

1.0 Relational Database Schemas.

For the schemas, the tables were created in correspondence with the elements in the normalised ERD. There are 8 elements which will be created in Live SQL and interconnected with foreign keys using the CONSTRAINT statement. Below are the statements to create those tables:

1. Customer

```
CREATE TABLE Customer (  
    customerID    NUMBER(10) NOT NULL,  
    custUsername  VARCHAR2(15) NOT NULL,  
    custEmail     VARCHAR2(30) NOT NULL,  
    custPassword  VARCHAR2(20) NOT NULL,  
    custName      VARCHAR2(50) NOT NULL,  
    custMobileNo  NUMBER(12) NOT NULL,  
    custPin       NUMBER(6) NOT NULL,  
  
    CONSTRAINT customer_pk PRIMARY KEY ( customerID ),  
    CONSTRAINT customer_email_uk UNIQUE ( custEmail )  
);
```

2. Vendor

```
CREATE TABLE Vendor (  
  vendorID      VARCHAR2(10) NOT NULL,  
  vendorName    VARCHAR2(50) NOT NULL,  
  vendorEmail   VARCHAR2(30) NOT NULL,  
  vendorAddress VARCHAR2(200) NOT NULL,  
  vendorPhone   NUMBER(12) NOT NULL,  
  
  CONSTRAINT vendor_pk PRIMARY KEY ( vendorID ),  
  CONSTRAINT vendor_email_uk UNIQUE ( vendorEmail )  
);
```

3. Ticket

```
CREATE TABLE Ticket (  
  ticketID     VARCHAR2(3) NOT NULL,  
  ticketName   VARCHAR2(50) NOT NULL,  
  ticketDesc   VARCHAR2(200) NOT NULL,  
  ticketType   VARCHAR2(20) NOT NULL,  
  ticketPrice  NUMBER(5,2) NOT NULL,  
  
  CONSTRAINT ticket_pk PRIMARY KEY ( ticketID )  
);
```

4. TicketDetails

```
CREATE TABLE TicketDetails (  
    ticketDetailsID  VARCHAR2(10) NOT NULL,  
    ticketDate       DATE NOT NULL,  
    ticketStatus     CHAR(1) NOT NULL,  
    ticketQty        NUMBER(3) NOT NULL,  
    ticketAmount     NUMBER(5,2) NOT NULL,  
    ticketTotalPoint NUMBER(6) NOT NULL,  
  
    ticketID         VARCHAR2(10) NOT NULL,  
    customerID       NUMBER(10) NOT NULL,  
  
    CONSTRAINT ticket_details_pk PRIMARY KEY ( ticketDetailsID ),  
    CONSTRAINT ticket_details_ID_fk FOREIGN KEY ( ticketID ) REFERENCES  
Ticket ( ticketID ),  
    CONSTRAINT customer_details_ID_fk FOREIGN KEY ( customerID )  
REFERENCES Customer ( customerID )
```

5. Payment

```
CREATE TABLE Payment (  
    paymentID    VARCHAR2(10) NOT NULL,  
    paymentDate  DATE NOT NULL,  
    paymentTime  DATE NOT NULL,  
    paymentStatus NUMBER(1) NOT NULL,  
  
    paymentMethodID    NUMBER(2) NOT NULL,  
  
    CONSTRAINT payment_pk PRIMARY KEY ( paymentID ),  
    CONSTRAINT payment_method_id_fk FOREIGN KEY ( paymentMethodID )  
REFERENCES PaymentMethod ( paymentMethodID )  
);
```

6. PaymentMethod

```
CREATE TABLE PaymentMethod (  
    paymentMethodID    NUMBER(2) NOT NULL,  
    paymentMethodName  VARCHAR2(20) NOT NULL,  
  
    CONSTRAINT payment_method_pk PRIMARY KEY ( paymentMethodID )  
);
```

7. Alter Table

```
ALTER TABLE Payment ADD ticketDetailsID VARCHAR2(10) NOT NULL;
```

```
ALTER TABLE Payment
```

```
    ADD CONSTRAINT ticket_details_payment_fk FOREIGN KEY ( ticketDetailsID  
) REFERENCES TicketDetails ( ticketDetailsID );
```

```
ALTER TABLE Ticket ADD vendorID VARCHAR2(10) NOT NULL;
```

```
ALTER TABLE Ticket
```

```
    ADD CONSTRAINT ticket_vendor_id_fk FOREIGN KEY ( vendorID )  
REFERENCES Vendor ( vendorID );
```

2.0 SET OF DATA

1. Customer

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (3152436521, 'kemalx25', 'kemalchux@gmail.com', 'Kemalola9856', 'Kemal Aushaf', 60174532158, 524263);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (4301254431, 'alyanasuhax2', 'alyanasuhaax@gmail.com', 'Alyazzwaa75!', 'Alya Nasuha', 60142513366, 245532);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (2152215311, 'fikarfhh2', 'fikarchux@gmail.com', 'Fikaryyh316', 'Ahmad Zulfikar', 601154831665, 843511);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (5543287652, 'saveropower2', 'saverochux@gmail.com', 'Savero_877', 'Savero', 60174532158, 524263);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (4315226487, 'baim_wkwk', 'baimchux@gmail.com', 'Baimheyyo55', 'Faris Ibrahim', 60188842888, 112233);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (2315726183, 'faris_ibra', 'ibraf@gmail.com', 'Faris123', 'Muhammad Faris', 601238842842, 172839);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (7814736181, 'lit_kems', 'kems11t@gmail.com', 'Kems11ty', 'Ahmad Aushaf', 60120438146, 161885);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)
VALUES (60131575411, 'saver0', 'sav3ro@gmail.com', 'Save99', 'Sutiono', 60136747742, 236530);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName,
custMobileNo, custPin)
VALUES (0895767221, 'Pik4rU', 'P1karPikir@gmail.com', 'Pikar123', 'Zulfikri', 6011216970 ,
130521);
```

