IST 659

PUBLICATIONS DATABASE IPLEMENTATION REPORT

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PROJECT SUMMARY

Publication company publish magazines every month. They issue both physical and e-book copies. Customers can choose to subscribe for 3 months, 6 months or 12 months plan. The company also publishes the advertisements in each issue.

The company deals with business scenarios such as, number of magazines published so far, number of active subscriptions, subscription period of each customer, name and other details of the customers, region where all these customers belong to, name of the advertisers who publish advertisements in the magazine, number of advertisements in each issue of magazine. The company needs to keep track of revenue generated from subscription of the physical book each month, and the revenue generated from the subscription of the e-book. They also need to identify the region of advertisement clients, which region has more number of subscribers.

Currently subscribers are subscribing to the magazine through the company website via google form like user interface. The data gets collected in excel spreadsheets in the backend. Subscriber can cancel their subscriptions through company website and the data gets collected in excel in backend. The company employees maintain all this data in excel spreadsheets only. Company employees must manually do all the calculations for the revenue and expenditure reports. All the records for clients and advertisements are maintained by employees in physical files. Publication company is looking for database management system that can assist them in better data management in their daily processes.

The proposed project is for the publication company. The project focuses on following sections.

- Customers
- Magazines and their respective issues
- Advertisements
- Subscriptions
- Expenditure for each issue

The purpose of this system is to increase automation and reduce manual effort. Project is a well-structured database that will store all the required information in tables and will retrieve the data for the user by the data management team of the magazine whenever necessary in an astute manner. This will reduce the manual intervention to a bare minimum and this will in-turn reduce the number of errors while handling the transactions. The expenditure through various means are updated into the system and therefore can be tracked monthly i.e. expenditure incurred while publishing every issue of the magazine along with the details regarding the number of customers.

The proposed system will maintain all the data in an Access database. It is online system that is connected to database server. Employees can login to system. It allows employees to enter and update the customer details to database, update the magazine and issue details, server via access forms. Employees can also enter and update the expenditure details for each issue through this new system and track the advertisement and client details. Employees can enter the magazine and issue details as well.

This system will maintain up-to-date information of each customer, magazines and expenditure, which will allow effective functioning of publication processes.

The primary users of the system are employees of publication. They have all the access to the system i.e. to the customer information, magazine details and expenditure generated for each issue of magazine.

ENTITY AND ATTRIBUTE TABLE

1. Customer – This entity captures information about the customer who subscribed for the magazines.

| ENTITY NAME: Customer | ATTRIBUTE NAME | FIELD TYPE | NULL/NOT NULL | EXPLANATION |
|--------------------------|----------------|-------------|------------------|---|
| PRIMARY KEY | CustomerID | INT | NOT NULL | Unique Identifier for Customer Entity; CustomerID is given by Company employees. |
| OTHER ATTRIBUTES | CFName | VARCHAR(80) | NOT NULL | First Name of the customer |
| | CFMname | VARCHAR(80) | NOT NULL | Middle name of the customer |
| | CLName | VARCHAR(80) | NOT NULL | Last name of the customer |
| | СТуре | INT | NOT NULL | Type of subscription the customer has |
| | CEmail | VARCHAR(80) | NOT NULL | Customer Email ID |
| | CPhone | VARCHAR(20) | NOT NULL | Phone number of the customer |
| | CApt | VARCHAR(50) | NOT NULL | Apartment number of customer |
| | CStreet | VARCHAR(80) | NOT NULL | Street number of Customer address |
| | CCity | VARCHAR(80) | NOT NULL | City Name of Customer Address |
| | CStateID | CHAR(2) | NOT NULL | State ID |
| | CCountry | VARCHAR(80) | NOT NULL | Country Name |
| | CZip | BIGINT | NOT NULL | Zip Code |

2. Magazine - This entity captures information about the Magazines sold by company.

| ENTITY NAME: | ATTRIBUTE NAME | FIELD TYPE | NULL/NOT | EXPLANATION |
|------------------|----------------|-------------|----------|--------------------------------|
| Customer | | | NULL | |
| PRIMARY KEY | MagazineID | VARCHAR(20) | NOT NULL | Unique Identifier for Magazine |
| | | | | Entity; MagazineID |
| | | | | is assigned by Company |
| | | | | employees. |
| OTHER ATTRIBUTES | MagazineName | VARCHAR(20) | NOT NULL | Name of the Magazine |
| | | | | |

3. SubMagType - This entity captures information about the Magazines and subscriber relationship.

| ENTITY NAME: Customer | ATTRIBUTE NAME | FIELD TYPE | NULL/NOT NULL | EXPLANATION |
|--------------------------|----------------|--------------|------------------|---|
| PRIMARY KEY | SubMagTypeID | INT | NOT NULL | Unique Identifier for each Magazine and Subscription Entity; SubMagTypeID is assigned by Company employees. |
| OTHER ATTRIBUTES | MagID | VARCHAR (20) | NOT NULL | ID of the magazine to which this subscription belongs |
| | SubPeriod | INT | NOT NULL | Duration of the subscription which is 3/6/12 |
| | SubCost | INT | NOT NULL | Cost of the particular subscription |

4. Advertisement - This entity captures information about the Advertisements and client information.

| ENTITY NAME: | ATTRIBUTE | FIELD TYPE | NULL/NOT | EXPLANATION |
|------------------|---------------|--------------|----------|--|
| Customer | NAME | | NULL | |
| PRIMARY KEY | AdvertID | INT | NOT NULL | Unique Identifier for Advertisement Entity; AdvertID is assigned by Company employees. |
| OTHER ATTRIBUTES | ClientName | VARCHAR (20) | NOT NULL | Name of the client who advertised |
| | ClientStateID | CHAR | NOT NULL | ID of the State from which this advertisement was published |

