

**Project Title: DESIGN A DATABASE SYSTEM FOR AN E-COMMERCE SITE**

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**Term Project submitted for:**

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## Course Code: ICT 5103

## Course Name: Database Design and Management

**Post Graduate Diploma Program in (ICT),**

**Institute of Information and Communication Technology,BUET**

**System Features:**

i. A customer can login to the system

ii. Customer can place order in the system with one or more items

iii. Customer can choose from different types of payment methods, Mobile payment, card payment, COD, etc.

iv. After confirmation of the order, the item will be delivered to the customer

v. The delivery will be made by an employee

vi. Order status needs to be maintained at each stage

vii. A manager can create/update item

viii. A manager can add items in the store with purchase price

ix. A manager can update sale price of any item

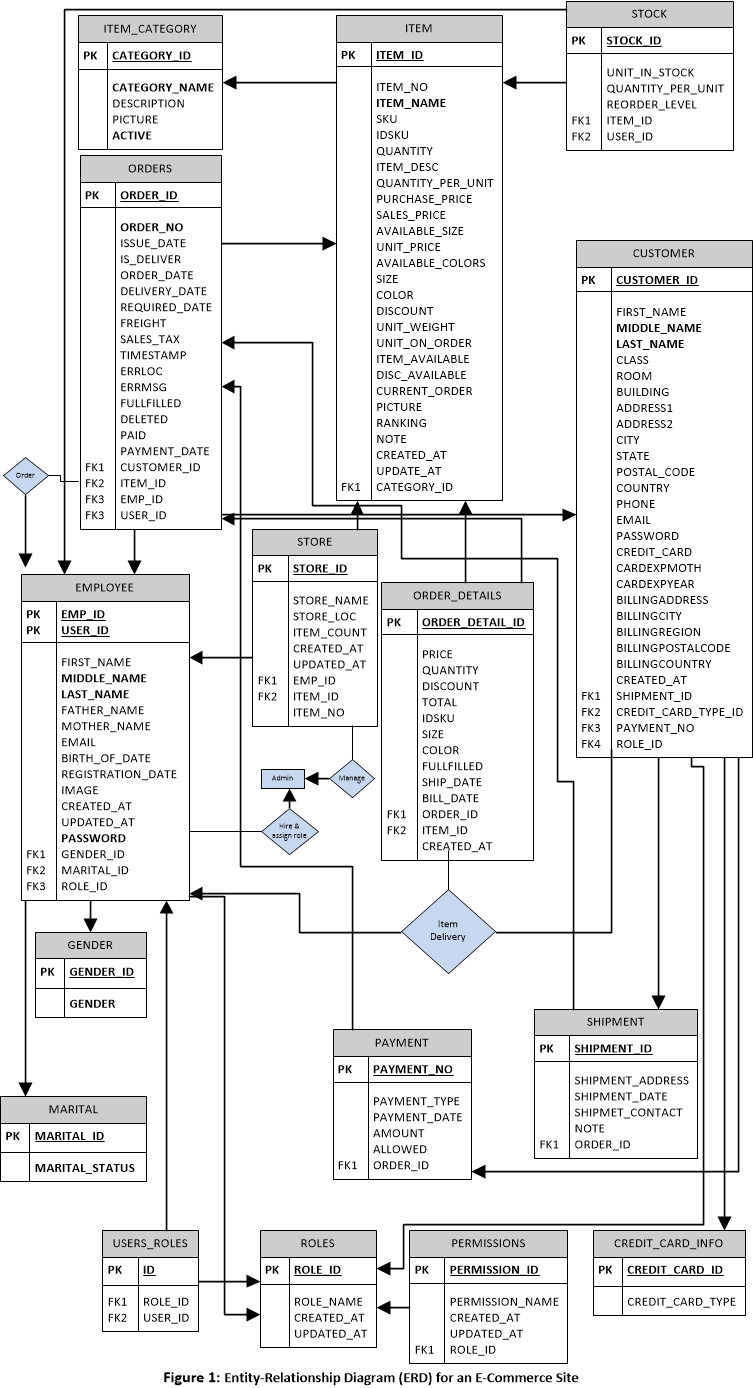
x. An admin can manage store locations

xi. An admin can create new employee and assign role to employee

**Tools:** Microsoft Visio 2010, MySQL

**Attachments:**

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| **SI** |  | **Assignment4** | **Visio Format** |
| **1** | **SQL Tables converted from the ER diagram:** |  |  |

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**Submitted the followings:**

1. **ER diagram for the system (Above Figure1)**

* Design a Database System for an E-Commerce Site.

1. **SQL tables converted from the ER diagram**

CREATE DATABASE BUET;

USE BUET;

create table employee

(

emp\_id integer not null,

first\_name varchar(30),

middle\_name varchar(30),

last\_name varchar(30),

father\_name varchar(30),

mother\_name varchar(30),

email varchar(30),

birth\_of\_date date,

image blob,

user\_id integer not null,

created\_at datetime,

updated\_at datetime,

password char(10),

gender\_id integer,

marital\_id integer,

role\_id integer not null,

primary key(emp\_id)

);

create table gender

(

gender\_id integer not null,

gender varchar(30) not null,

primary key(gender\_id)

);

create table marital

(

marital\_id integer not null,

marital\_status varchar(30) not null,

primary key(marital\_id)

);

create table stock

(

stock\_id integer not null,

unit\_in\_stock integer not null,

quantity\_per\_unit integer not null,

reorder\_level char(10),

item\_id integer not null,

user\_id integer not null,

primary key(stock\_id)

