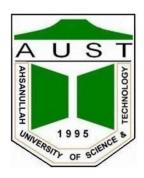
Ahsanullah University of Science and Technology

Department of Computer Science and Engineering



Project Name: **Police Station Case Management**

System

Couse Name: Database Lab

Couse ID: CSE 3104 **Semester:** FALL 2018

Student ID: Student Name

160204065 Abanti Chakraborty Shruti

160204072 Anika Tanzim

160204073 Marufa Kamal

Introduction:

Police Station Case management system is a java-based software platform which allows the user to store all the record related to a case in the software rather than writing it manually in the hard paper of the FIR registration files. The main aim is to store the Case number and its related attributes so that if an information is ever required it can provide the accurate details about it without going through all the paperwork. And the SQL database helps to minimize the time of the police officers increasing efficiency and effectiveness.

Motivation and Objective:

Even though technology has reached almost in every sector in our daily lives yet Police stations are still in practice of the old paper based working methods. Paperwork often may lead to missing files, data redundancy, lack of good storage media, records not properly secured and such. So, to eliminate this paperwork method and its drawbacks we aimed to build this software.

In future we also wish to make this software far more secured and as this is a complete new software which is not yet in use this can be used in all the Police stations of our country by the police officers.

Database Tables:

Table 01: DistrictCodes table

Field	Type	Constraint
DistrictId	Int	P.K (IS: 1001)
DistrictName	Varchar(50)	Not Null

Table 02: PoliceStation Table

Field Name	Type	Constraint
PoliceStationId	Int	Not Null P.K(IS:2001)
PolicestationName	Varchar(100)	Not Null
CodeNo	Int	Not Null
Area	Varchar(50)	Not Null
OfficerInCharge	Varchar(100)	Null

Table 03: PoliceOfficer table

Field Name	Type	Constraint
PoliceOfficerId	Int	P.K(IS:7001)
PoliceOfficerName	Varchar(100)	Not Null
Designation	Varchar(50)	Not Null
Area	Varchar(100)	Not Null
CaseHandledNo	Int	Null
PhoneNo	Varchar(11)	Not Null
Address	Varchar(100)	Null
DutyHour	Int	Default value(8)
YearsOfExperience	Int	Null

Table 04: Cases

Field Name	Туре	Constraint
CaseNo	Int	P.K (IS:6001)
SectionNo	Int	Not Null
PoliceStationId	Int	F.K(PoliceStation)
PoliceOfficerId	Int	F.K(PoliceOfficer)
MagistrateSection	Int	Null
StolenGoods	Varchar(100)	Null
RevivedGoods	Varchar(100)	Null
CaseAcceptance	Varchar(5)	Not Null
ComplainLetterNo	Int	Not Null
FinalReport	Varchar(5)	Null
CriminalStatus	Varchar(100)	Not Null
InvestigatingOfficerName	Varchar(100)	Not Null
CaseFilerName	Varchar(100)	Not Null
AreaOfCrime	Varchar(100)	Null
ClosingDate	Varchar(15)	Null
ReceivingDate	DateTime	Not Null
TypeOfCase	Varchar(10)	Not Null

Table 05: Victim

Field Name	Type	Constraint
VictimId	Int	P.K(IS: 1001)
CaseNo	Int	F.K(Cases)
VictimName	Varchar(100)	Not Null
Age	Int	Not Null
FathersName	Varchar(100)	Null
Village	Varchar(50)	Null
Thana	Varchar(50)	Not Null
DistrictId	Int	Not Null
PresentAdress	Varchar(100)	Not Null
PresentThana	Varchar(50)	Null
PresentDistrictId	Int	Null
MobileNo	Varchar(11)	Not Null

Table 06: Accused

Field Name	Туре	Constraint
AccusedId	Int	P.K(IS: 3001)
CaseNo	Int	F.K(Cases)
AccusedName	Varchar(50)	Not Null
Age	Int	Not Null
FathersName	Varchar(100)	Null
Village	Varchar(50)	Null
Thana	Varchar(50)	Not Null
DistrictId	Int	Not Null F.K(DictrictCodes)
PresentAdress	Varchar(100)	Not Null
PresentThana	Varchar(50)	Null
PresentDistrictId	Varchar(50)	Null F.K(DictrictCodes)

Table 07: Witness

Field Name	Type	Constraint
WitnessId	Int	P.K(IS: 4001)
CaseNo	Int	F.K(Cases)
WitnessName	Varchar(100)	Not Null
Age	Int	Not Null
FathersName	Varchar(100)	Null
Village	Varchar(50)	Null
Thana	Varchar(50)	Not Null
DistrictId	Int	Not Null F.K(DictrictCodes)
PresentAdress	Varchar(100)	Not Null
PresentThana	Varchar(50)	Null
PresentDistrictId	Varchar(50)	Null F.K(DictrictCodes)
MobileNo	Varchar(11)	Not Null

Table 08: Evidence

Field Name	Туре	Constraint
EvidenceId	Int	P.K(IS:5001)
CaseNo	Int	F.K(Cases)
EvidenceName	Varchar(100)	Not Null
Area	Varchar(50)	Null
Time	Varchar(25)	Null
CollectedFrom	Varchar(50)	Null
EvidenceStatus	Varchar(25)	Null
TypeOfEvidence	Varchar(20)	Not Null

Database Relations:

Relation 01: handles

Field	Туре	Constraint
CaseNo	Int	P.K (IS:6001)
PoliceStationId	Int	P.K(IS:2001)
CaseNo	Int	F.K (Case)
PoliceStationId	Int	F.K (PoliceStation)

Relation 02: files

Field	Type	Constraint
CaseNo	Int	P.K (IS:6001)
VictimId	Int	P.K(IS: 1001)
CaseNo	Int	F.K (Case)
VictimId	Int	F.K (Victim)

Relation 03: is against

Field	Туре	Constraint
CaseNo	Int	P.K (IS:6001)
AccusedId	Int	P.K(IS: 3001)
CaseNo	Int	F.K (Case)
AccusedId	Int	F.K (Accused)

