

## Student Database Management System

## Entering IP Address

```

"C:\Users\Dohnm\OneDrive\...  +  v  Enter Ip Address: 10.22.197.52
STUDENT MANAGEMENT SYSTEM
Enter Ip Address: 10.22.197.52
[1]ADD
[2]DELETE
[3]EDIT
[4]VIEW
[5]EXIT
|

```

## Adding Record

```

STUDENT MANAGEMENT SYSTEM
[1]ADD
[2]DELETE
[3]EDIT
[4]VIEW
[5]EXIT
1
Enter Student Id(XX-X-XXXXX): 23-1-02140
Enter Surname: Varquez
Enter Firstname: Dohn Michael
Enter Birthdate(MM-DD-YYYY): 12-01-2004
Enter Address(Baranggay, Town, Province): Purok 6 Tipolo, Ubay, Bohol
Enter Gender(M/F): M

RECORD INSERTED...

Press any key to continue . . . |

```

## Deleting Record

```

STUDENT MANAGEMENT SYSTEM
[1]ADD
[2]DELETE
[3]EDIT
[4]VIEW
[5]EXIT
2
24-1-00484 | stephen roland | adorza | 06-20-2006 | M | larrazabal, naval, biliran
24-1-23452 | Norman John | Bandibas | 03-30-2006 | M | Casao, Bontoc, Southern Leyte
23-1-01570 | Frances Ryza | Panelo | 09-21-2005 | F | Alta Vista, Ormoc City, Leyte
23-1-02150 | Fanum Tax | Skibidi | 23-12-2005 | M | Ohio
24-1-00321 | Gian Carlo | Suico | 01-29-2006 | M | Tinago, Bato, Leyte
23-1-02140 | Dohn Michael | Varquez | 12-01-2004 | M | Purok 6 Tipolo, Ubay, Bohol

Enter StudentId to delete: 23-1-02150
ROW DELETED...
Press any key to continue . . . |

```

2

```

STUDENT MANAGEMENT SYSTEM
[1]ADD
[2]DELETE
[3]EDIT
[4]VIEW
[5]EXIT
4
23-1-01570 | Frances Ryza | Panelo | 09-21-2005 | F | Alta Vista, Ormoc City, Leyte
23-1-02140 | Dohn Michael | Varquez | 12-01-2004 | M | Purok 6 Tipolo, Ubay, Bohol
24-1-00321 | Gian Carlo | Suico | 01-29-2006 | M | Tinago, Bato, Leyte
24-1-00484 | stephen roland | adorza | 06-20-2006 | M | larrazabal, naval, biliran
24-1-23452 | Norman John | Bandibas | 03-30-2006 | M | Casao, Bontoc, Southern Leyte

```

## Editing Record

```
24-1-00484 | stephen roland | adorza | 06-20-2006 | M | larrazabal, naval, biliran
24-1-23452 | Norman John | Bandibas | 03-30-2006 | M | Casao, Bontoc, Southern Leyte
23-1-01570 | Frances Ryza | Panelo | 09-21-2005 | F | Alta Vista, Ormoc City, Leyte
24-1-00321 | Gian Carlo | Suico | 01-29-2006 | M | Tinago, Bato, Leyte
23-1-02140 | Dohn Michael | Varquez | 12-01-2004 | M | Purok 6 Tipolo, Ubay, Bohol
Enter Record to Edit: 24-1-00484
Enter Student Id(XX-XX-XXXXX): 24-1-00484
Enter Surname: Adorza
Enter Firstname: Stephen Roland
Enter Birthdate: 06-20-2006
Enter Address: Larrazabal, Naval, Biliran
Enter Gender(M/F): M
CHANGES MADE
```

```
23-1-01570 | Frances Ryza | Panelo | 09-21-2005 | F | Alta Vista, Ormoc City, Leyte
23-1-02140 | Dohn Michael | Varquez | 12-01-2004 | M | Purok 6 Tipolo, Ubay, Bohol
24-1-00321 | Gian Carlo | Suico | 01-29-2006 | M | Tinago, Bato, Leyte
24-1-00484 | Stephen Roland | Adorza | 06-20-2006 | M | Larrazabal, Naval, Biliran
24-1-23452 | Norman John | Bandibas | 03-30-2006 | M | Casao, Bontoc, Southern Leyte
```

## Viewing Record

```
STUDENT MANAGEMENT SYSTEM
[1]ADD
[2]DELETE
[3]EDIT
[4]VIEW
[5]EXIT
4
23-1-01570 | Frances Ryza | Panelo | 09-21-2005 | F | Alta Vista, Ormoc City, Leyte
23-1-02140 | Dohn Michael | Varquez | 12-01-2004 | M | Purok 6 Tipolo, Ubay, Bohol
24-1-00321 | Gian Carlo | Suico | 01-29-2006 | M | Tinago, Bato, Leyte
24-1-00484 | Stephen Roland | Adorza | 06-20-2006 | M | Larrazabal, Naval, Biliran
24-1-23452 | Norman John | Bandibas | 03-30-2006 | M | Casao, Bontoc, Southern Leyte
```