5. AdvertTracker - This entity captures information, which Advertisements are published in which issue of Magazine.

| ENTITY NAME: | ATTRIBUTE NAME | FIELD TYPE | NULL/NOT | EXPLANATION |
|------------------|-------------------|------------|----------|-------------------------------|
| Customer | | | NULL | |
| PRIMARY KEY | IssueID | INT | NOT NULL | Unique Identifier for |
| | | | | AdvertTracker Entity; Part of |
| | | | | Composite Primary Key. |
| PRIMARY KEY | AdvertID | INT | NOT NULL | Unique Identifier for |
| | | | | AdvertTracker Entity; Part of |
| | | | | Composite Primary Key. |
| OTHER ATTRIBUTES | AdvertisementCost | INT | NOT NULL | Cost of each advertisement. |
| | | | | |

6. Subscription - This entity captures information, which Subscription are published in which issue of Magazine.

| ENTITY NAME: Customer | ATTRIBUTE NAME | FIELD TYPE | NULL/NOT NULL | EXPLANATION |
|--------------------------|----------------|------------|------------------|--|
| PRIMARY KEY | SubID | INT | NOT NULL | Unique Identifier for Subscription Entity; SubID is assigned by Company employees. |
| OTHER ATTRIBUTES | SCustomerID | INT | NOT NULL | ID of the customer who subscribed the magazine |
| | SSubMagtypeID | INT | NOT NULL | ID that identifies the duration of the subscription |
| | SubStartDate | DATE | NOT NULL | Month from which the subscription start |
| | SubEndDate | DATE | NOT NULL | Month when the subscription ends. |

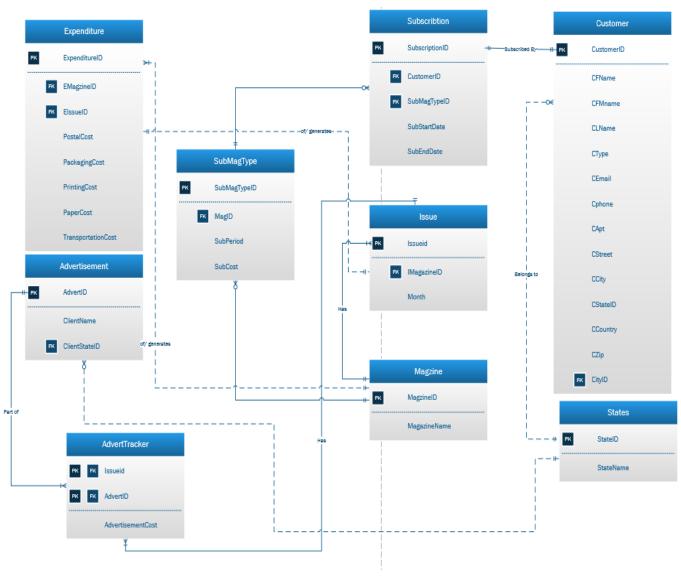
^{7.} Issue - This entity captures information, which Subscription are published in which issue of Magazine.

| ENTITY NAME: | ATTRIBUTE NAME | FIELD TYPE | NULL/NOT | EXPLANATION |
|------------------|----------------|-------------|----------|-------------------------------------|
| Customer | | | NULL | |
| PRIMARY KEY | IssueID | INT | NOT NULL | Unique Identifier for Issue Entity; |
| | | | | IssueID is assigned by Company |
| | | | | employees. |
| OTHER ATTRIBUTES | IMagazineID | VARCHAR | NOT NULL | Uniquely identifies the Magazines. |
| | | (20) | | |
| | | | | |
| | Month | VARCHAR(10) | NOT NULL | Month for each Issue. |
| | | | | |

8. States- This entity captures information about the States to which each Customer belongs.

| ENTITY NAME: | ATTRIBUTE NAME | FIELD TYPE | NULL/NOT | EXPLANATION |
|------------------|----------------|--------------|----------|--|
| Customer | | | NULL | |
| PRIMARY KEY | StateID | char(2) | NOT NULL | Unique Identifier for States Entity; StateID is assigned by Company employees. |
| OTHER ATTRIBUTES | StateName | VARCHAR (20) | NOT NULL | State name to which Customer belongs. |

ENTITY-RELATIONSHIP DIAGRAM



CREATION OF TABLES

Magazine:

```
CREATE TABLE SubMagType(
SubMagTypeID INT,
MagID VARCHAR(20),
SubPeriod INT,
SubCost INT,
PRIMARY KEY (SubMagTypeID),
FOREIGN KEY (MagID) REFERENCES Magazine (MagazineID));

33 (CREATE TABLE SubMagTypeID),
FOREIGN KEY (MagID) REFERENCES Magazine (MagazineID));

34 (MagID VARCHAR(20),
SubMerperiod INT,
SubMerperiod IN
```

Issue:

```
CREATE TABLE Issue(
    IssueID INT,
    IMagazineID VARCHAR(20),
    Month VARCHAR(10),
    PRIMARY KEY (IssueID),
    FOREIGN KEY (IMagazineID) REFERENCES Magazine (MagazineID));
```

Expenditure:

```
State Table Expenditure()

Expenditure() INT,

EMagazine(D VARCHAR (20) NOT NULL,

Postal Cost INT NOT
```

States:

```
CREATE TABLE States(
    StateID char(2),
    StateName VARCHAR(20) NOT NULL,
    PRIMARY KEY (StateID)
    );
```

```
GS CREATE TABLE States

(StateID char(2),
StateIAme VARCHAR(20 NOT NULL,
PRIMARY KEY (StateID)
);

(SM Messages

Command(s) completed successfully.
```

