                AdminPage adminPage = new AdminPage();
                adminPage.setVisible(true);
                dispose();
            } catch (Exception e)
            {
                JOptionPane.showMessageDialog(null, e);
            }
        }
    }
```

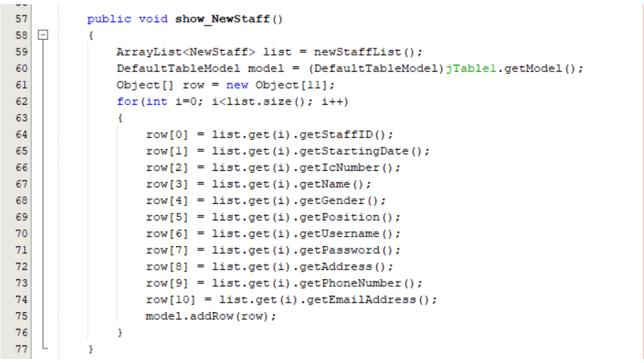


```
    private void jBtnDeleteActionPerformed(java.awt.event.ActionEvent evt) {
        Connection conn = MySqlDatabase.ConnectDB();
        String query = "DELETE FROM newstaffs_table WHERE staffID = ?";
        try{
            PreparedStatement ps = conn.prepareStatement(query);
            ps.setString(1, jTxtStaffID.getText());
            ps.executeUpdate();

            JOptionPane.showMessageDialog(null, "Successfully deleted the data.");

            AdminPage adminPage = new AdminPage();
            adminPage.setVisible(true);
            dispose();
        }catch(Exception e)
        {
            JOptionPane.showMessageDialog(null, e);
        }
    }
```

5. Show Table

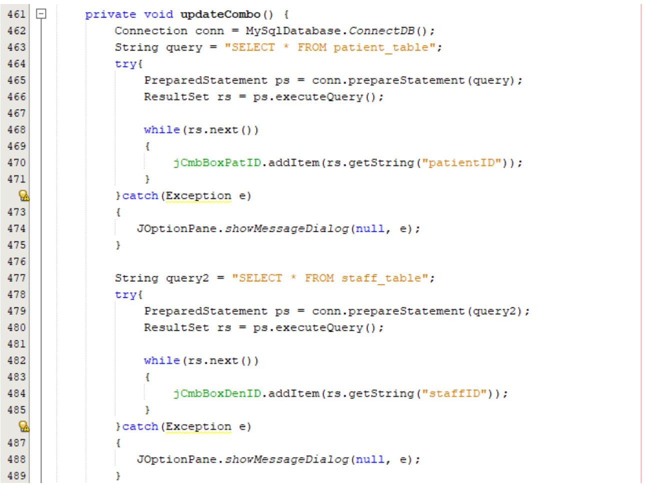


```
public ArrayList<NewStaff> newStaffList()
{
    ArrayList<NewStaff> staffList = new ArrayList<>();
    Connection conn = MySqlDatabase.ConnectDB();
    String query = "SELECT * FROM staff_table";
    try {
    PreparedStatement ps = conn.prepareStatement(query);
    ResultSet rs = ps.executeQuery(query);