Relation 04: has (Relationship between case and witness)

Field	Туре	Constraint
CaseNo	Int	P.K (IS:6001)
WitnessId	Int	P.K(IS: 4001)
CaseNo	Int	F.K (Case)
WitnessId	Int	F.K (Witness)

Relation 05: has (Relationship between case and evidence)

Field	Туре	Constraint
CaseNo	Int	P.K (IS:6001)
EvidenceId	Int	P.K(IS:5001)
CaseNo	Int	F.K (Case)
EvidenceId	Int	F.K (Evidence)

Relation 06: handled by

Field	Type	Constraint
CaseNo	Int	P.K (IS:6001)
PoliceOfficerId	Int	P.K(IS:7001)
CaseNo	Int	F.K (Case)
PoliceOfficerId	Int	F.K (PoliceOfficer)

Relation 07: works

Field	Type	Constraint
PoliceOfficerId	Int	P.K(IS:7001)
PoliceStationId	Int	P.K(IS:2001)
PoliceOfficerId	Int	F.K (PoliceOfficer)
PoliceStationId	Int	F.K (PoliceStation)

Relation 08:has

Field	Type	Constraint
DistrictId	Int	P.K(IS:8001)
VictimId	Int	P.K(IS:1001)
DistrictId	Int	F.K (PoliceOfficer)
VictimId	Int	F.K (Victim)

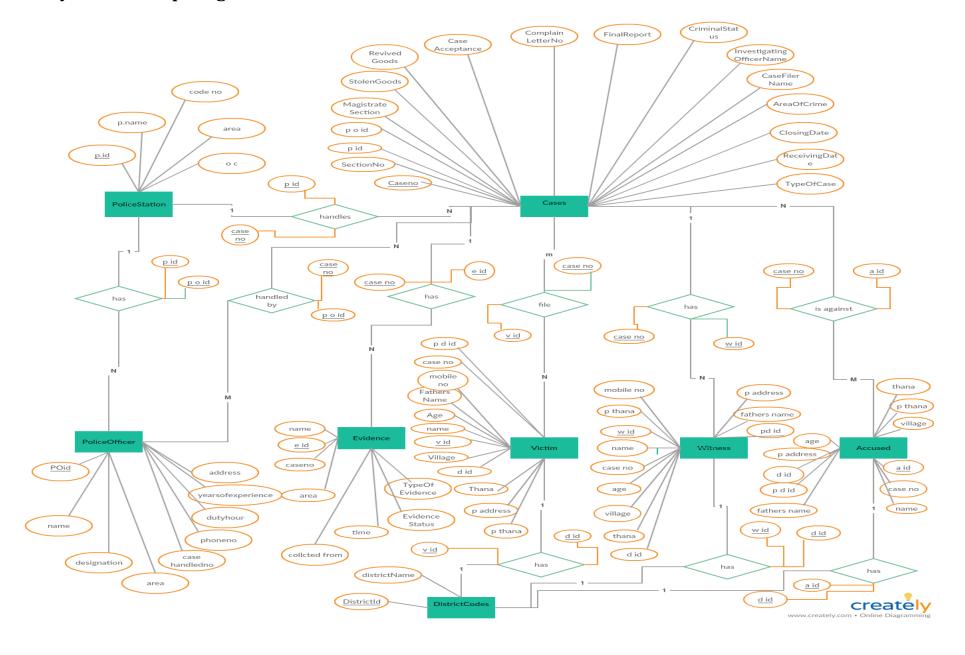
Relation 09:has

Field	Type	Constraint
DistrictId	Int	P.K(IS:8001)
AccusedId	Int	P.K(IS:3001)
DistrictId	Int	F.K (DistrictCodes)
AccusedId	Int	F.K (Accused)

Relation 10: has

Field	Type	Constraint
DistrictId	Int	P.K(IS:8001)
WitnessId	Int	P.K(IS:4001)
DistrictId	Int	F.K (DistrictCodes)
WitnessId	Int	F.K (Witness)

Entity Relationship Diagram:



Query Tables Construction

```
---table 1---
CREATE TABLE DistrictCodes(
DistrictId int IDENTITY (8001,1) PRIMARY KEY,
DistrictName varchar(50) NOT NULL
);
---table 2---
CREATE TABLE PoliceStation(
PoliceStationId int NOT NULL IDENTITY(2001,1) PRIMARY KEY,
PoliceStationName Varchar(100) NOT NULL,
CodeNo int NOT NULL,
Area varchar(50) NOT NULL,
OfficerInCharge Varchar(100)
);
---table 3---
CREATE TABLE PoliceOfficer(
PoliceOfficerId int IDENTITY(7001,1) PRIMARY KEY,
PoliceOfficerName varchar(100) NOT NULL,
Designation varchar(50) NOT NULL,
Area varchar(100) NOT NULL,
CaseHandledNo int,
PhoneNo varchar(11) NOT NULL,
Address varchar(100),
DutyHour int DEFAULT 8,
YearsOfExperience int
);
---table 4---
CREATE TABLE Cases(
CaseNo Int PRIMARY KEY IDENTITY (6001,1),
SectionNo Int Not Null,
PoliceStationId int FOREIGN KEY REFERENCES PoliceStation(PoliceStationId),
PoliceOfficerId int FOREIGN KEY REFERENCES PoliceOfficer(PoliceOfficerId).
MagistrateSection Int Null,
StolenGoods Varchar(100) Null,
RevivedGoods Varchar(100) Null,
CaseAcceptance Varchar(5) Not Null,
ComplainLetterNo Int Not Null,
FinalReport Varchar(5) Null,
CriminalStatus Varchar(100) Not Null,
InvestigatingOfficerName Varchar(100) Not Null,
```

```
CaseFilerName Varchar(100) Not Null,
AreaOfCrime Varchar(100) Null.
ClosingDate Varchar(15) Null,
ReceivingDate DATETIME Not Null,
TypeOfCase Varchar(10) Not Null
);
---table 5---
CREATE TABLE Victim(
VictimId int IDENTITY(1001,1) PRIMARY KEY,
CaseNo int FOREIGN KEY REFERENCES Cases(CaseNo) not null,
VictimName varchar(100) NOT NULL,
Age int NOT NULL,
FathersName varchar(100).
Village varchar(50),
Thana varchar(50) NOT NULL,
DistrictId int NOT NULL FOREIGN KEY REFERENCES DistrictCodes(DistrictId),
PresentAddress varchar(100) NOT NULL,
PresentThana varchar(50),
PresentDistrictId int FOREIGN KEY REFERENCES DistrictCodes(DistrictId),
MobileNo varchar(11) NOT NULL
);
---table 6---
CREATE TABLE Accused(
AccusedId int IDENTITY(3001,1) PRIMARY KEY,
CaseNo int FOREIGN KEY REFERENCES Cases(CaseNo),
AccusedName varchar(100),
Age int.
FathersName varchar(100),
Village varchar(50),
Thana varchar(50).
DistrictId int FOREIGN KEY REFERENCES DistrictCodes(DistrictId),
PresentAddress varchar(100).
PresentThana varchar(50),
PresentDistrictId int FOREIGN KEY REFERENCES DistrictCodes(DistrictId)
);
---table 7---
CREATE TABLE Witness(
WitnessId int IDENTITY(4001,1) PRIMARY KEY,
CaseNo int FOREIGN KEY REFERENCES Cases(CaseNo),
WitnessName varchar(100) NOT NULL,
```

```
Age int NOT NULL,
FathersName varchar(100),
Village varchar(50),
Thana varchar(50) NOT NULL,
DistrictId int NOT NULL FOREIGN KEY REFERENCES DistrictCodes(DistrictId),
PresentAddress varchar(100) NOT NULL,
PresentThana varchar(50),
PresentDistrictId int FOREIGN KEY REFERENCES DistrictCodes(DistrictId),
MobileNo varchar(11) Not Null
);
---table 8---
create table Evidence(
EvidenceId int IDENTITY(5001,1) PRIMARY KEY,
CaseNo int FOREIGN KEY REFERENCES Cases(CaseNo) not null,
EvidenceName varchar(100) NOT NULL,
Area varchar(50),
Time varchar(25),
CollectedFrom Varchar(50),
EvidenceStatus Varchar(25),
TypeOfEvidence Varchar(20) not null,
);
```