Customer:

```
CREATE TABLE Customer (
CustomerID INT,
CFName VARCHAR(80) NOT NULL,
CMNName VARCHAR(80),
CLName VARCHAR(80) NOT NULL,
CType INT NOT NULL,
CEmail VARCHAR(80) NOT NULL,
CPhone VARCHAR(20) NOT NULL,
CApt VARCHAR(50) NOT NULL,
CStreet VARCHAR(80) NOT NULL,
CCity VARCHAR(80) NOT NULL,
```

```
CStateID char(2) NOT NULL,
CCountry VARCHAR(80) NOT NULL,
CZip BIGINT NOT NULL,
PRIMARY KEY (CustomerID),
FOREIGN KEY (CStateID) REFERENCES States (StateID),
CONSTRAINT chk_customer CHECK (CType in (01,10,11)),
CONSTRAINT chk_customer1 CHECK (Czip<100000),
CONSTRAINT chk_customer2 CHECK (CPhone<999999999));
```

```
71 ÉCRATE TABLE Customer (
Customer DINT,
73 CFName VARCHAR(80) NOT NULL,
74 CTNName VARCHAR(80) NOT NULL,
75 CLIAmer VARCHAR(80) NOT NULL,
76 CType TIN NOT NULL,
77 CERBIL VARCHAR(80) NOT NULL,
78 CFName VARCHAR(80) NOT NULL,
80 CStreet VARCHAR(80) NOT NULL,
81 CCITY VARCHAR(80) NOT NULL,
82 CStateID char(2) NOT NULL,
83 CCCountry VARCHAR(80) NOT NULL,
84 CZtp Bfoint NOT NULL,
85 STRIAMPRE (Vistomer ID).
86 Command(s) completed successfully.
```

Advertisement:

```
CREATE TABLE Advertisement(
    AdvertID INT,
    ClientName VARCHAR(20) NOT NULL,
    ClientStateID char(2) NOT NULL
    PRIMARY KEY (AdvertID),
    FOREIGN KEY (ClientStateID) REFERENCES States (StateID)
    );
```

AdvertTracker:

```
104 ECREATE TABLE AdvertInder(
155 ISsueID INT,
166 AdvertID INT,
170 AdvertisementCost INT,
181 PRIMARY KEY (IssueID, AdvertID),
182 PRIMARY KEY (IssueID, AdvertID),
183 PRIMARY KEY (IssueID, AdvertID),
184 PRIMARY KEY (IssueID, AdvertID),
185 PRIMARY KEY (IssueID, AdvertID),
185 PRIMARY KEY (IssueID, AdvertID),
186 PRIMARY KEY (IssueID, AdvertID),
186 PRIMARY KEY (IssueID, AdvertID),
187 PRIMARY KEY (IssueID, AdvertID),
188 PRIMARY KEY (IssueID, AdvertID),
188 PRIMARY KEY (IssueID, AdvertID),
189 PRIMARY KEY (IssueID, AdvertID),
199 PRIMARY KEY (IssueID, Adv
```

Subscription:

```
112 BCREATE TABLE Subscription(
113 SubID INT,
114 SCustomerID INT,
115 SSubMagtypeID INT,
116 SubStartDate date,
117 SubMagtypeID INT,
118 PRIMARY KEY (SubID),
119 FOREIGN KEY (SCustomerID REFERENCES Customer (CustomerID),
120 FOREIGN KEY (SCustomerID) REFERENCES SubMagType (SubMagTypeID));
121
122 F-INSERTing Data INTO the TABLES
123
124 Messages
125 Command(s) completed successfully.
```

```
Inserting Data:
-- INSERTing Data INTO the TABLEs
--States
INSERT INTO States VALUES ('NY', 'New York');
INSERT INTO States VALUES('AL','Alabama')
INSERT INTO States VALUES('AK', 'Alaska')
INSERT INTO States VALUES('AZ','Arizona')
INSERT INTO States VALUES('AR','Arkansas')
INSERT INTO States VALUES('CA','California')
INSERT INTO States VALUES('CO','Colorado')
INSERT INTO States VALUES('CT','Connecticut')
INSERT INTO States VALUES('DE','Delaware')
INSERT INTO States VALUES('DC','District of Columbia')
INSERT INTO States VALUES('FL', 'Florida')
INSERT INTO States VALUES('GA','Georgia')
INSERT INTO States VALUES('HI','Hawaii')
INSERT INTO States VALUES('ID','Idaho')
INSERT INTO States VALUES('IL','Illinois')
INSERT INTO States VALUES('IN', 'Indiana')
INSERT INTO States VALUES('IA','Iowa')
INSERT INTO States VALUES('KS', 'Kansas')
INSERT INTO States VALUES('KY', 'Kentucky')
INSERT INTO States VALUES('LA','Louisiana')
INSERT INTO States VALUES('ME', 'Maine')
INSERT INTO States VALUES('MT','Montana')
INSERT INTO States VALUES('NE','Nebraska')
INSERT INTO States VALUES('NV','Nevada')
INSERT INTO States VALUES('NH','New Hampshire')
INSERT INTO States VALUES('NJ','New Jersey')
INSERT INTO States VALUES('NM','New Mexico')
INSERT INTO States VALUES('NC','North Carolina')
INSERT INTO States VALUES('ND','North Dakota')
INSERT INTO States VALUES('OH','Ohio')
INSERT INTO States VALUES('OK','Oklahoma')
```

```
INSERT INTO States VALUES('OR','Oregon')
INSERT INTO States VALUES('MD', 'Maryland')
INSERT INTO States VALUES('MA', 'Massachusetts')
INSERT INTO States VALUES('MI','Michigan')
INSERT INTO States VALUES('MN','Minnesota')
INSERT INTO States VALUES('MS', 'Mississippi')
INSERT INTO States VALUES('MO','Missouri')
INSERT INTO States VALUES('PA', 'Pennsylvania')
INSERT INTO States VALUES('RI', 'Rhode Island')
INSERT INTO States VALUES('SC','South Carolina')
INSERT INTO States VALUES('SD', 'South Dakota')
INSERT INTO States VALUES('TN', 'Tennessee')
INSERT INTO States VALUES('TX', 'Texas')
INSERT INTO States VALUES('UT','Utah')
INSERT INTO States VALUES('VT','Vermont')
INSERT INTO States VALUES('VA','Virginia')
INSERT INTO States VALUES('WA','Washington')
INSERT INTO States VALUES('WV','West Virginia')
INSERT INTO States VALUES('WI', 'Wisconsin')
INSERT INTO States VALUES('WY', 'Wyoming')
```