```
INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName,
custMobileNo, custPin)
VALUES (5237785220, 'A4liyah', '4liyahnasihat@gmail.com', 'Aliyah?11', 'Aaliyah',
601912197980 , 229121);
```

2. Vendor

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven1520315', 'Kidzy Museum Sdn Bhd', 'Museum3D@kidzy.com', 'Lot 4.01-4.03
Level 2, Central Market Annexe, Jalan Hang Kasturi Kuala Lumpur, 50050 Kuala Lumpur',
0320221613);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven1248733', 'i-City Wax Museum Sdn Bhd', 'MuseumWax@icity.com', 'D-9-1,
Jalan Multimedia, 7/AJ City Park, i-City, Shah Alam', 0355218800);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven1723652', 'Penang Boutique Aquarium Sdn Bhd',
'BoutiqueAquarium@baqua.com', 'The Top Boutique Aquarium, Level 4, The Top@Komtar
Penang.', 042623800);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven4215132', 'Jabatan Muzium Negara', 'MuziumNegara@mnegara.com', 'Jabatan
Muzium Malaysia, Jln Damansara, Perdana Botanical Gardens, 50566 Kuala Lumpur, Federal
Territory of Kuala Lumpur', 60322671000);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven4252111', 'Bank Negara Malaysia', 'MuziumBNM@mbnm.com', 'Sasana
Kijang, 2, Jalan Dato Onn, Kuala Lumpur, 50480 Kuala Lumpur, Wilayah Persekutuan Kuala
Lumpur', 60391792784);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven1975122', 'National Textile Museum', 'N.TextileMuseum@gmail.com', '26,
Jalan Sultan Hishamuddin, City Centre, 50000 Kuala Lumpur, Wilayah Persekutuan Kuala
Lumpur', 60322671000);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven2645210', 'Orang Asli Craft Museum', 'O.Asli@craft.com', 'Orang Asli Crafts
Museum, Jabatan Muzium Malaysia, Jalan Damansara, 50566 Kuala Lumpur', 60322826255);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven7545578', '3D Art Langkawi', 'Langkawi3D@yahoo.com', 'Jalan Telaga Tujuh,
07100 Langkawi, Kedah', 60135091209);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven1512452', 'Upside Down Museum Penang',
'penangmuseum.upside@gmail.com', '45, Lebuh Kimberley, George Town, 10100 George
Town, Pulau Pinang', 60322671000);
```

```
INSERT INTO Vendor (vendorID, vendorName, vendorEmail, vendorAddress, vendorPhone)
VALUES ('ven1456998', 'Selfie Museum KL', 'selfie@gmail.com', 'Unit 2.28-2.40, Level 2,
```

Fahrenheit88, 179, Bukit Bintang St, 55100 Kuala Lumpur, Federal Territory of Kuala Lumpur', 60123878968);

3. Ticket

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (001, 'Wax Museum', 'See your favourite stars up close and be wowed with the vast
collection', 'Adult', 25.00, 'ven1520315');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (002, 'Wax Museum', 'See your favourite stars up close and be wowed with the vast
collection', 'Children', 20.00, 'ven1520315');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (003, 'Wax Museum', 'See your favourite stars up close and be wowed with the vast
collection.', 'Loss Fortune (OKU)', 15.00, 'ven1520315');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (004, '3D Museum', 'Trick or be tricked and let your imagination run wild with
optical illusions and sculptures.', 'Adult', 5.00, 'ven1248733');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (005, '3D Museum', 'Trick or be tricked and let your imagination run wild with
optical illusions and sculptures.', 'Children', 10.00, 'ven1248733');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (006, '3D Museum', 'Trick or be tricked and let your imagination run wild with
optical illusions and sculptures.', 'Loss Fortune (OKU)', 7.00, 'ven1248733');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (007, 'Boutique Aquarium', 'Get up and personal with marine, flora and fauna and
go on a journey of discovery.', 'Adult', 45.00, 'ven1723652');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (008, 'Boutique Aquarium', 'Get up and personal with marine, flora and fauna and
go on a journey of discovery.', 'Children', 40.00, 'ven1723652');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (009, 'Boutique Aquarium', 'Get up and personal with marine, flora and fauna and
go on a journey of discovery.', 'Loss Fortune (OKU)', 35.00, 'ven1723652');
```