);

create table item\_category

(

category\_id integer not null,

category\_name varchar(30),

description varchar(50),

picture blob,

active char(10),

primary key(category\_id)

);

create table payment

(

payment\_no integer not null,

payment\_type varchar(30),

payment\_date date,

amount numeric(10,2),

allowed char(10),

order\_id integer,

primary key(payment\_no)

);

create table shipment

(

shipment\_id integer not null,

shipment\_address varchar(100),

shipment\_date date,

shipmet\_contact varchar(100),

note varchar(100),

order\_id integer not null,

primary key(shipment\_id)

);

create table credit\_card\_info

(

credit\_card\_id integer not null,

credit\_card\_type varchar(100),

primary key(credit\_card\_id)

);

create table customer

(

customer\_id integer not null,

first\_name varchar(30),

middle\_name varchar(30),

last\_name varchar(30),

class char(10),

building char(10),

address1 varchar(100),

address2 varchar(100),

city varchar(30),

state varchar(30),

postal\_code char(10),

country varchar(30),

phone char(10),

email varchar(30),

credit\_card varchar(30),

cardexpmoth char(10),

cardexpyear char(10),

billingaddress varchar(100),

billingcity varchar(100),

billingregion varchar(100),

billingpostalcode char(10),

billingcountry varchar(30),

issue\_date date,

shipment\_id integer,

credit\_card\_type\_id integer,

payment\_no integer not null,

role\_id integer not null,

primary key(customer\_id)

);

create table orders

(

order\_id integer not null,

order\_no integer not null,

issue\_date date,

is\_deliver char(10),

delivery\_date date,

order\_date date,

required\_date date,

freight char(10),

sales\_tax integer,

timestamp datetime,

errloc char(10),

errmsg varchar(50),

fullfilled char(10),

deleted char(10),

paid char(10),

payment\_date date,

customer\_id integer,

item\_id integer not null,

emp\_id integer not null,

user\_id integer,

primary key (order\_id),

constraint ord\_cust\_id\_fk foreign key(customer\_id) references customer(customer\_id)

);

create table store

(

store\_id integer not null,

store\_name varchar(30),

store\_loc varchar(50),

item\_count integer,

created\_at datetime,

updated\_at datetime,

item\_id integer,

emp\_id integer not null,

item\_no integer not null,

primary key (store\_id)

);

create table item

(

item\_id integer not null,

item\_no integer not null,

item\_name varchar(50),

sku char(10),

idsku char(10),

quantity integer,

item\_desc varchar(50),

quantity\_per\_unit integer,

purchase\_price numeric(10,2),

sales\_price numeric(10,2),

available\_size char(10),

unit\_price integer,

available\_colors char(10),

size char(10),

color char(10),

discount numeric(10,2),

unit\_weight numeric(10,2),

unit\_on\_order integer,

item\_available char(10),

disc\_available char(10),

current\_order char(10),

picture blob,

ranking char(10),

note varchar(200),

category\_id integer,

primary key(item\_id)

);

create table order\_details

(

order\_detail\_id integer not null,

price numeric(10,2),

quantity integer,

discount numeric(10,2),

total numeric(10,2),

idsku char(10),

size char(10),

color char(10),

fullfilled char(10),

ship\_date date,

bill\_date date,

order\_id integer,

item\_id integer,

created\_at datetime,

primary key(order\_detail\_id)

);

create table users\_roles

(

id integer not null,

role\_id integer not null,

user\_id integer not null,

primary key(id)

);

create table roles

(

role\_id integer not null,

role\_name varchar(30),

created\_at datetime,

updated\_at datetime,

primary key(role\_id)

);

create table permissions

(

permission\_id integer not null,

permission\_name varchar(50),

created\_at datetime,

updated\_at datetime,

role\_id integer not null,

primary key(permission\_id)

);

1. **Following SQL queries:**
2. **List of customers that place an order with order total for a date range:**

Select a.customer\_name, a.total\_orders

From

(

Select concat(c.middle\_name,' ',c.last\_name) as customer\_name,count(\*) as total\_orders

From customer c, orders ord, order\_details ors

Where c.customer\_id = ord.customer\_id

And ord.order\_id = ors.order\_id

And ord.order\_date between '2018-09-01' and '2018-10-30'

) a

group by a.customer\_name;

1. **Date-wise order totals for a date range:**

select ord.order\_date as order\_date, count(\*) as total\_orders

from orders ord, order\_details ors

where ord.order\_id = ors.order\_id

and ord.order\_date between '2018-09-01' and '2018-10-30'

group by ord.order\_date;

1. **Item with order total for a date range:**

select a.item\_name, a.total\_orders

from

(

select i.item\_name,count(\*) as total\_orders

from item i, orders ord, order\_details ors

where i.item\_id = ord.item\_id

and ord.order\_id = ors.order\_id

and ord.order\_date between '2018-09-01' and '2018-10-30'

) a

group by a.item\_name;

1. **List of employees with order delivery count:**

select a.employee\_name, a.count\_delivery

from

(

select concat(e.middle\_name,' ',e.last\_name) as employee\_name,count(\*) as count\_delivery

from employee e, orders ord

where E.emp\_id = ord.emp\_id

and upper(ord.is\_deliver)='YES'

) a

group by a.employee\_name;

1. **Item count in store for all items:**

select i.item\_name, count(\*) as no\_of\_items

from item i, store s

where i.item\_id = s.item\_id

group by i.item\_name;