select * from States

```
select * from States
           --INSERTING Data INTO the Customer TABLE
INSERT INTO Customer VALUES (1,'Axe','Sharp','Strength',1,'axe.strength@gmail.com','3152452536','3','710 South Beech St', 'Syracuse','NY', 'USA',13210);
100 % -
mark Results has Ressages
      StateID StateName
     AK
              Alaska
               Alabama
      AR
               Arkansas
               Arizona
      CA
               California
      СТ
               Connecticut
      DE
               Delawar
      FL
GA
11
               Georgia
13
      IA
               lowa
 15
                                                                                                                                 ist-s-students.syr.edu (12.... | AD\saramasa (174) | IST659_M003_saramasa | 00:00:00 | 51 rows
```

--Inserting data into Advertisement

```
INSERT INTO Advertisement VALUES (21,'AdCom Pvt Ltd','NY')
INSERT INTO Advertisement VALUES (22, 'TecAdvt Pvt Ltd', 'MI')
insert into Advertisement values (1, Justina Pvt Ltd', 'TN')
insert into Advertisement values (2, 'Mandy Pvt Ltd', 'OR')
insert into Advertisement values (3,'Conrad Pvt Ltd','OH')
insert into Advertisement values (4, 'Cyril Pvt Ltd', 'CA')
insert into Advertisement values (5, 'Shelley Pvt Ltd', 'TX')
insert into Advertisement values (6, 'Rosalind Pvt Ltd', 'MN')
insert into Advertisement values (7, 'Davis Pvt Ltd', 'OH')
insert into Advertisement values (8, 'Winnie Pvt Ltd', 'TX')
insert into Advertisement values (9, 'Trudy Pvt Ltd', 'CA')
insert into Advertisement values (10, 'Deshawn Pvt Ltd', 'TX')
insert into Advertisement values (11, 'Claudio Pvt Ltd', 'NJ')
insert into Advertisement values (12, 'Sal Pvt Ltd', 'IN')
insert into Advertisement values (13, 'Cristina Pvt Ltd', 'NY')
insert into Advertisement values (14, 'Cary Pvt Ltd', 'OH')
```

```
insert into Advertisement values (15, 'Haley Pvt Ltd', 'CO') insert into Advertisement values (16, 'Dorothea Pvt Ltd', 'NJ') insert into Advertisement values (17, 'Fannie Pvt Ltd', 'FL') insert into Advertisement values (18, 'Allyson Pvt Ltd', 'NJ') insert into Advertisement values (19, 'Roger Pvt Ltd', 'FL') insert into Advertisement values (20, 'Dollie Pvt Ltd', 'TX')
```

SELECT * FROM Advertisement



-- INSERTing Data INTO the Customer TABLE

INSERT INTO Customer VALUES (1,'Axe','Sharp','Strength',1,'axe.strength@gmail.com','3152452536','3','710 South Beech St', 'Syracuse','NY', 'USA',13210);

INSERT INTO Customer VALUES(2, 'Essie', 'Conrad', 'Vaill', 11, 'essie@vaill.com', '9073450962', '14225', 'Hancock Dr', 'Anchorage', 'AK', 'United States of America', 99515)

INSERT INTO Customer VALUES(3,'Cruz','Cyril','Roudabush',11,'cruz@roudabush.com','6022524827','2202','S Central Ave','Phoenix','AZ','United States of America',85004)

INSERT INTO Customer VALUES(4, 'Billie', 'Shelley', 'Tinnes',1, 'billie@tinnes.com', '2128895775', '28', 'W 27th St', 'New York', 'NY', 'United States of America', 10001)

INSERT INTO Customer VALUES(5,'Zackary','Rosalind','Mockus',1,'zackary@mockus.com','7324420638','286','State St ','Perth Amboy','NJ','United States of America',8861)

INSERT INTO Customer VALUES(6, 'Rosemarie', 'Davis', 'Fifield',1, 'rosemarie@fifield.com', '8088368966', '3131', 'N Nimitz Hwy', 'Honolulu', 'HI', 'United States of America', 96819)

INSERT INTO Customer VALUES(7,'Bernard','Winnie','Laboy',10,'bernard@laboy.com','8154670487','22661','S Frontage Rd','Channahon','IL','United States of America',60410)

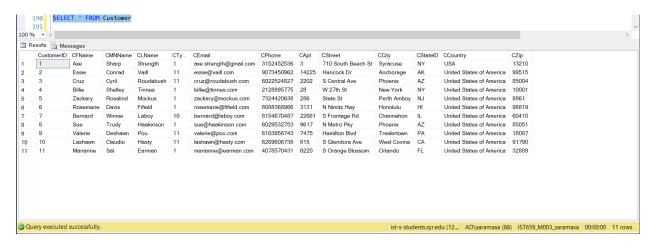
INSERT INTO Customer VALUES(8,'Sue','Trudy','Haakinson',1,'sue@haakinson.com','6029532753','9617','N Metro Pky','Phoenix','AZ','United States of America',85051)

INSERT INTO Customer VALUES(9,'Valerie','Deshawn','Pou',11,'valerie@pou.com','6103958743','7475','Hamilton Blvd ','Trexlertown','PA','United States of America',18087)