```
INSERT INTO Ticket (ticketID, ticketName, ticketDesc, ticketType, ticketPrice, vendorID)
VALUES (010, 'Selfie Museum', 'Visitors to this quirky modern art museum take selfies amid
vibrant dessert-themed installations.', 'Adult', 45.00, 'ven1456998');
```

4. Ticket Details

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic3251244', TO_DATE ('03-Dec-2020', 'DD-MM-YYYY'), 'S', 1, 25.00, 25, 001,
3152436521);
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic5142631', TO_DATE('04-Dec-2020', 'DD-MM-YYYY'), 'S', 2, 40.00, 40, 002,
5543287652 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic5213652', TO_DATE('05-Dec-2020', 'DD-MM-YYYY'), 'S', 1, 15.00, 15, 003,
5543287652 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic5241253', TO_DATE('05-Dec-2020', 'DD-MM-YYYY'), 'U', 1, 7.00, 7, 006,
2152215311 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic1422188', TO_DATE('05-Dec-2020', 'DD-MM-YYYY'), 'U', 3, 120.00, 120,
007, 4301254431 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic7214511', TO_DATE('06-Dec-2020', 'DD-MM-YYYY'), 'S', 1, 40.00, 40, 008,
4301254431 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic7214886', TO_DATE('05-Dec-2020', 'DD-MM-YYYY'), 'S', 3, 150.00, 150,
009, 4301255533 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic7276590', TO_DATE('09-Dec-2020', 'DD-MM-YYYY'), 'S', 6, 210.00, 210,
010, 432025554 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,
ticketAmount, ticketTotalPoint, ticketID, customerID )
VALUES ('tic7276660', TO_DATE('11-Dec-2020', 'DD-MM-YYYY'), 'S', 4, 140.00, 140,
011, 432033354 );
```

```
INSERT INTO TicketDetails (ticketDetailsID, ticketDate, ticketStatus, ticketQty,  
ticketAmount, ticketTotalPoint, ticketID, customerID )  
VALUES ('tic7359590', TO_DATE('10-Dec-2020', 'DD-MM-YYYY'), 'S', 3, 105.00, 105,  
012, 432115576 );
```

5. Payment

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay1542158', TO_DATE('01-Dec-2020', 'DD-MM-YYYY'), TO_DATE('01-Dec-
2020 14:55:32', 'DD-MM-YYYY hh24:mi:ss'), 0, 01, 'tic3251244' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay1215423', TO_DATE('02-Dec-2020', 'DD-MM-YYYY'), TO_DATE('02-Dec-
2020 15:45:55', 'DD-MM-YYYY hh24:mi:ss'), 0, 02, 'tic5142631' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay1425120', TO_DATE('03-Dec-2020', 'DD-MM-YYYY'), TO_DATE('03-Dec-
2020 12:45:36', 'DD-MM-YYYY hh24:mi:ss'), 0, 03, 'tic7214511' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay4251399', TO_DATE('04-Dec-2020', 'DD-MM-YYYY'), TO_DATE('04-Dec-
2020 10:45:30', 'DD-MM-YYYY hh24:mi:ss'), 1, 01, 'tic5343652' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay5467432', TO_DATE('05-Dec-2020', 'DD-MM-YYYY'), TO_DATE('05-Dec-
2020 09:45:31', 'DD-MM-YYYY hh24:mi:ss'), 1, 02, 'tic1444188' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay1754329', TO_DATE('06-Dec-2020', 'DD-MM-YYYY'), TO_DATE('06-Dec-
2020 08:43:30', 'DD-MM-YYYY hh24:mi:ss'), 1, 04, 'tic5289652' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay3435634', TO_DATE('07-Dec-2020', 'DD-MM-YYYY'), TO_DATE('07-Dec-
2020 11:45:30', 'DD-MM-YYYY hh24:mi:ss'), 0, 01, 'tic5255652' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay1235634', TO_DATE('08-Dec-2020', 'DD-MM-YYYY'), TO_DATE('08-Dec-
2020 14:45:20', 'DD-MM-YYYY hh24:mi:ss'), 0, 02, 'tic9875652' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay2222634', TO_DATE('09-Dec-2020', 'DD-MM-YYYY'), TO_DATE('09-Dec-
2020 16:35:24', 'DD-MM-YYYY hh24:mi:ss'), 1, 03, 'tic9875652' );
```

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
```

```
VALUES ('pay2333634', TO_DATE('10-Dec-2020', 'DD-MM-YYYY'), TO_DATE('10-Dec-2020 22:45:22', 'DD-MM-YYYY hh24:mi:ss'), 1, 04, 'tic9575652' );
```

6. PaymentMethod

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (01, 'Online Banking' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (02, 'Grab Pay' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (03, 'Touch N Go eWallet' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (04, 'Credit/Debit Card' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (05, 'Ovo' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)
```

```
VALUES (06, 'Shopee Pay' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (07, 'Lazada Pay' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (08, 'Razr Pay ' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (09, 'Paypal' );
```

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)  
VALUES (10, Boost' );
```

3.0 SET OF QUERIES

A) Customer

1. FETCH ALL RESULT

```
SELECT * FROM customer
```

2. CHANGE ONE OF THE CUSTOMER PHONE NUMBER

```
UPDATE customer
```

```
SET custMobileNo = '0211890228'
```

```
WHERE custName = 'Alya Nasuha'
```

3. FETCH RESULT WHERE CUSTOMERID “3152436521”

```
SELECT * FROM customer
```

```
WHERE customerID = '3152436521'
```

4. FETCH THE RESULT WHERE ADMIN EMAIL CONTAINS CHARACTER - A

```
SELECT * FROM customer
```

```
WHERE customerEmail LIKE '%a%'
```

5. FETCH THE CUSTOMER NAME AND CUSTOMER ID IN ASCENDING ORDER

```
SELECT * FROM customer
```

```
ORDER BY custName ASC, customerID ASC
```

6. FETCH RESULT OF CUSTOMER INFO INTO CATEGORIES

```
SELECT customerID, custName, custMobileNo  
  
FROM customer  
  
ORDER BY custName;
```

7. FETCH RESULT OF CUSTOMER EMAIL THAT USES GMAIL.COM

```
SELECT customerEmail  
FROM customer  
WHERE customerEmail LIKE '%gmail.com'
```

8. FETCH RESULT OF CUSTOMER EMAIL THAT USES YAHOO.COM

```
SELECT customerEmail  
FROM customer  
WHERE customerEmail LIKE '%yahoo.com'
```