Query Insertion of Data

```
---table 1---
INSERT INTO DistrictCodes VALUES ('Barguna'), ('Barisal'), ('Bhola'), ('Jhalokathi'), ('Potuakhali'),
('Pirojpur'),('Bandarban'), ('Brahmanbaria'),('Chandpur'),('Chittagong'),('Comilla'), ('Coxs Bazar'),
('Feni'), ('Khagrachhari'), ('Lakshmipur'), ('Noakhali'), ('Rangamati'), ('Dhaka'), ('Faridpur'),
('Gazipur'), ('Gopalgani'), ('Kishorgani'), ('Madaripur'), ('Manikgani'), ('Munshigani'),
('Narayanganj'),('Narsingdi'),('Rajbari'),('Shariatpur'), ('Tangail'),('Bagerhat'),
('Chuadanga'),('Jessore'),('Jhenaidaha'),('Khulna'), ('Kushtia'),
('Magura'), ('Meherpur'), ('Narail'), ('Satkhira'), ('Jamalpur'), ('Mymensingh'), ('Netrokona'),
('Sherpur'),('Bogura'),('Joypurhat'),('Naogan'), ('Natore'),
('Chapai Nawab Ganj'), ('Pabna'), ('Rajshahi'), ('Sirajganj'), ('Dinajpur'),
('Gaibandha'),('Kurigram'),('Nilphamari'),('Lalmonirhaat'),('Panchagarh'),('Rangpur'),('Thakurgao
n'),('Habiganj'),('Moulovibajar'), ('Sunamganj'),('Sylhet');
---table 2---
INSERT INTO PoliceStation values
('ADABAR Police Station','1207','Adabar, Dhaka','Abul kalam'),
('BADDA Police Station','1214','Baridhara, Dhaka','Abdur rahman'),
('BANGSHAL Police Station','1245','Fazlul Karim Community Center, English Road','Ashique
('BIMAN BANDAR Police Station','1254','Cargo Village, Shahjala Int Airport','Ishmam kalam'),
('CANTONMENT Police Station','1206','Cantonment, Dhaka','Jabir Islam'),
('CHAWK BAZAR Police Station','1354','59 Urdu Road, Dhaka','Abdur Rahim'),
('DHAKKHINKHAN Police Station','1254','193 Dhakkhinkhan, Dhaka','Mishal monsur'),
('DAR US SALAM Police Station', '1254', '100 Golatek, Dar Us Salam', 'Ashfaque Islam'),
('DEMRA Police Station','1254','Ahmed Bawani, Demra','Istiaq islam'),
('DHANMONDI Police Station','1209','R#6. H#21, Dhanmondi','Abul karim'),
('GANDARIAI Police Station','1254','Keshab Benarjee Rd','Arman kamal'),
('GULSHANI Police Station','1214','H-32, 115 Gulshan Avenue, Gulshan-2','Ahnaf khan'),
('HAZARIBAGI Police Station','1254','98/2 Gojmohal, Hazaribag','Ahmed Islam'),
('JATRABARII Police Station', '1236', 'Dhaka-Demra Highway', 'Abul kalam').
('KAFRULI Police Station','1205','Mirpur-14, Dhaka','Mainul Islam'),
('KALABAGAN I Police Station','1209','30 North road, Vutergoli, Kalabagan','Abul khan'),
('KAMRANGICHORI Police Station','1209','Signboard, Asrafabad, Kamrangirchar','Fahim ahmed'),
('KHILGOAN Police Station','1219','Khilgaon Taltola Market, Block#A,','Faisal Islam'),
('KHILKHET Police Station', '1229', 'R-1, Nikunjo-2 (South Side), Khilkhet', 'Farhan Akhter'),
('KATAMTOLI Police Station', '1254', 'Rayerbagh Rd, Mujahidnagar', 'Faizul Khan'),
('KOTWALI Police Station','1254','2 No Simson Road, Kotwali','Rashedul Islam'),
('LALBAG Police Station','1211','Shaheed Nagar, RND Road, House#24','Ove Chowdhury'),
('MIRPUR MODEL Police Station', '1216', 'Mirpur-2', 'Mehedi Islam'),
('MOHAMMADPUR Police Station','1225','Sat Mosjid Road','Kazi Iqbal'),
('MOTIJHEEL Police Station','1223','140 Motijheel C/A','Argha Chowdhury'),
('MUGDA Police Station','1221','Wapdagoli, Mugda','Robiul Islam'),
('NEW MARKET Police Station','1205','Nilkhet Katabon Road','Fahim Ahmed'),
('PALLABI Police Station','1217','Pallabi-12','Zobaidul Khan'),
('PALTAN Police Station','1000','Paltan VIP Road, Paltan','Saimum Islam'),
```

```
('RAMNA Police Station','1217','Old Elephant road','Mohaimin Chowdhury'),
('RAMPURA Police Station','1254','House#21,Block#H, Road#3/1, Khilgoan','Mishal Khan'),
('RUPNAGAR Police Station','1254','House#10/A, Road#8, Section#7, Arambagh','Ayon Khan'),
('SABUZBAG Police Station','1214','202 Moddho Basabo','Masfig Kamal'),
('SHAH ALI Police Station','1254','Road#1, Section#1, Block#B, House#29, Shah Ali',' AryanKhan'),
('SHAHBAG Police Station','1205','Shahbagh more, Shahbagh','Prithiraz Das'),
('SHAJAHANPUR Police Station','1254','Shahjahanpur Railway Colony','Pradipto Narayan'),
('SUTRAPUR Police Station','1254','37 Water Road','Snehal salsabil'),
('SHYAMPUR Police Station','1254','Postagola','Tonmoy Das'),
('SHER E BANGLA NAGAR Police Station','1254','Sayed Mahbub Morshed Ave','Farhan Sadique'),
('TEJGOAN INDUSTRIAL Police Station', '1215', '56 Tejkunipara, Farmgate', 'Subayer Islam'),
('TEJGOAN Police Station','1208','Tejgao','Md Zawad'),
('UTTARA (EAST) Police Station', '1230', 'R-14/D, Sector-4, H-12, Uttara', 'Mahrab aritro'),
('UTTARA (WEST) Police Station','123','H-48, Road No: 18, Sector: 11, Uttara'.'Ishmam
chowdhury'),
('UTTARKHAN Police Station','1254','Madarbari, Mazer road, Uttarkhan','Ashraful Ahmed '),
('VASHANTEK Police Station','1254','Vashantek, Mirpur,','Rifat Islam'),
('VATARA Police Station','1204','Natunbazar','Ahmed Inteshar'),
('WARI Police Station','1203','25 Tipusultan Rd','Hasibul haque');
---table 3---
INSERT INTO PoliceOfficer VALUES
('Abdul karim', 'Sub-Inspector', 'Dhanmondi', 3, '01733459558', 'Dhanmondi 10/A, Dhaka', 7, 3),
('Rejaul haque','Additional Deputy Inspector','Tejgao',8,'01678459547','Niketon Housing',7,6),
('Rashedul Haque','Traffic Inspector','Ramna',2,'01758459591','Bangla motor',9,1),
('Moinul zaman','Assistant Sub-Inspector','Shahbag',6,'01674478558','Dhanmondi Lake
Road', 8, 4),
('Rafiqu ul Islam', 'Sub-Inspector', 'Kalabagan', 8, '01718459558', 'Green Road, Jahanara Garder', 7, 5),
('Robiul monsur', 'Assistant Sub-Inspector', 'Lalbag', 5, '01712459545', 'Dhanmonid road 12/A', 8, 4).
('Ishmam Salsabil','Additional Deputy
Commissioner', 'Bangshal', 8.'01778849778', 'Bangshal, Nimtoli lane', 8.10).
('Pradipta Narayan Chowdhury', 'Sub-Inspector', 'Motijheel', 3, '01741595581', 'new eskaton, Dilu
Road',7,5).
('Ashraful Islam', 'Traffic Inspector', 'Palton', 3, '01772459558', 'Shideshwari, peer shaheber
goli',9,2),
('Tonmoy das', 'Sub-Inspector', 'Rampura', 3, '01745459558', 'Mogbazar', 7, 5);
---table 4---
insert into Cases values
(307,2040,7002,1860,null,null,'yes',567,'FRT', 'Surrender','Rejaul haque','Nafiur Rashid','Tejgaon
Shilpanchol,infront of DMG gate, Kuni Para,word no-37','2018-12-03','2018-01-05
12:04:03','FIR'),
```

(171,2014,7004,462,null,null,'yes',567,'FRT', 'Convicted','Moinul zaman','Mahmudur Rahaman','Jatrabari, Bazar Road,word no-7',null,'2018-06-03 11:04:03','GD'), (60,2008,7010,462,null,null,'yes',567,'FRT', 'Reedemed','Tonmoy das','Syed Rabbi Hasan','DAR US SALAM Road,infront of DAR US SALAM Police Station',null,'2018-11-06 10:28:34','FIR'), (188,2039,7006,1860,'laptop',null,'yes',567,'FRT', 'Convicted','Golam Rabbani ','Nafiur Rashid','SHER E BANGLA NAGAR koloni','nil','2018-12-15 09:45:03','FIR'),

(60,2001,7008,462,null,null,'no',567,'FRF', 'Convicted','Pradipta Narayan Chowdhury','Faiyaj Hossain Mridha ','Adabor, beside Adabor School and College','2019-01-03','2019-01-03 12:04:03','GD');

insert into Cases values

(188,2039,7006,1860,'laptop',null,'yes',567,'FRT', 'Convicted','Golam Rabbani ','Nafiur Rashid','SHER E BANGLA NAGAR koloni','nil','2018-12-15 09:45:03','FIR'), (60,2001,7008,462,null,null,'no',567,'FRF', 'Convicted','Pradipta Narayan Chowdhury','Faiyaj Hossain Mridha ','Adabor, beside Adabor School and College','2019-01-03','2019-01-03 12:04:03','GD');