INSERT INTO Customer VALUES(10, 'Lashawn', 'Claudio', 'Hasty', 11, 'lashawn@hasty.com', '6269606738', '815', 'S Glendora Ave', 'West Covina', 'CA', 'United States of America', 91790)

INSERT INTO Customer VALUES(11,'Marianne','Sal','Earman',1,'marianne@earman.com','4078570431','6220','S Orange Blossom','Orlando','FL','United States of America',32809)

SELECT * FROM Customer



--INSERTING DATA INTO MAGAZINE TABLE

INSERT INTO Magazine VALUES ('VOG','VOGUE');
INSERT INTO Magazine VALUES ('VOG-E','VOGUE');

SELECT * FROM Magazine;



--INESSRTING DATA INTO ISSUE TABLE

INSERT INTO Issue VALUES(1,'VOG','January')

INSERT INTO Issue VALUES(2,'VOG','February')

INSERT INTO Issue VALUES(3,'VOG','March')

INSERT INTO Issue VALUES(4,'VOG','April')

INSERT INTO Issue VALUES(5,'VOG','May')

INSERT INTO Issue VALUES(6, 'VOG', 'June')

INSERT INTO Issue VALUES(7,'VOG','July')

INSERT INTO Issue VALUES(8, 'VOG', 'August')

INSERT INTO Issue VALUES(9,'VOG','September')

INSERT INTO Issue VALUES(10, 'VOG', 'October')

INSERT INTO Issue VALUES(11, 'VOG', 'November')

INSERT INTO Issue VALUES(12, 'VOG', 'December')

INSERT INTO Issue VALUES(13, 'VOG-E', 'January')

INSERT INTO Issue VALUES(14, 'VOG-E', 'February')

INSERT INTO Issue VALUES(15, 'VOG-E', 'March')

INSERT INTO Issue VALUES(16, 'VOG-E', 'April')

INSERT INTO Issue VALUES(17,'VOG-E','May')
INSERT INTO Issue VALUES(18,'VOG-E','June')

```
INSERT INTO Issue VALUES(19, 'VOG-E', 'July')
INSERT INTO Issue VALUES(20, 'VOG-E', 'August')
INSERT INTO Issue VALUES(21, 'VOG-E', 'September')
INSERT INTO Issue VALUES(22, 'VOG-E', 'October')
INSERT INTO Issue VALUES(23, 'VOG-E', 'November')
INSERT INTO Issue VALUES(24, 'VOG-E', 'December')
```

SELECT * FROM Issue



```
--INSERTING DATA INTO ADVERTTRACKER TABLE
INSERT INTO AdvertTracker VALUES (1,1,6437)
INSERT INTO AdvertTracker VALUES (2,1,5339)
INSERT INTO AdvertTracker VALUES (3,1,8985)
INSERT INTO AdvertTracker VALUES (4,1,6473)
INSERT INTO AdvertTracker VALUES (5,2,6342)
INSERT INTO AdvertTracker VALUES (6,1,5561)
INSERT INTO AdvertTracker VALUES (7,1,5577)
INSERT INTO AdvertTracker VALUES (8,2,5917)
INSERT INTO AdvertTracker VALUES (9,1,9399)
INSERT INTO AdvertTracker VALUES (10,1,6797)
INSERT INTO AdvertTracker VALUES (11,2,9487)
INSERT INTO AdvertTracker VALUES (12,1,9125)
INSERT INTO AdvertTracker VALUES (13,1,6723)
INSERT INTO AdvertTracker VALUES (14,2,6406)
INSERT INTO AdvertTracker VALUES (15,1,7342)
INSERT INTO AdvertTracker VALUES (16,1,9096)
INSERT INTO AdvertTracker VALUES (17,2,8150)
INSERT INTO AdvertTracker VALUES (18,1,7946)
INSERT INTO AdvertTracker VALUES (19,1,8627)
INSERT INTO AdvertTracker VALUES (20,1,7661)
INSERT INTO AdvertTracker VALUES (21,1,7476)
INSERT INTO AdvertTracker VALUES (22,2,6634)
INSERT INTO AdvertTracker VALUES (23,2,6858)
INSERT INTO AdvertTracker VALUES (24,1,9466)
```

SELECT * FROM AdvertTracker



```
--INSERTING DATA INTO SUBMAGTYPE TABLE
INSERT INTO SubMagType VALUES(1,'VOG',3,69)
INSERT INTO SubMagType VALUES(2,'VOG',6,138)
INSERT INTO SubMagType VALUES(3,'VOG',12,276)
INSERT INTO SubMagType VALUES(4,'VOG-E',3,63)
INSERT INTO SubMagType VALUES(5,'VOG-E',6,126)
INSERT INTO SubMagType VALUES(6,'VOG-E',12,252)
```