9. FETCH ALL RESULT OF CUSTOMER BY EMAIL IN DESCENDING ORDER

```
SELECT * FROM customer  
ORDER BY customerEmail DESC
```

10. FETCH TO SPECIFY THE NUMBER OF RECORD TO RETURN

```
SELECT * FROM customer  
  
WHERE custName <= 'Ahmad Zulfikar';
```

11. ADDING COLUMN MEMBERSHIP EXPIRY DATE TO CUSTOMER TABLE

```
ALTER TABLE customer  
ADD (membershipDate DATE 'DD-MM-YYYY');
```

12. ALTERNATE QUOTE(q) OPERATOR FOR CUSTOMER TABLE

```
SELECT customerID || q'[ and ]' || customerEmail || q'[ can be used to login ]' AS  
"Selection"  
FROM customer;
```

13. FETCH RESULT OF CUSTOMER INFO IN ASCENDING ORDER OF CUSTOMER EMAIL

```
SELECT customerID, customerEmail,  
FROM customer  
ORDER BY customerEmail
```

14. DROPPING COLUMN CUSTOMER PIN

```
ALTER TABLE customer
```

```
DROP COLUMN custPin
```

15. DELETE ROW OF CUSTOMER ID 2152215311

```
DELETE FROM customer
```

```
WHERE customerID= '2152215311'
```

B) Payment

1. FETCH THE TOTAL OF PAYMENT

```
SELECT * FROM payment
```

2. FETCH RESULT WHERE PAYMENT DATE "03-DEC-2020"

```
SELECT * FROM payment
```

```
WHERE paymentDate = '12/03/2020'
```

3. FETCH RESULT WHERE PAYMENT ID "pay1542158"

```
SELECT * FROM payment
```

```
WHERE paymentID = 'pay1542158'
```

4. FETCH RESULT WHERE PAYMENT TIME "14:55:30"

```
SELECT * FROM payment
```

```
WHERE paymentTime = '14:55:30'
```

5. FETCH RESULT OF TICKET DETAILS ID

```
SELECT * FROM payment  
Where ticketDetailsID = 'tic514263'
```

6. FETCH RESULT OF PAYMENT STATUS SUCCESSFUL

```
SELECT * FROM payment  
Where paymentStatus = '0'
```

7. FETCH THE RESULT WHERE UPDATE THE PAYMENT STATUS

```
UPDATE paymentStatus = '1'  
Where paymentID = 'pay1542158'
```

8. FETCH RESULT OF PAYMENT STATUS UNSUCCESSFUL

```
SELECT * FROM payment  
Where paymentStatus = '1'
```

9. FETCH RESULT OF PAYMENT ID IN ASCENDING ORDER OF PAYMENT

```
SELECT paymentID, paymentTime  
FROM payment  
PAYMENT BY payment ID
```

10. FETCH RESULT OF PAYMENT INTO CATEGORIES

```
SELECT paymentID, paymentDatepaymentTime, paymentStatus, paymentMethodID  
FROM payment  
ORDER BY paymentID;
```

11. FETCH RESULT OF PAYMENT METHOD ID

```
SELECT * from payment  
Where payment method ID = '1'
```

12. FETCH RESULT OF PAYMENT METHOD ID

```
SELECT * FROM payment  
Where payment method ID = '2'
```

13. FETCH RESULT OF PAYMENT METHOD ID

```
SELECT * from payment  
Where payment method ID = '3'
```

14. FETCH RESULT OF PAYMENT METHOD ID

```
SELECT * FROM payment  
Where payment method ID = '4'
```

15. FETCH THE RESULT WHERE UPDATE THE PAYMENT DATE

```
SELECT * FROM payment  
UPDATE Payment date = DD-MM-YYYY  
Where Payment date = '03/12/2020'
```

C) Payment Method

1. FETCH THE PAYMENT METHOD

```
SELECT * FROM paymentMethod
```

2. FETCH RESULT WHERE PAYMENT METHOD ONLINE BANKING

```
SELECT paymentMethod  
From paymentMethodID = '1'  
Where paymentMethodName = Online Banking
```

3. FETCH RESULT WHERE PAYMENT METHOD GRAB PAY

```
SELECT paymentMethodName  
From paymentMethodID = '2'  
Where paymentMethodName = Grab Pay
```

4. FETCH RESULT WHERE PAYMENT METHOD TOUCH N GO E WALLET

```
SELECT paymentMethodName  
From paymentMethodID = '3'  
Where paymentMethodName = Touch N Go eWallet
```

5. FETCH RESULT WHERE PAYMENT METHOD CREDIT/DEBIT CARD

```
SELECT paymentMethodName  
From paymentMethodID = '4'  
Where paymentMethodName = Credit/Debit Card
```

6. UPDATE THE CREDIT/DEBIT CARD NAME INTO PAYPAL/VISA

```
UPDATE payment method  
SET paymentmethodname = 'PAYPAL/VISA'  
WHERE paymentmethodID = '04'
```

7. DELETE THE PAYPAL/VISA ANOMALIES

```
DELETE FROM paymentmethod  
  
WHERE paymentmethodname ='PAYPAL/VISA'
```

8. REMOVE THE GRAB PAY METHOD FROM THE PAYMENT METHOD

```
DELETE FROM paymentmethod  
  
WHERE paymentmethodname ='grab pay'
```

9. REMOVE THE ONLINE BANKING METHOD FROM THE PAYMENT METHOD

```
DELETE FROM paymentmethod  
  
WHERE paymentmethodname ='online banking'
```

