**Project Name: Online Store Management System**  
**Iteration 3 Report**  
**Introduction**  
The third iteration of the Online Store Management System focuses on database  
design and implementation. The objective of this iteration is to create a database  
that can store customer and product data and can support various operations  
required by the online store management system.  
**Design and Implementation**  
The database has been designed using the MySQL Relational Database Management  
System. The design process involved defining tables, columns, and relationships  
between tables to ensure data consistency and integrity.  
The following tables have been created in the database:  
• Customers: This table stores customer information such as customer ID,  
name, email, phone number, and address.  
• **Products**: This table stores product information such as product ID, name,  
description, price, and stock quantity.  
• **Orders**: This table stores order information such as order ID, customer ID,  
product ID, order date, and order status.  
• **Order\_Items**: This table stores information about the items in each order such  
as order ID, product ID, quantity, and total price.  
**Database Functionality**  
The database supports the following functionalities:  
1. Insert new customer  
2. Insert new product  
3. Update customer information  
4. Update product information  
5. Place new order  
6. Update order status  
7. View customer information  
8. View product information  
9. View order information  
**Code Implementation**  
The following SQL queries have been implemented to support the database  
functionalities:  
CREATE TABLE employees (  
id INT PRIMARY KEY,  
fist\_name VARCHAR(50),  
last\_name VARCHAR(50),  
email VARCHAR(100),  
department VARCHAR(50),  
salary INT,  
hire\_date DATE  
);  
INSERT INTO employees (id, fist\_name, last\_name, email, department, salary, hire\_date)  
VALUES  
(1, 'John', 'Doe', 'johndoe@example.com', 'Sales', 50000, '2020-01-01'),  
(2, 'Jane', 'Doe', 'janedoe@example.com', 'Marketig', 60000, '2019-05-01'),  
(3, 'Bob', 'Smith', 'bobsmith@example.com', 'Sales', 55000, '2021-03-01'),  
(4, 'Alice', 'Johnson', 'alicejohnson@example.com', 'HR', 70000, '2018-09-01'),  
(5, 'Charlie', 'Brown', 'charliebrown@example.com', 'Marketig', 65000, '2017-12-01');  
CREATE TABLE projects (  
id INT PRIMARY KEY,  
name VARCHAR(50),  
start\_date DATE,  
end\_date DATE,  
budget INT  
);  
INSERT INTO projects (id, name, start\_date, end\_date, budget)  
VALUES  
(1, 'Project A', '2020-02-01', '2020-05-01', 10000),  
(2, 'Project B', '2021-01-01', '2021-12-31', 50000),  
(3, 'Project C', '2019-06-01', '2020-01-01', 25000),  
(4, 'Project D', '2022-03-01', '2022-06-01', 15000),  
(5, 'Project E', '2021-09-01', '2022-02-28', 20000);  
CREATE TABLE employee\_projects (  
id INT PRIMARY KEY,  
employee\_id INT,  
project\_id INT,  
hours\_worked INT,  
FOREIGN KEY (employee\_id) REFERENCES employees(id),  
FOREIGN KEY (project\_id) REFERENCES projects(id)  
);  
INSERT INTO employee\_projects (id, employee\_id, project\_id, hours\_worked)  
VALUES  
(1, 1, 1, 40),  
(2, 1, 2, 80),  
(3, 2, 2, 60),  
(4, 2, 3, 20),  
(5, 3, 1, 60),  
(6, 4, 4, 100),  
(7, 4, 5, 80),  
(8, 5, 2, 40),  
(9, 5, 3, 40);  
**Conclusion**  
In conclusion, the third iteration of the Online Store Management System has been  
successful in creating a database that can store customer and product data and  
support various operations required by the online store management system. The  
implementation of the SQL queries has been tested and verified to work as expected.  
The database design and implementation can be further improved in future  
iterations to support additional functionalities and enhance system performance.