SELECT * **FROM** SubMagType

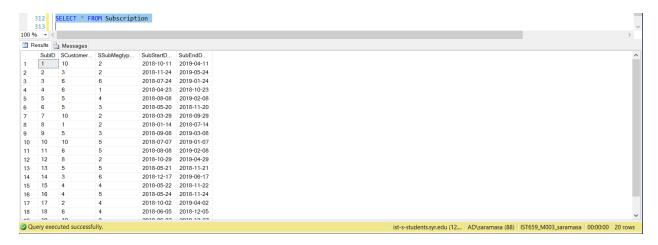


--INSERTING DATA INTO SUBSCRIPTION TABLE

```
insert into Subscription values (1,10,2,'2018/10/11','2019/04/11') insert into Subscription values (2,3,2,'2018/11/24','2019/05/24') insert into Subscription values (3,6,6,'2018/07/24','2019/01/24') insert into Subscription values (4,6,1,'2018/04/23','2018/10/23') insert into Subscription values (5,5,4,'2018/08/08','2019/02/08') insert into Subscription values (6,5,3,'2018/05/20','2018/11/20') insert into Subscription values (7,10,2,'2018/03/29','2018/09/29') insert into Subscription values (8,1,2,'2018/01/14','2018/07/14')
```

```
insert into Subscription values (9,5,3,'2018/09/08','2019/03/08') insert into Subscription values (10,10,5,'2018/07/07','2019/01/07') insert into Subscription values (11,6,5,'2018/08/08','2019/02/08') insert into Subscription values (12,8,2,'2018/10/29','2019/04/29') insert into Subscription values (13,5,5,'2018/05/21','2018/11/21') insert into Subscription values (14,3,6,'2018/12/17','2019/06/17') insert into Subscription values (15,4,4,'2018/05/22','2018/11/22') insert into Subscription values (16,4,5,'2018/05/24','2018/11/24') insert into Subscription values (17,2,4,'2018/10/02','2019/04/02') insert into Subscription values (18,6,4,'2018/06/05','2018/12/05') insert into Subscription values (19,10,3,'2018/06/27','2018/12/27') insert into Subscription values (20,1,2,'2018/08/05','2019/02/05')
```

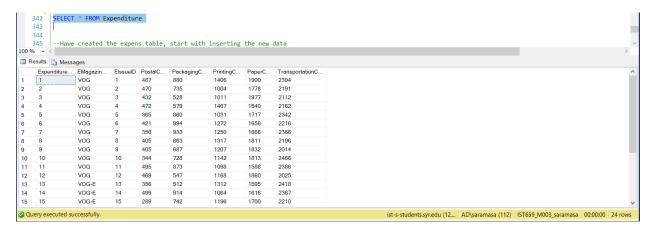
SELECT * FROM Subscription



--INSERT INTO SUBSCRIPTION TABLE

```
INSERT INTO EXPENDITURE VALUES (1, 'VOG', 1, 487, 880, 1406, 1900, 2394)
INSERT INTO EXPENDITURE VALUES (2, 'VOG', 2, 470, 735, 1004, 1778, 2191)
INSERT INTO EXPENDITURE VALUES (3, 'VOG', 3, 432, 528, 1011, 1977, 2112)
INSERT INTO EXPENDITURE VALUES (4, 'VOG', 4, 472, 579, 1467, 1540, 2162)
INSERT INTO EXPENDITURE VALUES (5, 'VOG', 5, 365, 860, 1031, 1717, 2342)
INSERT INTO EXPENDITURE VALUES (6, 'VOG', 6, 421, 994, 1272, 1656, 2216)
INSERT INTO EXPENDITURE VALUES (7, 'VOG', 7, 356, 933, 1250, 1666, 2366)
INSERT INTO EXPENDITURE VALUES (8, 'VOG', 8, 405, 663, 1317, 1811, 2196)
INSERT INTO EXPENDITURE VALUES (9, 'VOG', 9, 405, 687, 1207, 1832, 2014)
INSERT INTO EXPENDITURE VALUES (10, 'VOG', 10, 344, 728, 1142, 1813, 2466)
INSERT INTO EXPENDITURE VALUES (11, VOG', 11, 495, 873, 1098, 1586, 2386)
INSERT INTO EXPENDITURE VALUES (12, VOG', 12, 469, 547, 1168, 1860, 2025)
INSERT INTO EXPENDITURE VALUES (13, 'VOG-E', 13, 356, 512, 1312, 1595, 2418)
INSERT INTO EXPENDITURE VALUES (14, VOG-E', 14, 499, 914, 1064, 1616, 2367)
INSERT INTO EXPENDITURE VALUES (15, 'VOG-E', 15, 289, 742, 1196, 1700, 2210)
INSERT INTO EXPENDITURE VALUES (16, 'VOG-E', 16, 435, 528, 1435, 1907, 2037)
INSERT INTO EXPENDITURE VALUES (17, 'VOG-E', 17, 363, 529, 1074, 1734, 2168)
INSERT INTO EXPENDITURE VALUES (18, VOG-E', 18, 443, 721, 1443, 1845, 2160)
INSERT INTO EXPENDITURE VALUES (19, VOG-E', 19, 497, 580, 1372, 1566, 2491)
INSERT INTO EXPENDITURE VALUES (20, 'VOG-E', 20, 333, 923, 1238, 1784, 2374)
INSERT INTO EXPENDITURE VALUES (21, 'VOG-E', 21, 363, 529, 1074, 1734, 2168)
INSERT INTO EXPENDITURE VALUES (22, VOG-E1, 22, 363, 529, 1074, 1734, 2168)
INSERT INTO EXPENDITURE VALUES (23, VOG-E', 23, 363, 529, 1074, 1734, 2168)
```

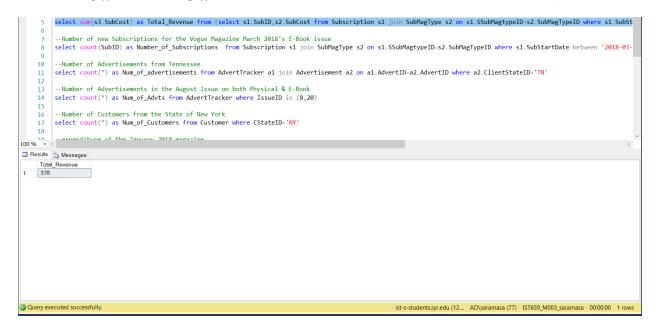
SELECT * FROM Expenditure



MAJOR DATA QUESTIONS

1. What is the Total Revenue for the month of July 2018?

select sum(s3.SubCost) as Total_Revenue from (select s1.SubID,s2.SubCost from Subscription s1 join SubMagType s2 on s1.SSubMagtypeID=s2.SubMagTypeID where s1.SubStartDate between '2018-07-01' and '2018-07-31') as s3