10. REMOVE THE TOUCH N GO EWALLET METHOD FROM THE PAYMENT METHOD

```
DELETE FROM paymentmethod
WHERE paymentmethodname ='Touch N Go eWallet'
```

11. MAKE SURE IF THE DELETION IS SUCCESS ON PAYMENT METHOD TOUCH N GO E WALLET

```
SELECT paymentMethodName
From paymentMethodID = '3'
Where paymentMethodName = Touch N Go eWallet
```

12. MAKE SURE IF THE DELETION IS SUCCESS ON PAYMENT METHOD ONLINE BANKING

```
SELECT paymentMethod
From paymentMethodID = '1'
Where paymentMethodName = Online Banking
```

13. MAKE SURE IF THE DELETION IS SUCCESS ON PAYMENT METHOD GRAB PAY

```
SELECT paymentMethodName
From paymentMethodID = '2'
Where paymentMethodName = GrabPay
```

14. MAKE SURE IF THE DELETION IS SUCCESS ON PAYMENT METHOD PAYPAL/VISA CARD

```
SELECT paymentMethodName
From paymentMethodID = '4'
Where paymentMethodName = PAYPAL/VISA
```

15. UPDATE "RAZR PAY" TO "RAZER PAY"

```
UPDATE paymentmethod
SET paymentmethodname = 'Razer pay '
WHERE paymentmethodID = '04';
```

D) Vendor

1. FETCH ALL RESULT

```
SELECT * FROM vendor
```

2. FETCH RESULT WHERE VENDOR ID VEN1248733

```
SELECT * FROM vendor
```

```
WHERE vendorID = 'ven1248733'
```

3. FETCH THE RESULT OF VENDOR NAME THAT CONTAINS CHAR 'X'

```
SELECT * FROM vendor
```

```
WHERE vendorName LIKE '%x%'
```

4. CHANGE ONE OF THE VENDOR PHONE NUMBER

```
UPDATE vendor
```

```
SET vendorPhone = '0320221515'
```

```
WHERE vendorName = 'Kidzy Museum Sdn Bhd'
```

5. UPDATE THE vendorAddress TO 'D-10-2, Jalan Multimedia, 7/AJ City Park, i-City, Shah Alam'

```
UPDATE vendor
```

```
SET vendorAddress = 'D-10-2, Jalan Multimedia, 7/AJ City Park, i-City, Shah Alam'
```

```
WHERE vendorID = 'ven1248733'
```

6. JOIN VENDOR AND CUSTOMER(DIFFERENT NAMES COLUMNS)

```
SELECT vendor.vendorName, customer.customerID
```

```
FROM vendor
```

```
FULL OUTER JOIN customer ON vendor.vendorName=customer.customerID
```

7. FETCH THE VENDOR PHONE AND VENDOR EMAIL IN ASCENDING ORDER

```
SELECT * FROM vendor
```

```
ORDER BY vendorPhone ASC, vendorEmail ASC
```

8. ADD COLUMN VENDOR AGE (HOW LONG THEY HAVE BEEN ESTABLISHED)

```
ALTER TABLE vendor
```

```
ADD ( Age INTEGER(3) NOT NULL)
```

9. FETCH RESULT OF VENDOR EMAIL THAT USES KIDZY.COM

```
SELECT vendorEmail  
  
FROM vendor  
  
WHERE vendorEmail LIKE '%kidzy.com'
```

10. FETCH RESULT OF VENDOR INFO INTO CATEGORIES

```
SELECT vendorID, vendorName, vendorPhone  
  
FROM vendor  
  
ORDER BY vendorName;
```

11. UPDATE THE vendorName AND vendorPhone value

```
UPDATE vendor  
  
SET vendorName = 'Penang Boutique and Retail Aquarium Sdn Bhd', vendorPhone =  
'021523890'  
  
WHERE vendorID = 'ven1723652';
```

12. FETCH TO SPECIFY THE NUMBER OF RECORD TO RETURN

```
SELECT * FROM vendor  
  
WHERE vendorName <= 'Kidzy Museum Sdn Bhd';
```

13. FETCH THE RESULT OF VENDOR NAME THAT END WITH 'D'

```
SELECT * FROM vendor  
  
WHERE vendorName LIKE '%d'
```

14. DROPPING COLUMN VENDOR PHONE

```
ALTER TABLE vendor  
  
DROP COLUMN vendorPhone
```

15. DELETE ROW OF VENDOR ID VEN1248733

```
DELETE FROM vendor
```

WHERE vendorID= 'ven1248733'

E) TICKET

1. FETCH ALL RESULT
SELECT * FROM ticket
2. FETCH RESULT WHERE TICKET NAME IS 3D MUSEUM
SELECT * FROM ticket
WHERE ticketName= 3D Museum
3. FETCH THE RESULT WHERE TICKET DESCRIPTION CONTAINS CHARACTER -
x
SELECT * FROM ticket
WHERE ticketDesc LIKE '%x%'
4. CHANGE ONE OF THE TICKET ID
UPDATE ticket
SET ticketID = '010'
WHERE ticketName = 'Wax Museum'
5. UPDATE THE TICKET TYPE TO ADULT
UPDATE ticket
SET ticketType = 'Adult'
WHERE ticketID = '005'
6. FETCH THE TICKET ID AND TICKET NAME IN ASCENDING ORDER
SELECT * FROM ticket
ORDER BY ticketID ASC, ticketName ASC
7. FETCH RESULT OF TICKET ID THAT 01
SELECT ticketID
FROM ticket
WHERE ticketID LIKE '%01'
8. FETCH RESULT OF TICKET INFO INTO CATEGORIES
SELECT ticketID, ticketName, ticketPrice
FROM ticket
ORDER BY ticketName;