---table 5---

INSERT INTO Victim VALUES (6010,'Abdur Rashid',32,'Md.Salam Rashid','Balia','Babuganj',8004,'Kawran bazar','Tejgaon',8001,01722222753), (6011,'Solaiman Khan',25,'Abrar Bhuiya','Goalbari','Parshuram',8006,'Shahjahanpur','Shahjahanpur',8001,01722249909), (6012,'Kamrun Nahar',38,'Abul Kalam','Ghorua','Beanibazar',8003,'East building','Keraniganj',8001,01733349909), (6013,'Rahman Khalil',25,'Md.Tipu Sultan','Des bhuyai','Hizla',8004,'Crowpara','Shreepur',8005,01725679909), (6014,'Halima Begum',59,'Jobayer Hasan','Jhigli','Feni Sadar',8006,'117/2 baumoni','Feni',8006,01914249909);

---table6---

INSERT INTO Accused VALUES ('Solaiman Mia',34,'Khalil Morshed','IslaamPur','Jagannathpur',8003,'Elephant road','Ramna',8001), ('Solaiman Mia',34,'Khalil Morshed','IslaamPur','Jagannathpur',8003,'Elephant road','Ramna',8001),

INSERT INTO Accused VALUES (6010,'Solaiman Mia',34,'Khalil Morshed','IslaamPur','Jagannathpur',8003,'Elephant road','Ramna',8001), (6011,'MD.Kashem Hossain Mridha',50,'Golam Rabbani','Bahirghat','Bahirghat',8003,'Khilgaon','Khilgaon',8001), (6012,'MD Rahat Osman',50,'Md Raja','Patuakhali','Patuakhali',8003,'Shutrapur','Shutrapur',8001), (6013,'Abdur Rashid',32,'Md.Salam Rashid','Balia','Babuganj',8004,'Kawran bazar','Tejgaon',8001);

---table 7---

INSERT INTO Witness VALUES (6010,'Abdur Rashid',32,'Md.Salam Rashid','Balia','Babuganj',8004,'Kawran bazar','Tejgaon',8001,'01987654'), (6011,'Solaiman Khan',25,'Abrar Bhuiya','Goalbari','Parshuram',8006,'Shahjahanpur','Shahjahanpur',8001,'01876543'), (6012,'Kamrun Nahar',38,'Syed Rabbi Hasan ','Ghorua','Babuganj',8003,'East building','Keraniganj',8001,'01765432'),

(6013,'Rahman Khalil',25,'Md.Tipu Sultan','Patuakhali','Patuakhali',8004,'Crowpara','Shreepur',8005,'01567892'), (6014,'Halima Begum',59,'Fatima khatun','Jhigli','Feni Sadar',8006,'117/2 baumoni','Feni',8006,'014567892');

---table 8---

String query = "INSERT INTO Evidence(CaseNo,EvidenceName,Area,Time,CollectedFrom,EvidenceStatus,TypeOfEvidence)

VALUES (?,?,?,?,?,?)";

Query for Value Update, Setting Constraints and Rules

```
"UPDATE Accused SET CaseNo='"+acc_caseNo+"', AccusedName='"+acc_name+"',
Age='"+acc_age+"',FathersName
='"+acc fathersname+"',Village='"+acc village+"',Thana='"+acc thana+"',DistrictId
='"+dis+"',PresentAddress ='"+acc_pre_add+"',PresentThana='"+acc_pre_thana+"',
PresentDistrictId =""+pdis+" WHERE CaseNo=""+acc caseNo+" ";
"UPDATE Cases SET SectionNo="+SectionNo+", PoliceStationId="+PoliceStationId+",
PoliceOfficerId=""+PoliceOfficerId+"",MagistrateSection
='"+MagistrateSection+"',StolenGoods=""+StolenGoods+"',RevivedGoods=""+RevivedGoods+"',Case
Acceptance =""+CaseAcceptance +"',ComplainLetterNo
='"+ComplainLetterNo+"',FinalReport=""+FinalReport+"', CriminalStatus ='"+CriminalStatus+"',
InvestigatingOfficerName = "+InvestigatingOfficerName+", CaseFilerName="+CaseFilerName+"
,AreaOfCrime='"+AreaOfCrime+"',ClosingDate='"+ClosingDate+"',ReceivingDate='"+ReceivingDate
+"',TypeOfCase=""+TypeOfCase+"' WHERE PoliceStationId=""+PoliceStationId+"' ";
"UPDATE Evidence SET
CaseNo=""+evi_caseId+"",EvidenceName=""+evi_name+"",Area=""+evi_area+"",Time=""+evi_time+"",
CollectedFrom=""+evi_collected+"',EvidenceStatus=""+evi_status+"',TypeOfEvidence=""+evi_type+"
'WHERE CaseNo='"+evi_caseId+"'";
"UPDATE PoliceOfficer SET
PoliceOfficerName=""+pol_name+"",Designation=""+pol_desig+"",Area=""+pol_area+"",CaseHandled
No='"+pol_casehandld+"',PhoneNo='"+pol_phn+"',Address='"+pol_add+"',DutyHour='"+pol_dutyhr
+"', YearsOfExperience='"+pol_exp+"' WHERE PoliceOfficerName='"+pol_name+"'";
"UPDATE Victim SET CaseNo=""+vic_caseid+"", VictimName=""+vicName+"",
Age='"+vic_age+"',FathersName
='"+vic_father+"',Village='"+vic_vill+"',Thana='"+vic_tha+"',DistrictId ='"+dis+"',PresentAddress
='"+vic_preadd+"',PresentThana='"+vic_pre_tha+"', PresentDistrictId ='"+pdis+"', MobileNo
='"+vic mob+"' WHERE CaseNo='"+vic caseid+"' ";
"UPDATE Witness SET CaseNo=""+wit_case+"", WitnessName=""+wit_name+"",
Age='"+wit_age+"',FathersName
='"+wit_father+"',Village='"+wit_vill+"',Thana='"+wit_tha+"',DistrictId ='"+dis+"',PresentAddress
```

```
='"+wit_pre_ad+"',PresentThana='"+wit_pre_tha+"', PresentDistrictId ='"+pdis+"', MobileNo
=""+wit_mob+"" WHERE CaseNo=""+wit_case+"" ";
"DELETE FROM Accused WHERE AccusedId = "+value;
"DELETE FROM Victim WHERE CaseNo = "+value;
"DELETE FROM Accused WHERE CaseNo = "+value;
"DELETE FROM Evidence WHERE CaseNo = "+value;
"DELETE FROM Witness WHERE CaseNo = "+value;
"DELETE FROM Cases WHERE CaseNo = "+value;
"DELETE FROM Evidence WHERE EvidenceId = "+value;
"DELETE FROM PoliceOfficer WHERE PoliceOfficerId = "+value;
"DELETE FROM PoliceStation WHERE PoliceStationId = "+value:
"DELETE FROM Victim WHERE VictimId = "+value;
"DELETE FROM Witness WHERE WitnessId = "+value;
"SELECT * FROM Accused ORDER BY AccusedId ASC";
"SELECT * FROM Accused ORDER BY CaseNo ASC";
"SELECT * FROM Accused ORDER BY AccusedName ASC";
"SELECT * FROM Accused ORDER BY Age ASC":
"SELECT * FROM Accused ORDER BY FathersName ASC";
"SELECT * FROM Accused ORDER BY Village ASC";
"SELECT * FROM Accused ORDER BY Thana ASC";
"SELECT * FROM Accused ORDER BY DistrictId ASC":
"SELECT * FROM Accused ORDER BY PresentAddress ASC";
"SELECT * FROM Accused ORDER BY PresentThana ASC";
"SELECT * FROM Accused ORDER BY PresentDistrictId ASC":
"SELECT * FROM Cases ORDER BY CaseNo ASC":
"SELECT * FROM Cases ORDER BY SectionNo ASC";
"SELECT * FROM Cases ORDER BY MagistrateSection ASC";
```