2. What is the total Number of new Subscriptions for the Vogue Magazine March 2018's E-Book issue?

select count(SubID) as Number_of_Subscriptions from Subscription s1 join SubMagType s2 on s1.SSubMagtypeID=s2.SubMagTypeID where s1.SubStartDate between '2018-03-01' and '2018-03-31'



3. What is the total Number of Advertisements from Tennessee?

select count(*) as Num_of_advertisements from AdvertTracker a1 join Advertisement a2 on a1.AdvertID=a2.AdvertID where a2.ClientStateID='TN'



4. Whatis the Number of Advertisements in the August Issue on both Physical & E-Book?

select count(*) as Num_of_Advts from AdvertTracker a join Issue i on a.IssueID=i.IssueID where i.Month='August'



5. What is the Total Number of Customers from the State of New York?

select count(*) as Num_of_Customers from Customer where CStateID='NY'



6. What is the Total expenditure of the January 2018 magazine?

select i.IssueID, i.Month , (PostalCost+PackagingCost+PrintingCost+PaperCost+TransportationCost) as Total_Cost from Expenditure e join Issue i on e.ElssueID=i.IssueID where ElssueID in (select IssueID from Issue i where Month='January')

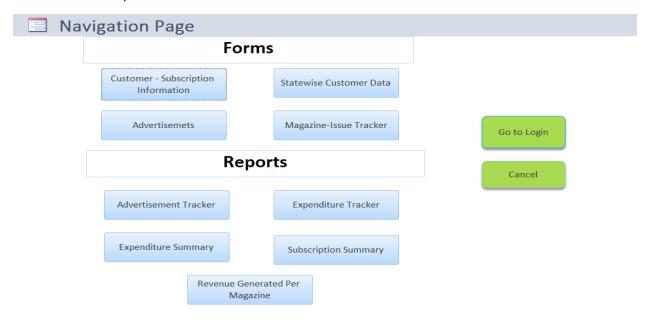
INTERFACES

1. Employee Login Page:



2. Home Page:

After successful logging in, the user is greeted with the home page for the navigation forms and reports.



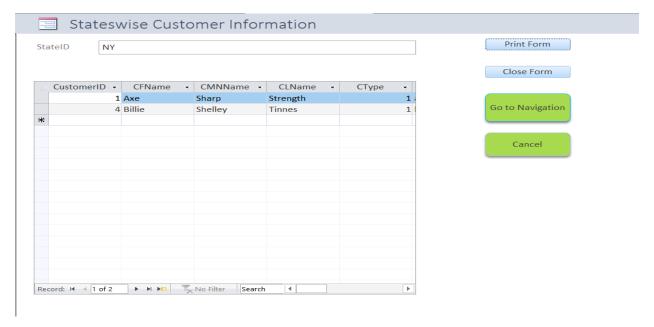
3. Customer Data Form:

Here we have a form to View, Add, Delete, Save & Print the data related to the Customers.



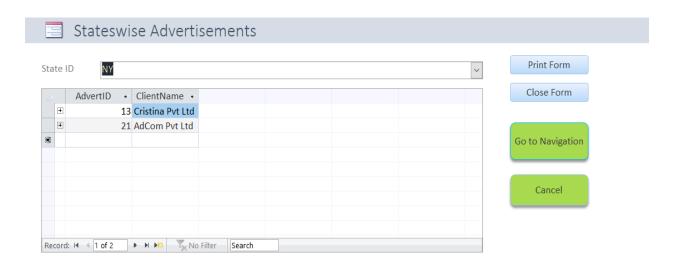
4. State wise Customers:

In this form we can view the customers according to their state of residency.



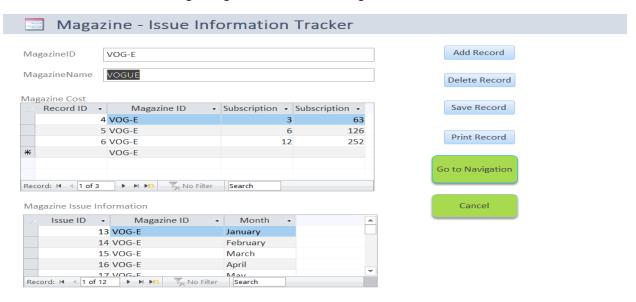
5. State-wise Advertisements:

Here we can view all the advertisements that were received in each and every state.



6. Magazine – Issue Information Tracker

Provides information regarding the subscription cost for the chosen Magazine and the information regarding the issues of that magazine.



REPORT

1. Advertisement Tracker:

Advertisement and their respective clients.

| ssueID | IMagazineID | AdvertID | Month | ClientName | ClientStateID | AdvertisementCost |
|--------|-------------|----------|-----------|-----------------|---------------|-------------------|
| 1 | VOG | 1 | January | Justina Pvt Ltd | TN | 643 |
| 2 | VOG | 1 | February | Justina Pvt Ltd | TN | 533 |
| 3 | VOG | 1 | March | Justina Pvt Ltd | TN | 898 |
| 4 | VOG | 1 | April | Justina Pvt Ltd | TN | 647 |
| 5 | VOG | 2 | May | Mandy Pvt Ltd | OR | 634 |
| 6 | VOG | 1 | June | Justina Pvt Ltd | TN | 550 |
| 7 | VOG | 1 | July | Justina Pvt Ltd | TN | 55 |
| 8 | VOG | 2 | August | Mandy Pvt Ltd | OR | 59: |
| 9 | VOG | 1 | September | Justina Pvt Ltd | TN | 939 |
| 10 | VOG | 1 | October | Justina Pvt Ltd | TN | 679 |
| 11 | VOG | 2 | November | Mandy Pvt Ltd | OR | 948 |
| 12 | VOG | 1 | December | Justina Pvt Ltd | TN | 917 |
| 13 | VOG-E | 1 | January | Justina Pvt Ltd | TN | 67: |
| 14 | VOG-E | 2 | February | Mandy Pvt Ltd | OR | 641 |
| 15 | VOG-E | 1 | March | Justina Pvt Ltd | TN | 734 |
| 16 | VOG-E | 1 | April | Justina Pvt Ltd | TN | 909 |
| 17 | VOG-E | 2 | May | Mandy Pvt Ltd | OR | 81 |
| 18 | VOG-E | 1 | June | Justina Pvt Ltd | TN | 794 |
| 19 | VOG-E | 1 | July | Justina Pvt Ltd | TN | 862 |
| 20 | VOG-E | 1 | August | Justina Pvt Ltd | TN | 760 |
| 21 | VOG-E | 1 | September | Justina Pvt Ltd | TN | 747 |
| 22 | VOG-E | 2 | October | Mandy Pvt Ltd | OR | 663 |
| 23 | VOG-E | 2 | November | Mandy Pvt Ltd | OR | 685 |
| 24 | VOG-E | 1 | December | Justina Pvt Ltd | TN | 946 |

2. Subscription summary:

This report displays magazine and corrosponding subscription cost.

| Magazine Subs | cription Cost | | | |
|--------------------|---------------|---------------------|-------------------|--|
| Magazine ID VOG | Magazine Name | Subscription Period | Subscription Cost | |
| | VOGUE | | | |
| | | 12 | 276 | |
| | | 6 | 138 | |
| | | 3 | 69 | |
| VOG-E | | | | |
| | VOGUE | | | |
| | | 12 | 252 | |
| | | 6 | 126 | |
| | | 3 | 63 | |

Go to Navigation Page

Cancel

3. Subscription Revenue:

Revenue generated for each magazine.

| Revenue Ge | nerated Per Ma | gazine | | |
|-------------|----------------|----------------|---------------|--|
| Magazine ID | Magazine Name | Subcription ID | Total Revenue | |
| VOG | VOGUE | 19 | 276 | |
| VOG | VOGUE | 1 | 138 | |
| VOG | VOGUE | 2 | 138 | |
| VOG | VOGUE | 7 | 138 | |
| VOG | VOGUE | 8 | 138 | |
| VOG | VOGUE | 12 | 138 | |
| VOG | VOGUE | 20 | 138 | |
| VOG | VOGUE | 6 | 276 | |
| VOG | VOGUE | 4 | 69 | |
| VOG | VOGUE | 9 | 276 | |
| VOG-E | VOGUE | 14 | 252 | |
| VOG-E | VOGUE | 15 | 63 | |
| VOG-E | VOGUE | 17 | 63 | |
| VOG-E | VOGUE | 18 | 63 | |
| VOG-E | VOGUE | 10 | 126 | |
| VOG-E | VOGUE | 11 | 126 | |
| VOG-E | VOGUE | 13 | 126 | |

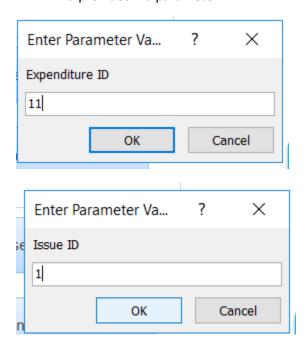
4. Expenditure Summary:

Expenditure for each magazine.

| xpenditure Summary | | | | | | | | | | | | | |
|---------------------------------|------------------------|-------------------------|---------------------------|------------------------|--------------------------|------------------|-----------------------|--|--|--|--|--|--|
| EMagazineID | vog | | | | | | | | | | | | |
| Expenditure Total Postal Cost | Average Postal Cost | Total Packaging Cost | Average Packaging Cost | Total Printing Cost | Average Printing Cost | Total Paper Cost | Average Paper Cost | | | | | | |
| 1 487 | 487 | 880 | 880 | 1406 | 1406 | 1900 | 1900 | | | | | | |
| 2 470 | 470 | 735 | 735 | 1004 | 1004 | 1778 | 1778 | | | | | | |
| 3 432 | 432 | 528 | 528 | 1011 | 1011 | 1977 | 1977 | | | | | | |
| 4 472 | 472 | 579 | 579 | 1467 | 1467 | 1540 | 1540 | | | | | | |
| 5 365 | 365 | 860 | 860 | 1031 | 1031 | 1717 | 1717 | | | | | | |
| 6 421 | 421 | 994 | 994 | 1272 | 1272 | 1656 | 1656 | | | | | | |
| 7 356 | 356 | 933 | 933 | 1250 | 1250 | 1666 | 1666 | | | | | | |
| 8 405 | 405 | 663 | 663 | 1317 | 1317 | 1811 | 1811 | | | | | | |
| 9 405 | 405 | 687 | 687 | 1207 | 1207 | 1832 | 1832 | | | | | | |
| 10 344 | 344 | 728 | 728 | 1142 | 1142 | 1813 | 1813 | | | | | | |
| 11 495 | 495 | 873 | 873 | 1098 | 1098 | 1586 | 1586 | | | | | | |
| 12 469 | 469 | 547 | 547 | 1168 | 1168 | 1860 | 1860 | | | | | | |

5. Expenditure Tracker

This report displays postal cost, packaging cost, paper cost and transportation cost for each issue id provided via parameter.



Expenditure Tracker

| EMagazineID | Expenditure ID | Issue Id | | Postal Cost | Packaging Cost | Printing Cost | Paper Cost | Transportation Cost |
|-------------|----------------|----------|---|-------------|----------------|---------------|------------|---------------------|
| VOG | 2 | | 1 | 487 | 880 | 1406 | 1900 | 2394 |