9. UPDATE THE ticketName AND ticketPrice value
UPDATE ticket
SET ticketName = '4D Museum', ticketPrice = '10.00'
WHERE vendorID = '006';
10. FETCH TO SPECIFY THE NUMBER OF RECORD TO RETURN
SELECT * FROM ticket
WHERE ticketName <= 'Wax Museum';
11. FETCH THE RESULT OF TICKET TYPE THAT END WITH 'n'
SELECT * FROM ticket
WHERE ticketType LIKE '%n'
12. JOIN TICKET AND VENDOR(DIFFERENT NAMES COLUMNS)
SELECT ticket.ticketName, vendor.vendorName
FROM ticket
FULL OUTER JOIN vendor ON ticket.ticketName=vendor.vendorName
Order BY ticket.ticketName
13. ADD COLUMN TICKET AVAILABILITY (IN DAYS)
ALTER TABLE ticket
ADD (ticketAvail INTEGER(4) NOT NULL)
14. DROPPING COLUMN TICKET
ALTER TABLE ticket
DROP COLUMN ticketDesc
15. DELETE ROW OF TICKET ID 009
DELETE FROM ticket
WHERE ticketID= '009'

F) TICKET DETAILS

- 1.FETCH ALL RESULT
SELECT * FROM ticketDetails
2. FETCH RESULT WHERE TICKETDETAILSID tic3251244
SELECT * FROM ticketDetails
WHERE ticketDetailsID = tic3251244
3. FETCH RESULT OF TICKET STATUS SUCCESSFUL
SELECT * FROM ticketStatus
Where ticketStatus = '0'

4. FETCH RESULT TICKET STATUS UNSUCCESSFUL
SELECT * FROM ticketStatus
Where ticketStatus = '1'
5. FETCH RESULT WHERE TICKET DATE "03/12/2020"
SELECT * FROM TicketDetails
WHERE TicketDate = '03/12/2020'
6. FETCH RESULT WHERE TICKET QUANTITY "1"
SELECT * FROM ticketQty
WHERE ticketQty = '1'
7. FETCH RESULT WHERE TICKET QUANTITY "2"
SELECT * FROM ticketQty
WHERE ticketQty = '2'
8. FETCH RESULT WHERE TICKET AMOUNT "25.00"
SELECT * FROM ticketAmount
WHERE ticketAmount = '25.00'
9. FETCH RESULT WHERE CUSTOMER ID "3152436521"
SELECT * FROM customerID
WHERE ticketAmount = '3152436521'
10. FETCH THE RESULT WHERE UPDATE THE TICKET DATE
SELECT * FROM TicketDetails
UPDATE Ticket date = DD-MM-YYYY
Where Ticket date = '4/12/2020'
11. FETCH RESULT OF TICKET DETAILS INTO CATEGORIES
SELECT ticketDetailsID, ticketDate, ticketStatus
FROM ticket ID
ORDER BY customerID;
12. FETCH THE RESULT WHERE UPDATE THE VALUE OF QUANTITY AND AMOUNT
UPDATE TicketDetails SET ticketQty = 1
ticketID = '001';

13. DELETE ROW OF TICKET DETAILS ID 'tic3251244'

```
DELETE FROM Ticket Details  
WHERE TicketDetailsID = 'tic3251244'
```

14. UPDATE THE ticketQty AND ticketAmount value

```
UPDATE TicketDetails  
SET ticketQty = '2', ticketAmount = '40.00'  
WHERE customerID = '5543287652';
```

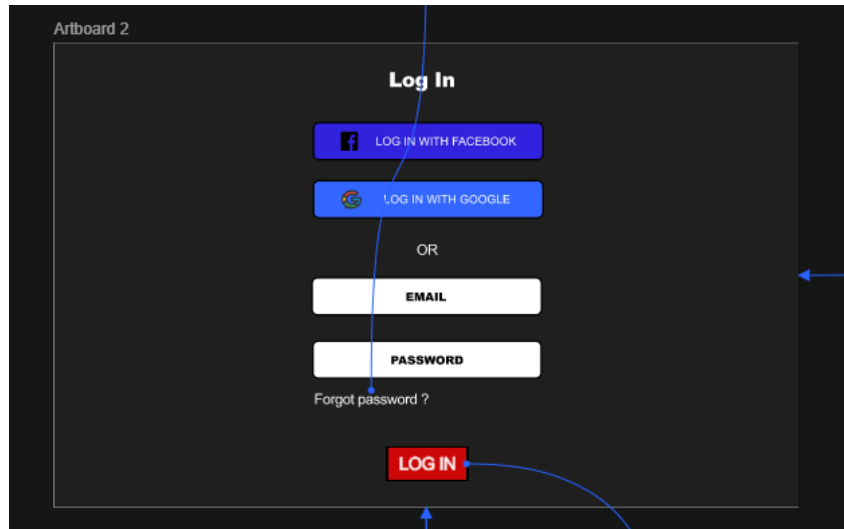
15. CHANGE ONE OF THE TICKET QTY

```
UPDATE TicketDetails  
SET ticketQty = '2'  
WHERE customerID = '3152436521'
```

4.0 USER INTERFACE WITH WEBSITE (CUSTOMER VIEW)

Interface Design (GUI)