    NewStaff newStaff;
    while(rs.next())
    {
        newStaff = new NewStaff(rs.getString("staffID"), rs.getString("startingDate"), rs.getString("icNumber"), rs.getString("name"), rs.getString("ge
        staffList.add(newStaff);
    }
    }catch(Exception e)
     {
       JOptionPane.showMessageDialog(null, e);
     }
    return staffList;
}
```



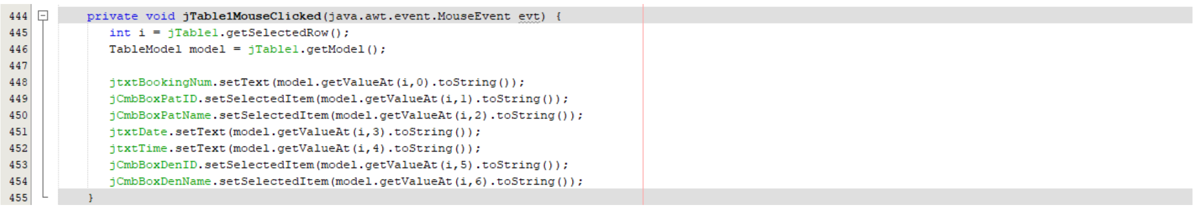
```
public void show_NewStaff()
{
    ArrayList<NewStaff> list = newStaffList();
    DefaultTableModel model = (DefaultTableModel)jTable1.getModel();
    Object[] row = new Object[11];
    for(int i=0; i<list.size(); i++)
    {
        row[0] = list.get(i).getStaffID();
        row[1] = list.get(i).getStartingDate();
        row[2] = list.get(i).getIcNumber();
        row[3] = list.get(i).getName();
        row[4] = list.get(i).getGender();
        row[5] = list.get(i).getPosition();
        row[6] = list.get(i).getUsername();
        row[7] = list.get(i).getPassword();
        row[8] = list.get(i).getAddress();
        row[9] = list.get(i).getPhoneNumber();
        row[10] = list.get(i).getEmailAddress();
        model.addRow(row);
    }
}
```

6. Searching



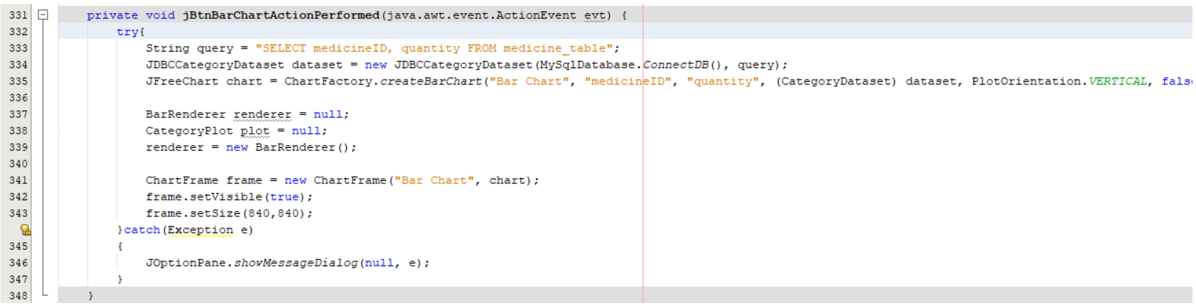
```
private void updateCombo() {
    Connection conn = MySqlDatabase.ConnectDB();
    String query = "SELECT * FROM patient_table";
    try{
        PreparedStatement ps = conn.prepareStatement(query);
        ResultSet rs = ps.executeQuery();

        while(rs.next())
        {
            jCmbBoxPatID.addItem(rs.getString("patientID"));
        }
    }catch(Exception e)
    {
       JOptionPane.showMessageDialog(null, e);
    }

    String query2 = "SELECT * FROM staff_table";
    try{
        PreparedStatement ps = conn.prepareStatement(query2);
        ResultSet rs = ps.executeQuery();

        while(rs.next())
        {
            jCmbBoxDenID.addItem(rs.getString("staffID"));
        }
    }catch(Exception e)
    {
       JOptionPane.showMessageDialog(null, e);
    }
```

7. Mouse Clicked



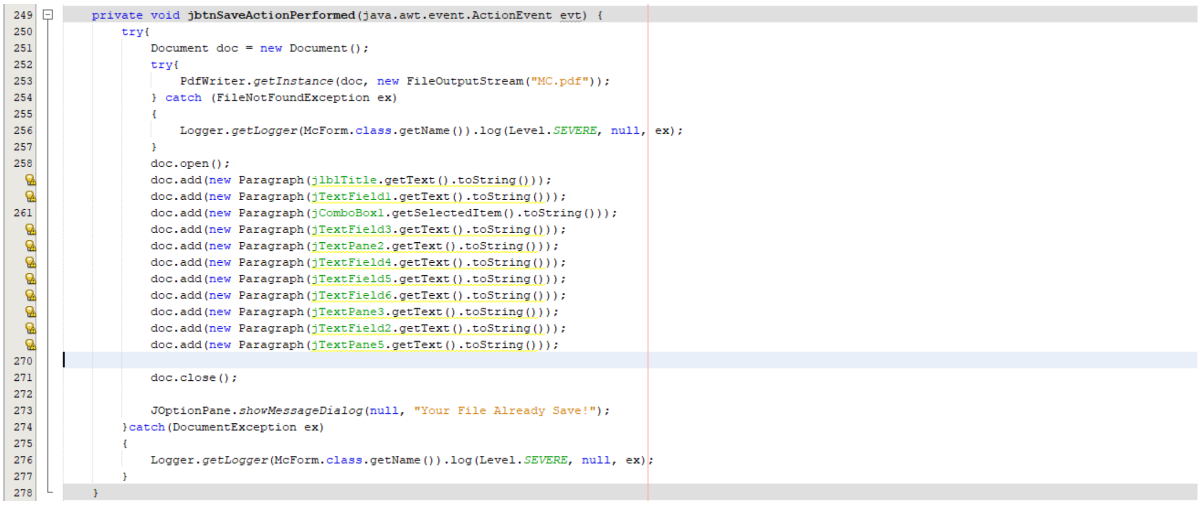
```java
private void jTable1MouseClicked(java.awt.event.MouseEvent evt) {
    int i = jTable1.getSelectedRow();
    TableModel model = jTable1.getModel();