"SELECT * FROM Cases ORDER BY StolenGoods ASC";

```
"SELECT * FROM Cases ORDER BY RevivedGoods ASC";
"SELECT * FROM Cases ORDER BY CaseAcceptance ASC";
"SELECT * FROM Cases ORDER BY ComplainLetterNo ASC";
"SELECT * FROM Cases ORDER BY FinalReport ASC":
"SELECT * FROM Cases ORDER BY CriminalStatus ASC";
"SELECT * FROM Cases ORDER BY InvestigatingOfficerName ASC";
"SELECT * FROM Cases ORDER BY ClosingDate ASC":
"SELECT * FROM Cases ORDER BY CaseFilerName ASC":
"SELECT * FROM Cases ORDER BY AreaOfCrime ASC";
"SELECT * FROM Cases ORDER BY TypeOfCase ASC";
"SELECT * FROM Cases ORDER BY PoliceStationId ASC":
"SELECT * FROM Cases ORDER BY PoliceOfficerId ASC";
"SELECT * FROM Evidence ORDER BY EvidenceId ASC";
"SELECT * FROM Evidence ORDER BY CaseNo ASC";
"SELECT * FROM Evidence ORDER BY EvidenceName ASC";
"SELECT * FROM Evidence ORDER BY Area ASC":
"SELECT * FROM Evidence ORDER BY Time ASC";
"SELECT * FROM Evidence ORDER BY CollectedFrom ASC";
"SELECT * FROM Evidence ORDER BY EvidenceStatus ASC":
"SELECT * FROM Evidence ORDER BY TypeOfEvidence ASC":
"SELECT * FROM PoliceOfficer ORDER BY PoliceOfficerId ASC":
"SELECT * FROM PoliceOfficer ORDER BY PoliceOfficerName ASC";
"SELECT * FROM PoliceOfficer ORDER BY Designation ASC";
"SELECT * FROM PoliceOfficer ORDER BY Area ASC";
"SELECT * FROM PoliceOfficer ORDER BY CaseHandledNo ASC";
"SELECT * FROM PoliceOfficer ORDER BY PhoneNo ASC";
"SELECT * FROM PoliceOfficer ORDER BY Address ASC";
```

```
"SELECT * FROM PoliceOfficer ORDER BY DutyHour ASC";
"SELECT * FROM PoliceOfficer ORDER BY YearsOfexperience ASC";
"SELECT * FROM PoliceStation ORDER BY PoliceStationId ASC";
"SELECT * FROM PoliceStation ORDER BY PoliceStationName ASC";
"SELECT * FROM PoliceStation ORDER BY Area ASC";
"SELECT * FROM PoliceStation ORDER BY OfficerInCharge ASC";
"SELECT * FROM PoliceStation ORDER BY CodeNo ASC":
"SELECT * FROM Victim ORDER BY VictimId ASC":
"SELECT * FROM Victim ORDER BY CaseNo ASC";
"SELECT * FROM Victim ORDER BY VictimName ASC";
"SELECT * FROM Victim ORDER BY Age ASC":
"SELECT * FROM Victim ORDER BY FathersName ASC";
"SELECT * FROM Victim ORDER BY Village ASC";
"SELECT * FROM Victim ORDER BY Thana ASC";
"SELECT * FROM Victim ORDER BY DistrictId ASC";
"SELECT * FROM Victim ORDER BY PresentAddress ASC";
"SELECT * FROM Victim ORDER BY PresentThana ASC";
"SELECT * FROM Victim ORDER BY PresentDistrictId ASC";
"SELECT * FROM Victim ORDER BY MobileNo ASC":
"SELECT * FROM Witness ORDER BY WitnessId ASC":
"SELECT * FROM Witness ORDER BY CaseNo ASC":
"SELECT * FROM Witness ORDER BY WitnessName ASC";
"SELECT * FROM Witness ORDER BY Age ASC";
"SELECT * FROM Witness ORDER BY FathersName ASC";
"SELECT * FROM Witness ORDER BY Village ASC";
"SELECT * FROM Witness ORDER BY Thana ASC";
"SELECT * FROM Witness ORDER BY DistrictId ASC";
```

```
"SELECT * FROM Witness ORDER BY PresentAddress ASC";
"SELECT * FROM Witness ORDER BY PresentThana ASC";
"SELECT * FROM WitnessORDER BY PresentDistrictId ASC";
"SELECT * FROM Witness ORDER BY MobileNo ASC":
"SELECT * FROM Accused WHERE AccusedId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE CaseNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE AccusedName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE Age LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE FathersName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE Village LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE Thana LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE DistrictId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE PresentAddress LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Accused WHERE PresentThana LIKE'%"+stringToSearch+"%";
"SELECT * FROM Accused WHERE PresentDistrictId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE CaseNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE SectionNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE MagistrateSection LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE StolenGoods LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE RevivedGoods LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE CaseAcceptance LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE ComplainLetterNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE FinalReport LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE InvestigatingOfficerName LIKE'%"+stringToSearch+"%";
"SELECT * FROM Cases WHERE ClosingDate LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE ReceivingDate LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Cases WHERE TypeOfCase LIKE'%"+stringToSearch+"%'";
```

```
"SELECT * FROM Cases WHERE PoliceOfficerId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Evidence WHERE EvidenceId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Evidence WHERE CaseNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Evidence WHERE EvidenceName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Evidence WHERE Area LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Evidence WHERE Time LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Evidence WHERE CollectedFrom LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Evidence WHERE EvidenceStatus LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE PoliceOfficerId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE PoliceOfficerName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE Designation LIKE'%"+stringToSearch+"%";
"SELECT * FROM PoliceOfficer WHERE Area LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE CaseHandledNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE PhoneNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE Address LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE DutyHour LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceOfficer WHERE YearsOfExperience LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceStation WHERE PoliceStationId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceStation WHERE PoliceStationName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceStation WHERE CodeNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM PoliceStation WHERE Area LIKE'%"+stringToSearch+"%'":
"SELECT * FROM PoliceStation WHERE OfficerInCharge LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE VictimId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE CaseNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE VictimName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE Age LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE FathersName LIKE'%"+stringToSearch+"%'";
```

```
"SELECT * FROM Victim WHERE Village LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE Thana LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE DistrictId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE PresentAddress LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE PresentThana LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE PresentDistrictId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Victim WHERE MobileNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE WitnessId LIKE'%"+stringToSearch+"%'":
"SELECT * FROM Witness WHERE CaseNo LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE WitnessName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE Age LIKE'%"+stringToSearch+"%'":
"SELECT * FROM Witness WHERE FathersName LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE Village LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE Thana LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE DistrictId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE PresentAddress LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE PresentThana LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE PresentDistrictId LIKE'%"+stringToSearch+"%'";
"SELECT * FROM Witness WHERE MobileNo LIKE'%"+stringToSearch+"%";
Alter table Victim Add check(MobileNo > 11);
Alter table Witness Add check(MobileNo > 11);
"select CaseNo,CriminalStatus from cases where ClosingDate<> '";
```