Login



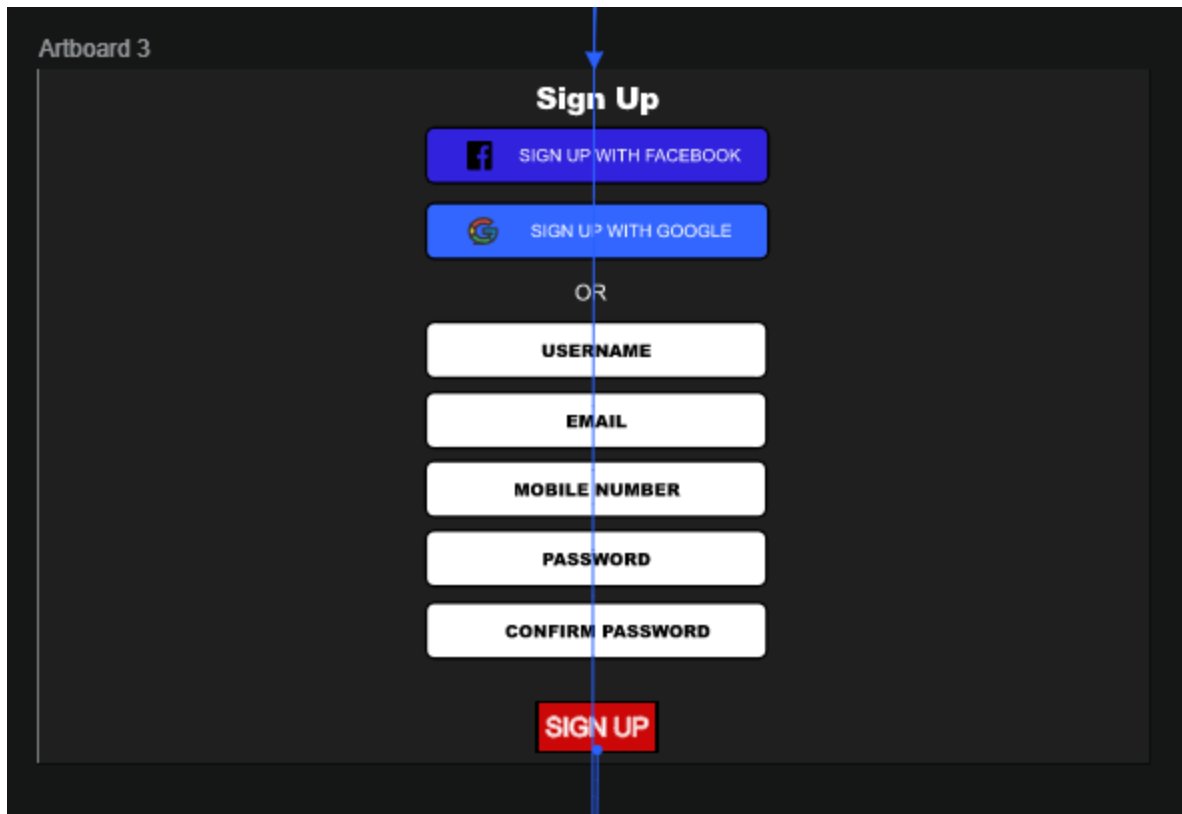
Before gaining access to the functions, the user is required to log into the system or sign up. This interface shows the login page. Here, the user has the option to sign up using a Ticketastic account or using Facebook & Google. When logging in, the data retrieved from the CUSTOMER table is as follows:

- custEmail VARCHAR2(30) NOT NULL,
- custPassword VARCHAR2(20) NOT NULL

When the customer inserts their credentials, they are validated by using the SQL queries below:

- *SELECT custEmail, custPassword
FROM customer
WHERE custEmail = 'kemalchux@gmail.com' and custPassword = Kemalola9856;*

Sign Up

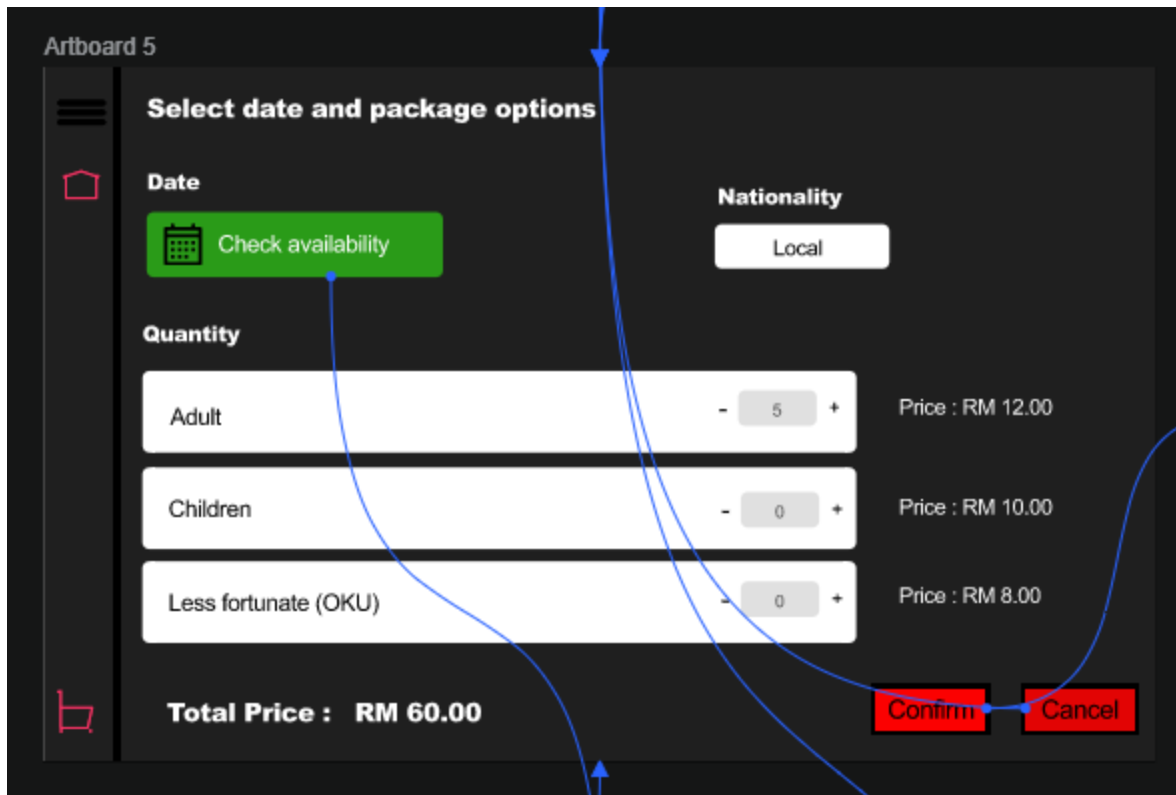


If the customer decides to sign up for a Ticktastic account instead, they will be prompted to enter their username, email, number, & password which will be keyed into the CUSTOMER table as a new entry. The statement is as below:

- *INSERT INTO Customer (customerID, custUsername, custEmail, custPassword, custName, custMobileNo, custPin)*

VALUES (3152436521, 'kemalx25', 'kemalchux@gmail.com', 'Kemalola9856', 'Kemal Aushaf', 0174532158, 524263);

Ticket Details



When selecting the ticket details, the customer sees the above page. They are prompted to select the date, the type of ticket and the quantity for each ticket. This information is retrieved from the TICKET table. Once the order is completed the details will be inserted into the PAYMENT table.

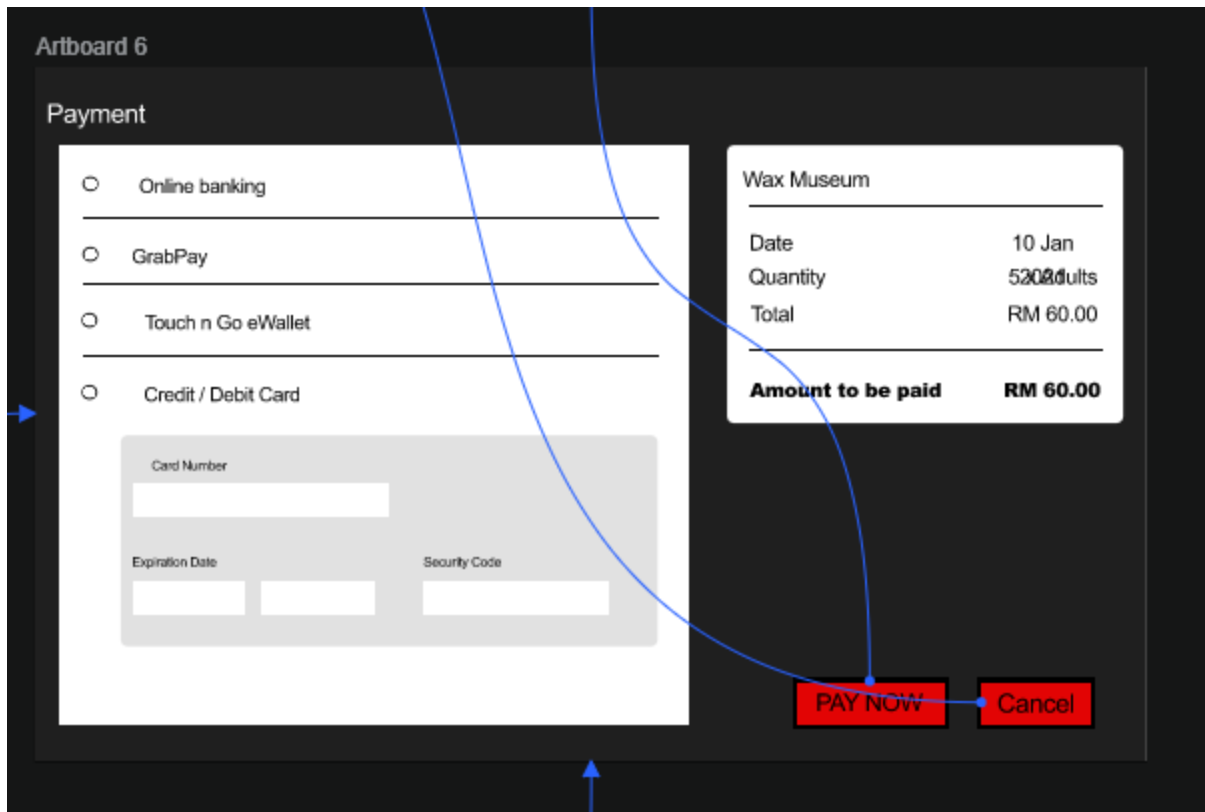
- Once payment is confirmed:

```
INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName)
VALUES (01, 'Online Banking');
```

- Updating PAYMENT table

```
INSERT INTO Payment (paymentID, paymentDate, paymentTime, paymentStatus,
paymentMethodID, ticketDetailsID )
VALUES ('pay1542158', TO_DATE('01-Dec-2020', 'DD-MM-YYYY'), TO_DATE('01-
Dec-2020 14:55:30', 'DD-MM-YYYY hh24:mi:ss'), 0, 01, 'tic3251244');
```

Payment



When making payment, the user is required to select their preferred payment method. Here, they are adding queries into the PAYMENTMETHOD table.

- *INSERT INTO PaymentMethod (paymentMethodID, paymentMethodName) VALUES (01, 'Online Banking');*

SELECT * FROM ticket details