    jtxtBookingNum.setText(model.getValueAt(i,0).toString());
    jCmbBoxPatID.setSelectedItem(model.getValueAt(i,1).toString());
    jCmbBoxPatName.setSelectedItem(model.getValueAt(i,2).toString());
    jtxtDate.setText(model.getValueAt(i,3).toString());
    jtxtTime.setText(model.getValueAt(i,4).toString());
    jCmbBoxDenID.setSelectedItem(model.getValueAt(i,5).toString());
    jCmbBoxDenName.setSelectedItem(model.getValueAt(i,6).toString());
}
```

8. Bar Chart



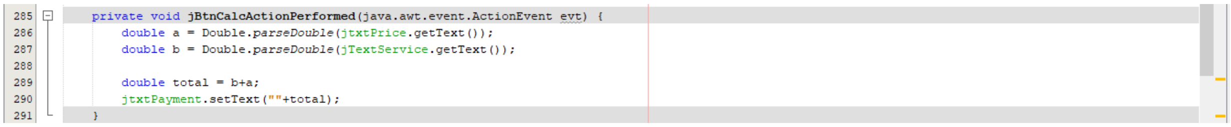
```java
private void jBtnBarChartActionPerformed(java.awt.event.ActionEvent evt) {
    try{
        String query = "SELECT medicineID, quantity FROM medicine_table";
        JDBCCategoryDataset dataset = new JDBCCategoryDataset(MySqlDatabase.ConnectDB(), query);
        JFreeChart chart = ChartFactory.createBarChart("Bar Chart", "medicineID", "quantity", (CategoryDataset) dataset, PlotOrientation.VERTICAL, fals

        BarRenderer renderer = null;
        CategoryPlot plot = null;
        renderer = new BarRenderer();

        ChartFrame frame = new ChartFrame("Bar Chart", chart);
        frame.setVisible(true);
        frame.setSize(840,840);
    }catch(Exception e)
    {
        JOptionPane.showMessageDialog(null, e);
    }
}
```

9. .pdf File



```java
private void jbtnSaveActionPerformed(java.awt.event.ActionEvent evt) {
    try{
        Document doc = new Document();
        try{
            PdfWriter.getInstance(doc, new FileOutputStream("MC.pdf"));
        } catch (FileNotFoundException ex)
        {
            Logger.getLogger(McForm.class.getName()).log(Level.SEVERE, null, ex);
        }
        doc.open();
        doc.add(new Paragraph(jlblTitle.getText().toString()));
        doc.add(new Paragraph(jTextField1.getText().toString()));
        doc.add(new Paragraph(jComboBox1.getSelectedItem().toString()));
        doc.add(new Paragraph(jTextField3.getText().toString()));
        doc.add(new Paragraph(jTextPane2.getText().toString()));
        doc.add(new Paragraph(jTextField4.getText().toString()));
        doc.add(new Paragraph(jTextField5.getText().toString()));
        doc.add(new Paragraph(jTextField6.getText().toString()));
        doc.add(new Paragraph(jTextPane3.getText().toString()));
        doc.add(new Paragraph(jTextField2.getText().toString()));
        doc.add(new Paragraph(jTextPane5.getText().toString()));

        doc.close();

        JOptionPane.showMessageDialog(null, "Your File Already Save!");
    }catch(DocumentException ex)
    {
        Logger.getLogger(McForm.class.getName()).log(Level.SEVERE, null, ex);
    }
}
```

10. Calculation



```java
private void jBtnCalcActionPerformed(java.awt.event.ActionEvent evt) {
    double a = Double.parseDouble(jtxtPrice.getText());
    double b = Double.parseDouble(jTextService.getText());

    double total = b+a;
    jtxtPayment.setText(""+total);
}
```

CHAPTER 5

Conclusion

Dental Clinic Management System helping on making the system in clinic especially dental clinic more efficient. This project giving opportunity to create a useable system. Moreover, this project motivates to learn how to connect programming with database. I was hoping that this system giving good effect towards society especially to the users of this system. I also hope that this project can help producing new Malaysia that advanced in technologies.

REFERENCES

1. Writing coding in java

   https://www.youtube.com/user/ProgrammingKnowledge

   https://stackoverflow.com