## Viewing Sorted Record

```
23-1-01570 | Frances Ryza | Panelo | 09-21-2005 | F | Alta Vista, Ormoc City, Leyte
23-1-02140 | Dohn Michael | Varquez | 12-01-2004 | M | Purok 6 Tipolo, Ubay, Bohol
24-1-00321 | Gian Carlo | Suico | 01-29-2006 | M | Tinago, Bato, Leyte
24-1-00484 | Stephen Roland | Adorza | 06-20-2006 | M | Larrazabal, Naval, Biliran
24-1-23452 | Norman John | Bandibas | 03-30-2006 | M | Casao, Bontoc, Southern Leyte
```

Do you wish to sort data? (y/n): y|

```
24-1-00484 | Stephen Roland | Adorza | 06-20-2006 | M | Larrazabal, Naval, Biliran
24-1-23452 | Norman John | Bandibas | 03-30-2006 | M | Casao, Bontoc, Southern Leyte
23-1-01570 | Frances Ryza | Panelo | 09-21-2005 | F | Alta Vista, Ormoc City, Leyte
24-1-00321 | Gian Carlo | Suico | 01-29-2006 | M | Tinago, Bato, Leyte
23-1-02140 | Dohn Michael | Varquez | 12-01-2004 | M | Purok 6 Tipolo, Ubay, Bohol
Press any key to continue . . . |
```

## Source Code

```
#include <iostream>

#include <windows.h>

#include <mysql.h>

#include <iomanip>

#include <sstream>

#include <ctype.h>

#include <string>


using namespace std;


void addRec(string ipAdd);

void delRec(string ipAdd);

void viewRec(string ipAdd);

void editRec(string ipAdd);

void viewSort(string ipAdd);

MYSQL* connect(string ipAdd);

int main()

{

    /*MYSQL* conn;

    conn = mysql_init(0);

    conn = mysql_real_connect(conn, "10.214.3.15", "admin", "admin", "test1", 0, NULL, 0);

    if(conn)

        cout<<"CONNECTED\n";

    else

        cout<<"ERROR";

    int qstate = 0;

    stringstream ss;

    string name = "rhuel gwapo";

    ss<<"INSERT INTO testt1(name) VALUES('"<< name <<"')";
```

```

string query = ss.str();

const char* q = query.c_str();

qstate = mysql_query(conn, q);


if(qstate == 0)

{
    cout<<"RECORD INSERTED...";

}

else

    cout<<"FAILED to insert";

*/

string ipAdd;

cout<<"Enter Ip Address: ";

cin>>ipAdd;


int checkRun = 0;

while(checkRun == 0)

{

    int choice;


    cout<<"STUDENT MANAGEMENT
SYSTEM"<<endl<<"[1]ADD"<<endl<<"[2]DELETE"<<endl<<"[3]EDIT"<<endl<<"[4]VIEW"<<endl<<"[5]EXIT"<<endl;


    cin>>choice;


    switch(choice)

    {

    case 1:

        addRec(ipAdd);

        system("pause");

        system("cls");

        break;

    case 2:

        delRec(ipAdd);

        system("pause");

```

```

        system("cls");

        break;

case 3:

    editRec(ipAdd);

    system("pause");

    system("cls");

    break;

case 4:

    viewRec(ipAdd);

    system("pause");

    system("cls");

    break;

case 5:

    checkRun = 1;

    break;

default:

    cout<<"Command not Available...\n";

    system("pause");

    system("cls");

    break;

}

cin.ignore();

}

}

MYSQL* connect(string ipAdd)

{

    MYSQL* conn;

    conn = mysql_init(0);


    const char* q = ipAdd.c_str();

    conn = mysql_real_connect(conn, q, "admin", "admin", "dbms", 0, NULL, 0);


    return conn;

}

void addRec(string ipAdd)

```

```

{
    MYSQL* checkCon = connect(ipAdd);

    if(checkCon)
    {
        string studentID, surname, firstname, birthdate, address, gender;

        int qstate = 0;

        cout << "Enter Student Id(XX-X-XXXXX): ";

        cin >> studentID;

        cout << "Enter Surname: ";

        cin.ignore();

        getline(cin, surname);

        cout << "Enter Firstname: ";

        getline(cin, firstname);

        cout << "Enter Birthdate(MM-DD-YYYY): ";

        getline(cin, birthdate);

        cout << "Enter Address(Baranggay, Town, Province): ";

        getline(cin, address);

        cout << "Enter Gender(M/F): ";

        cin >> gender;

        if(studentID.length() > 10 || studentID.length() < 10)
        {
            cout<<"Record failed to insert. Invalid input on Student Id.\n";

            return;
        }

        else if(birthdate.length() > 10 || birthdate.length() < 10)
        {
            cout<<"Record failed to insert. Invalid input on Birthdate.\n";

            return;
        }
    }
}