Query for Aggregate functions

"select count(TypeOfCase) from cases where TypeofCase=""+typeofcase+"" ";

"select Top 1 PoliceOfficerName,Designation,max(CaseHandledNo) from PoliceOfficer group by PoliceOfficerName,Designation ";

"Select ReceivingDate,count(CaseNo) from cases where ReceivingDate BETWEEN '"+from+"' AND '"+to+"' group by ReceivingDate";

"Select AccusedName from accused group by AccusedName having count(distinct CaseNo) >1";

Query for the Join and Binary Operation (like Union, except)

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo;";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo WHERE Cases.CaseNo LIKE'%"+stringToSearch+"%'";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo WHERE VictimName LIKE'%"+stringToSearch+"%'";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo WHERE AccusedName LIKE'%"+stringToSearch+"%'";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo WHERE WitnessName LIKE'%"+stringToSearch+"%'";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo WHERE EvidenceName LIKE'%"+stringToSearch+"%'";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo ORDER BY Cases.CaseNo ASC";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo ORDER BY VictimName ASC";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo ORDER BY AccusedName ASC";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo ORDER BY WitnessName ASC";

"select cases.CaseNo

,Victim.VictimName,Accused.AccusedName,Witness.WitnessName,Evidence.EvidenceName from (((cases left join Witness on cases.CaseNo=Witness.CaseNo) left join Evidence on cases.CaseNo=Evidence.CaseNo) left join Accused on cases.CaseNo=Accused.CaseNo) left join Victim on cases.CaseNo=Victim.CaseNo ORDER BY EvidenceName ASC";

Query used by the form of sub query

```
"select CaseNo from cases where \n" +

"CaseNo =(select CaseNo from Victim where MobileNo='"+phoneNo+"')\n" +

"or\n" +

"CaseNo in (select CaseNo from PoliceOfficer where PhoneNo='"+phoneNo+"')\n" +

"or\n" +

"CaseNo in(select CaseNo from Witness where MobileNo='"+phoneNo+"'); ";
```