```

```

    }

    else if(gender.length() > 1 || gender.length() < 1)

    {

        cout<<"Record failed to insert. Invalid input on Gender.\n";

        return;

    }


stringstream ss;


ss<<"INSERT INTO student(studentID, surname, firstname, birthdate, address, gender) VALUES('"<<studentID<<"',"
<<surname<<"',"<<firstname<<"',"<<birthdate<<"',"<<address<<"',"<<gender<<"");


string query = ss.str();

const char* q = query.c_str();

qstate = mysql_query(checkCon, q);


cout<<endl;


if(qstate == 0)

    cout<<"RECORD INSERTED...\n"<<endl;

else

    cout<<"FAILED TO INSERT...\n"<<endl;

}

else

    cout<<"FAILED TO ESTABLISH CONNECTION...\n";

}

void viewRec(string ipAdd)

{

    MYSQL* checkCon = connect(ipAdd);

    MYSQL_ROW row;

    MYSQL_RES* res;

    char ans;


    if(checkCon)

    {

```

```

int qstate = mysql_query(checkCon, "SELECT studentID, firstname, surname, birthdate, gender, address FROM student");

if(!qstate)
{
    res = mysql_store_result(checkCon);

    while((row = mysql_fetch_row(res)))
        cout<<setw(10)<<left<<row[0]<<" | "<<setw(15)<<left<<row[1]<<" | "<<setw(15)<<left<<row[2]<<" |
"<<setw(10)<<left<<row[3]<<" | "<<setw(2)<<left<<row[4]<<" | "<<setw(15)<<left<<row[5]<<endl;
}

cout<<"\nDo you wish to sort data? (y/n): ";
cin>>ans;

if(ans == 'y')
{
    system("cls");
    viewSort(ipAdd);
}
}

void delRec(string ipAdd)
{
    MYSQL* checkCon = connect(ipAdd);

    if(checkCon)
    {
        viewSort(ipAdd);
        string studentID;

        cout<<"\n Enter StudentId to delete: ";
        cin>>studentID;

        stringstream ss;

        ss<<"DELETE FROM student WHERE studentID = '"+ studentID +"'";
    }
}

```



```

string query = ss.str();

const char* q = query.c_str();

int qstate = mysql_query(checkCon,q);

if(qstate == 0)
    cout<<"ROW DELETED...\n";
else
    cout<<"ROW FAILED TO DELETE...\n";
}

else
    cout<<"FAILED TO ESTABLISH CONNECTION...\n";
}

void editRec(string ipAdd)
{
    MYSQL *checkCon = connect(ipAdd);

    if(checkCon)
    {
        viewRec(ipAdd);

        string studentIDTE, studentID, surname, firstname, birthdate, address, gender;

        int qstate = 0;

        cout<<"Enter Record to Edit: ";

        cin>>studentIDTE;

        cout << "Enter Student Id(XX-XX-XXXXX): ";

        cin >> studentID;

        cout << "Enter Surname: ";

        cin.ignore();

        getline(cin, surname);

        cout << "Enter Firstname: ";

        getline(cin, firstname);

```

```

cout << "Enter Birthdate: ";

getline(cin, birthdate);


cout << "Enter Address: ";

getline(cin, address);


cout << "Enter Gender(M/F): ";

cin >> gender;


stringstream ss;


ss << "UPDATE student SET studentID = '" << studentID << "', surname = '" << surname << "', firstname = '" << firstname << "',
birthdate = '" << birthdate << "', address = '" << address << "', gender = '" << gender << "' WHERE studentID = '" << studentIDTE <<
"',
";


string query = ss.str();

const char* q = query.c_str();

qstate = mysql_query(checkCon, q);


cout<<endl;


if(qstate == 0)

    cout<<"CHANGES MADE...\n"<<endl;

else

    cout<<"FAILED TO CHANGE DATA...\n"<<endl;

}

else

    cout<<"FAILED TO ESTABLISH DATA...\n";

}

void viewSort(string ipAdd)

{

    MYSQL *checkCon = connect(ipAdd);

    MYSQL_ROW row;

    MYSQL_RES* res;

```

```

if(checkCon)

{

    int qstate = mysql_query(checkCon, "SELECT studentID, firstname, surname, birthdate, gender, address FROM student ORDER
    BY surname");

    if(!qstate)

    {

        res = mysql_store_result(checkCon);

        while((row = mysql_fetch_row(res)))

            cout<<setw(10)<<left<<row[0]<<" | "<<setw(15)<<left<<row[1]<<" | "<<setw(15)<<left<<row[2]<<" |
            "<<setw(10)<<left<<row[3]<<" | "<<setw(2)<<left<<row[4]<<" | "<<setw(15)<<left<<row[5]<<endl;

        }

    }

else

    cout<<"FAILED TO ESTABLISH DATA...\n";

}

```