Screen Shots of the project interface design



Image 01: home page

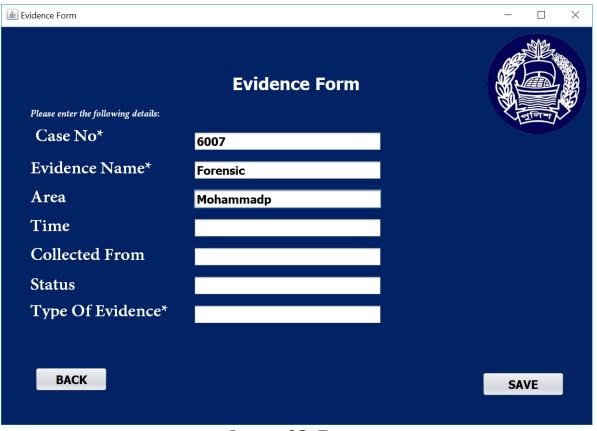


Image 02: Form

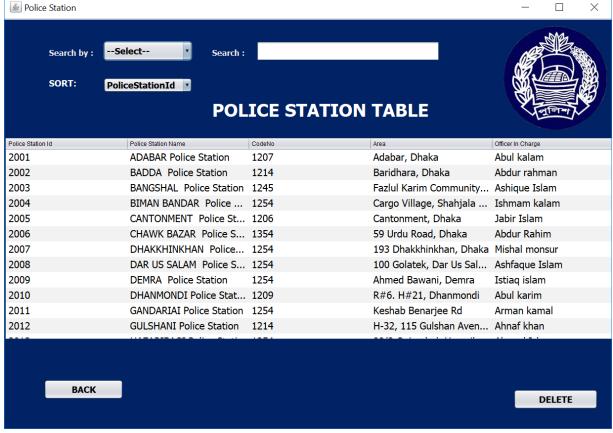


Image 03: Police station table

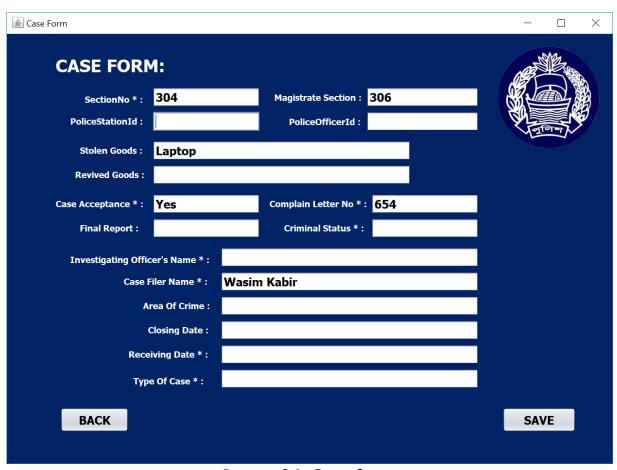


Image 04: Case form

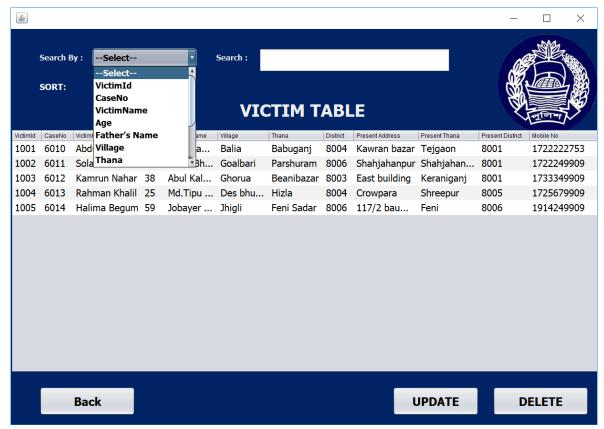


Image 05: Search Panel 1



Image 06: Search Panel 2

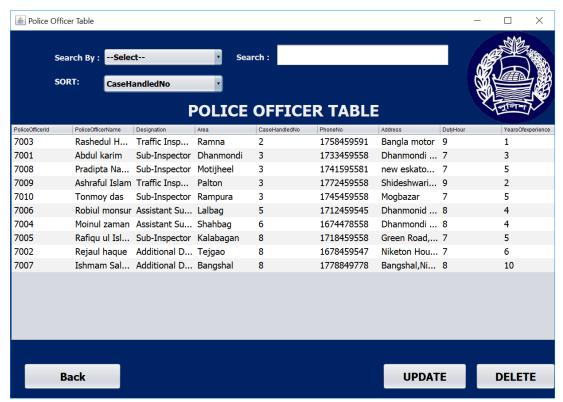


Image 07: Sort Panel

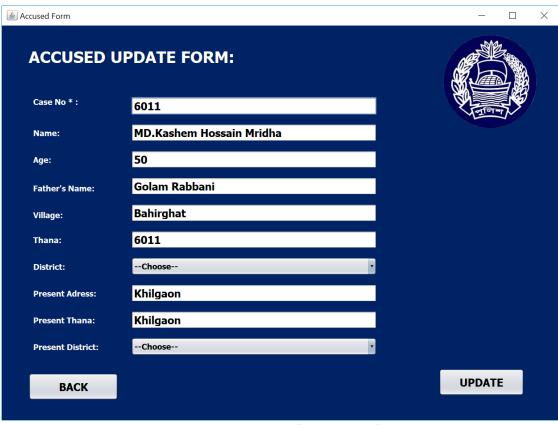


Image 08: Update Panel

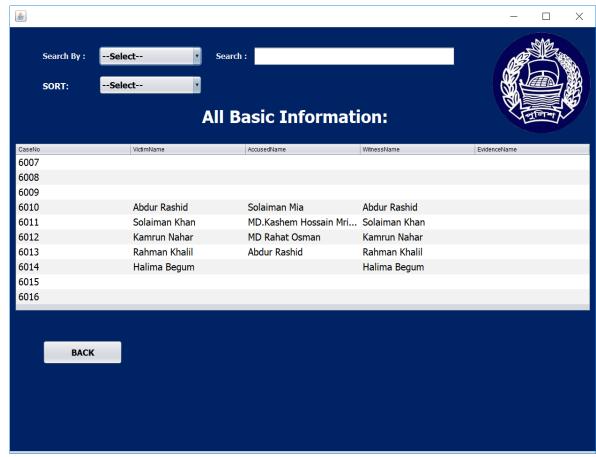


Image 09: All Join



Image 10: Report panel

Conclusion:

This software can bring about many changes in the outlook and security of the whole police station case management system in our country which will be a great start to make things more digital and technology based.

Contribution:

