

# **PROJECT: PHASE II**

## **Web Puppies' Website Designing Process**

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# CONTENTS

1. Overview	3
2. TO-BE Diagram	3
3. Tables and records on SQL	3
i. Client table	4
ii. JobOrder table	4
iii. Product table	5
iv. Portfolio table	6
v. Employee table	6
vi. Finance Department table	7
vii. Invoice table	8
4. Queries on SQL	9
i. Query 1 on Product Type	9
ii. Query 2 on Employees	10
iii. Query 3 on Total Revenue	10
iv. Query 4 on Project Duration	11
v. Query 5 on Payment	12
5. Annex	13

## 1. **Overview**

To recap, this project has chosen the company, Web Puppies, which is one of the leading web development and digital solutions companies in Southeast Asia. It is a vendor company which provides various services for its clients that cater specifically to their needs. The project drills down on their key service, which is the provision of web development solutions and identifies how this business process can benefit from proper data management.

## 2. **TO-BE Diagram**

To fix the gaps identified in Phase I, the business process has been amended as outlined below. The changes introduced in the TO-BE diagram are highlighted in green in the swimlane diagram.

### *1. Assignment of Client team to handle incoming job orders*

In the TO-BE diagram, the business development representative accepts and loads the request into the company's database. Thereafter, the case is assigned to a client team comprising a website designer and a web developer. This team is directly involved in meeting the client's brief and preparing mock-up websites as well as seeking and assessing possible implementation of client feedback. The TO-BE process also includes a specific pre-agreed number of meetings between the client and the website team to limit the possible iterations of revisions to the draft web designs and website mockups.

### *2. Introduction of database system*

The lack of a consolidated space comprising detailed insights into each client order is rectified with the introduction of a database system. This system allows all information related to a specific client order to be consolidated and updated at the time of the event/action taking place. In the TO-BE diagram, all updates to the case by each stakeholder have been keyed in real-time onto the database system. This also includes feedback from the clients on the draft web design and website mock-up, thereby allowing all parties to view the feedback simultaneously.

## 3. **Creation of tables and records on SQL**

A total of 7 tables were created on SQL and thereafter, records were loaded into these tables. They are Client with 21 records, JobOrder with 22 records, Product with 21 records, Portfolio with 23 records, Employee with 31 records, FinanceDepartment with 22 records and Invoice with 22 records.

The SQL code can be found below. Additionally, the full SQL code for all records of all tables is included in the annex of the report.

i. **Client table**

```
CREATE TABLE Client (  
    Client_id int(11),  
    Company_name varchar(20),  
    Company_address varchar(40),  
    Phone_number varchar(20),  
    Point_of_contact varchar(20) );
```

A sample of the records loaded into this table can be found below.

```
INSERT INTO Client  
(Client_id, Company_name, Company_address, Phone_number, Point_of_contact) VALUES  
  
    (456911188, 'UnitedHealth', '4876 Beechwood  
Avenue', '286.000.9792', 'Antonia'),  
  
    (456912345, 'Cigna', '3871 Rocky Road', '286.999.9792', 'Bob'),  
  
    (456913345, 'CVS', '123 Blue Court', '666.000.9792', 'Janie'),  
  
    (456966788, 'eBay', '123 Windy Drive', '203.844.3550', 'Penny'),  
  
    (458953783, 'Google', '1532 Crim Lane', '515.123.4567', 'Faith'),  
  
    (458953788, 'Amazon', '1443 Frosty Lane', '286.457.9702', 'James'),  
  
    (496911189, 'Apple', '3790 Village View Drive', '286.999.0000', 'Rafael'),  
  
    (496912349, 'Amgen', '3213 Blair Court', '555.000.9792', 'Harriet'),  
  
    (496913395, 'Boeing', '4446 Ocello Street', '666.555.9792', 'Rory'),  
  
    (496966798, 'AARP', '3682 Maple Avenue', '286.999.9909', 'Stephens');
```

ii. **JobOrder table**

```
CREATE TABLE JobOrder (  
    Order_id int(11),  
    Start_date date,  
    Product_code int(11),  
    Client_id int(11) );
```

A sample of the records loaded into this table can be found below.

```
INSERT INTO JobOrder (Order_id,Start_date,Product_code,Client_id) VALUES
(123313567,'2022-08-02',998913999,456912345),
(123913567,'2022-12-02',998913783,458953783),
(124013567,'2022-01-03',998913222,458953788),
(124113567,'2022-12-25',998913333,456966788),
(124213567,'2022-01-02',998914392,456911188),
(124313567,'2022-08-02',998913999,456912345),
(125013567,'2022-01-01',998913000,456913345),
(126013567,'2022-01-03',998913222,750020913),
(126313567,'2022-10-11',998903783,750020913),
(126513567,'2022-03-01',998913555,750020913);
```

### iii. Product table

```
CREATE TABLE Product (
    Product_code int(11),
    Product_type varchar(20) );
```

A sample of the records loaded into this table can be found below.

```
INSERT INTO Product (Product_code,Product_type) VALUES
(998913324,'Website Development'),
(998913333,'Website Maintenance'),
(998913452,'Website Development'),
(998913546,'Website Development'),
(998913555,'Website Development'),
(998913567,'Website Development'),
(998913783,'Website Maintenance'),
(998913878,'Website Development'),
(998913999,'Website Maintenance'),
(998914392,'Website Maintenance');
```

iv. **Portfolio table**

```
CREATE TABLE Portfolio (  
    Portfolio_id int(11),  
    Employee_id int(11),  
    Product_code int(11),  
    Start_date date,  
    End_date date);
```

A sample of the records loaded into this table can be found below.

```
INSERT INTO Portfolio  
(Portfolio_id,Employee_id,Product_code,Start_date,End_date) VALUES  
  
    (222913283,408767783,998913999,'2022-09-01','2022-10-01'),  
    (222923583,408777783,998914392,'2022-01-02','2022-01-10'),  
    (222933883,408888783,998913333,'2022-12-25','2022-12-25'),  
    (222943983,408888783,998913222,'2022-01-20','2022-02-01'),  
    (222952383,408900222,998913000,'2022-02-01','2022-03-01'),  
    (222954283,408900111,998913555,'2022-03-01','2022-04-01'),  
    (222955183,408900999,998913452,'2022-04-09','2022-05-09'),  
    (222956083,408900000,998913324,'2022-03-26','2022-04-02'),  
    (222958803,408900123,998913878,'2022-04-03','2022-04-10'),  
    (222958883,405901234,998913878,'2022-05-03','2022-05-10');
```

v. **Employee table**

```
CREATE TABLE Employee (  
    Employee_id int(11),  
    First_name varchar(20),  
    Last_name varchar(20),  
    Job_title varchar(35),  
    Address varchar(40),  
    Date_of_hire date,  
    Date_of_birth date,  
    Employee_email varchar(25),  
    Nationality varchar(25),  
    Employee_Type varchar(10) );
```

A sample of the records loaded into this table can be found below.

```
INSERT INTO Employee
(Employee_id,First_name,Last_name,Job_title,Address,Date_of_hire,Date_of_birt
h,Employee_email,Nationality,Employee_Type) VALUES

(401910435,'Chris','Ned','Sales / BD Representative','567 Blue
Road','2021-12-11','2001-10-12','chrisned@gmail.com',NULL,'S'),

(403900435,'Shansel','Spata','Web Designer','123 Yellow Lane','2021-
02-06','2001-12-03','shanselspata@gmail.com','Austrian','D'),

(403901234,'Abby','Manning','Web Designer','123 Yellow Road','2021-10-
10','2001-07-11','abbymanning@gmail.com','German','D'),

(404900435,'Ronaldo','Joe','Web Developer','123 Red Lane','2021-12-
10','2001-11-11','ronaldojoe@gmail.com','German','W'),

(405901234,'Messi','Pogba','Web Developer','223 Red Lane','2021-10-
11','2001-07-11','messipogba@gmail.com','Welsh','W'),

(406900435,'Phil','Foden','Sales / BD Representative','333 Red
Drive','2021-08-08','2001-03-11','philmfoden@gmail.com','Welsh','S'),

(407901234,'Erling','Haal','Sales / BD Representative','444 Blue
Lane','2021-09-09','2001-09-09','erlinghaal@gmail.com','Mexican','S'),

(408444783,'Joey','Chambers','Finance Associate','999 Blue
Drive','2022-03-13','2001-12-05','joeychambers@gmail.com','Canadian','F'),

(408767783,'Alex','Johnston','Finance Associate','788 Blue
Lane','2021-02-02','2001-12-06','alexjohnston@gmail.com','Canadian','F'),

(408777783,'Alexa','Robertson','Finance Associate','9133 Team
Drive','2020-08-08','2001-07-12','alexarobertson@gmail.com','Canadian','F');
```

#### vi. Finance Department table

```
CREATE TABLE FinanceDepartment (
    FD_employee_id int(11),
    Subdepartment varchar(35));
```

A sample of the records loaded into this table can be found below.

```
INSERT INTO FinanceDepartment (FD_employee_id,Subdepartment) VALUES

(408444783,'Accounting'),

(408767783,'Accounting'),

(408777783,'Accounting'),

(408888783,'Accounting'),
```

```
(408900000,'Accounting'),
(408900111,'Accounting'),
(408900123,'Budget Forecasting'),
(408900222,'Budget Forecasting'),
(408900435,'Budget Forecasting'),
(408900783,'Budget Forecasting');
```

## vii. Invoice table

```
CREATE TABLE Invoice (
    Invoice_ID int(11),
    FD_employee_ID int(11),
    Order_ID int(11),
    Due_date date,
    Date_of_payment date,
    Bank_account_number int(11),
    Routing_number int(11),
    Amount int(11) );
```

A sample of the records loaded into this table can be found below.

```
INSERT INTO Invoice
(Invoice_ID,FD_employee_ID,Order_ID,Date_of_payment,due_date,Bank_account_number,Routing_number,Amount) VALUES
(111000783,408900123,124313567,'2022-10-03','2022-10-03',777399997,888119667,7461.47),
(111868744,408900222,125013567,'2022-03-01','2022-03-01',777373567,888183567,492.18),
(111868783,408900222,125013567,'2022-03-01','2022-03-01',777353567,888583567,37492.13),
(111871006,408900435,126713567,'2022-05-12','2022-05-09',777344567,888194467,44440.44),
(111878755,408900435,126513567,'2022-04-01','2022-04-01',777383567,888193567,50000.65),
(111878783,408900435,126513567,'2022-04-01','2022-04-01',777393567,888993567,60770.65),
(111879956,408900435,126713567,'2022-05-12','2022-05-09',777344567,889123467,22220.65),
```



```
(111880083,408900999,124113567,'2022-12-22','2022-12-25',777344567,889194467,44440.44),

(111891004,408900222,126713567,'2022-05-12','2022-05-09',777374467,878184467,4444.48),

(111898783,408900999,124113567,'2022-12-22','2022-12-25',777374467,868184467,4444.48);
```

#### 4. Creation of queries on SQL

- i. Query 1 on Product Type – Determining the most popular product type and the highest contributor towards Web Puppies’ revenue

This query is important and useful because it helps Web Puppies understand which product type is more popular among clients and generates higher total revenue for the business. In this query, the results show that orders that are ‘Website Development’ are more common than ‘Website Maintenance’. Additionally, orders for ‘Website Development’ earn the highest average revenue for Web Puppies. This helps the business understand that ‘Website Development’ orders are better at increasing revenue and it would be good for the business to focus more on Website Development orders to increase profits.

#### Code

```
SELECT Product_type,
       COUNT(JobOrder.Product_code) AS "Number of Orders",
       AVG(Amount) AS "Average Amount",
       SUM(Amount) AS "Total Amount"
FROM Product, JobOrder, Invoice
WHERE Product.Product_code = JobOrder.Product_code
      AND Invoice.Order_ID = JobOrder.Order_ID
GROUP BY Product_type;
```

#### Output

	ABC Product_type ▼	123 Number of Orders ▼	123 Average Amount ▼	123 Total Amount ▼
1	Website Development	14	17,944.11	251,217.54
2	Website Maintenance	8	7,713.75875	61,710.07

- ii. Query 2 on employees – Identifying which employees work on the highest number of portfolios

This query is important because it helps Web Puppies identify which employees work on the highest number of portfolios at any given time. The assumption made in this company is the higher the number of portfolios an employee works on, the higher their year-end bonus. This query will allow the company to identify its top 3 hard-working employees and by rewarding them with higher bonuses, Web Puppies ensures its employees are incentivized to work even harder.

### Code

```
SELECT Portfolio.Employee_id,  
       First_name,  
       Last_name,  
       COUNT(Portfolio.Employee_id) AS "Number of Portfolios"  
FROM Employee, Portfolio, Product  
WHERE Employee.Employee_id = Portfolio.Employee_id  
       AND Product.Product_code = Portfolio.Product_code  
GROUP BY First_name, Last_name, Portfolio.Employee_id  
ORDER BY COUNT(Portfolio.Employee_id) DESC  
LIMIT 3;
```

### Output

	Employee_id	First_name	Last_name	Number of Portfolios
1	408,900,123	Lisa	Fleming	5
2	408,900,000	Rick	Reid	5
3	406,900,435	Phil	Foden	4

- iii. Query 3 on Total Revenue– Identifying the top three revenue contributing clients

This query is important because Web Puppies can easily identify its top three clients who have contributed the highest to the business revenue. By recognizing the top paying clients, Web Puppies can maintain a strong relationship with them and eventually benefit from additional orders. This will help the company increase its profits and allow additional financial success.

### Code

```
SELECT Client.Client_id,  
       Company_name,  
       SUM(Amount) AS "Total Amount"  
FROM Client, JobOrder, Invoice  
WHERE Client.Client_id = JobOrder.Client_id  
       AND JobOrder.Order_id = Invoice.Order_ID  
GROUP BY Client.Client_id, Company_name  
ORDER BY SUM(Amount) DESC  
LIMIT 3;
```

### Output

	123 Client_id	ABC Company_name	123 Total Amount
1	750,020,913	Aetna	110,771.3
2	555,773,345	Evernorth	73,327.75
3	456,966,788	eBay	52,713.88

#### iv. Query 4 on Project Duration – Identify outstanding projects

This query is useful because it helps Web Puppies isolate any project which exceeds the projected timeline for completion. The assumption made in this company is that all orders are given a timeline of one month to ensure project completion. In the query, the business identifies a project with the product type 'Website Development' is still ongoing beyond the projected timeline for completion. By monitoring such issues, the business can deep-dive into potential factors that cause the problem and minimize its occurrence.

### Code

```
SELECT Product.Product_code,  
       Product_type  
FROM Product  
WHERE Product_type = 'Website Development'  
       AND Product_code = ANY ( SELECT Product_code  
                                FROM Portfolio  
                                WHERE month(end_date) - month(start_date) > 1);
```

## Output

	12 Product_code	ABC Product_type
1	998,913,567	Website Development

### v. Query 5 on Payment – Track clients’ payment status of issued invoices

This query is useful because it helps Web Puppies to track payment status and especially identify payments that are late or past the due date. If there are any late payments received, the business can use Invoice\_ID to investigate and find any problems to address it. The business can also use Client\_ID and Company\_name to easily contact any clients that are late with their payments. This query can also be used by the business to confirm receipt of the money when clients’ payments are early. It helps to maintain a positive and strong relationship with Web Puppies’ best clients for more orders and will likely increase profits and promote additional financial success. Overall, this query is very useful in helping maintain profits, reducing any payment problems, and maintaining a strong relationship with amazing clients for additional orders and profits.

## Code

```
SELECT Client.Client_id,
       Company_name,
       Invoice_ID,
       Due_date,
       Date_of_payment,
       CASE WHEN Due_date > Date_of_payment THEN "Amazing. Payment received early."
            WHEN Due_date = Date_of_payment THEN "Good. Payment received on time."
            ELSE "Bad. Payment received late."
       END AS PaymentRating
FROM Invoice, JobOrder, Client
WHERE JobOrder.Order_id = Invoice.Order_ID
      AND JobOrder.Client_id = Client.Client_id
ORDER BY PaymentRating;
```

## Output

	Client_id	Company_name	Invoice_ID	Due_date	Date_of_payment	PaymentRating
1	456,966,788	eBay	112,280,083	2022-12-25	2022-12-22	Amazing. Payment received early.
2	456,966,788	eBay	112,299,983	2022-12-25	2022-12-22	Amazing. Payment received early.
3	456,966,788	eBay	112,280,993	2022-12-25	2022-12-22	Amazing. Payment received early.
4	456,966,788	eBay	111,898,783	2022-12-25	2022-12-22	Amazing. Payment received early.
5	456,966,788	eBay	111,880,083	2022-12-25	2022-12-22	Amazing. Payment received early.
6	555,773,345	Evernorth	111,899,754	2022-05-09	2022-05-12	Bad. Payment received late.
7	555,773,345	Evernorth	111,879,956	2022-05-09	2022-05-12	Bad. Payment received late.
8	555,773,345	Evernorth	111,891,004	2022-05-09	2022-05-12	Bad. Payment received late.
9	555,773,345	Evernorth	111,871,006	2022-05-09	2022-05-12	Bad. Payment received late.
10	456,911,188	UnitedHealth	144,280,993	2022-01-10	2022-01-10	Good. Payment received on time.
11	556,673,345	Dunkin Donuts	129,999,983	2022-04-02	2022-04-02	Good. Payment received on time.
12	556,673,345	Dunkin Donuts	129,980,113	2022-04-02	2022-04-02	Good. Payment received on time.
13	556,673,345	Dunkin Donuts	129,980,993	2022-04-02	2022-04-02	Good. Payment received on time.
14	556,673,345	Dunkin Donuts	129,999,113	2022-04-02	2022-04-02	Good. Payment received on time.
15	556,673,345	Dunkin Donuts	124,299,983	2022-04-02	2022-04-02	Good. Payment received on time.
16	556,673,345	Dunkin Donuts	124,280,993	2022-04-02	2022-04-02	Good. Payment received on time.
17	456,912,345	Cigna	111,000,783	2022-10-03	2022-10-03	Good. Payment received on time.
18	750,020,913	Aetna	111,878,783	2022-04-01	2022-04-01	Good. Payment received on time.
19	750,020,913	Aetna	111,878,755	2022-04-01	2022-04-01	Good. Payment received on time.
20	456,913,345	CVS	111,868,783	2022-03-01	2022-03-01	Good. Payment received on time.
21	456,913,345	CVS	111,868,744	2022-03-01	2022-03-01	Good. Payment received on time.
22	456,911,188	UnitedHealth	144,299,983	2022-01-10	2022-01-10	Good. Payment received on time.

\* \* \* \* \*

## Annex

A summary of all the records inputted into each table is outlined below along with their SQL query.

### **a. Client Table- 21 Records:**

```
INSERT INTO Client
(Client_id,Company_name,Company_address,Phone_number,Point_of_contact) VALUES

(456911188,'UnitedHealth','4876 Beechwood
Avenue','286.000.9792','Antonia'),

(456912345,'Cigna','3871 Rocky Road','286.999.9792','Bob'),

(456913345,'CVS','123 Blue Court','666.000.9792','Janie'),

(456966788,'eBay','123 Windy Drive','203.844.3550','Penny'),

(458953783,'Google','1532 Crim Lane','515.123.4567','Faith'),

(458953788,'Amazon','1443 Frosty Lane','286.457.9702','James'),

(496911189,'Apple','3790 Village View Drive','286.999.0000','Rafael'),

(496912349,'Amgen','3213 Blair Court','555.000.9792','Harriet'),

(496913395,'Boeing','4446 Ocello Street','666.555.9792','Rory'),

(496966798,'AARP','3682 Maple Avenue','286.999.9909','Stephens');

INSERT INTO Client
(Client_id,Company_name,Company_address,Phone_number,Point_of_contact) VALUES

(498953783,'3M','1265 Straford Park','515.999.4997','Jacqueline'),

(498953799,'Adobe','2399 Abia Martin
Drive','286.457.9999','Martinez'),

(555773345,'Evernorth','789 Teal Lane','887.110.9792','Miya'),

(556119345,'Chipotle','456 Grey Street','986.610.9792','Harry'),

(556673345,'Dunkin Donuts','781 Yellow Lane','899.110.9792','Skyla'),

(556999345,'Walgreens','123 Yellow Road','123.110.9792','Kane'),

(595773395,'Capital One','4822 Central
Avenue','545.110.9792','Brooklyn'),

(596673349,'Spectrum','528 Lake Floyd Circle','599.555.9792','Simon'),

(750020913,'Aetna','3900 Blue Road','400.751.0020','Laura'),

(777119345,'Burger King','777 Rock Street','777.610.9792','Donald');

INSERT INTO Client
(Client_id,Company_name,Company_address,Phone_number,Point_of_contact) VALUES
```

```
(790020993,'Burlington','2630 Ocello Street','400.751.5555','Sami');
```

**b. JobOrder Table- 22 Records:**

```
INSERT INTO JobOrder (Order_id,Start_date,Product_code,Client_id) VALUES
(123313567,'2022-08-02',998913999,456912345),
(123913567,'2022-12-02',998913783,458953783),
(124013567,'2022-01-03',998913222,458953788),
(124113567,'2022-12-25',998913333,456966788),
(124213567,'2022-01-02',998914392,456911188),
(124313567,'2022-08-02',998913999,456912345),
(125013567,'2022-01-01',998913000,456913345),
(126013567,'2022-01-03',998913222,750020913),
(126313567,'2022-10-11',998903783,750020913),
(126513567,'2022-03-01',998913555,750020913);

INSERT INTO JobOrder (Order_id,Start_date,Product_code,Client_id) VALUES
(126713567,'2022-04-09',998913452,555773345),
(127013567,'2022-01-01',998913000,777119345),
(127113567,'2022-12-25',998913333,750020913),
(127213567,'2022-01-02',998914392,750020913),
(127413567,'2022-04-03',998913878,458953788),
(127493567,'2022-10-03',998913567,458953788),
(127513567,'2022-03-01',998913555,777119345),
(127743567,'2022-04-09',998913452,777119345),
(127813567,'2022-03-15',998913324,556673345),
(129313567,'2022-04-03',998913878,777119345);

INSERT INTO JobOrder (Order_id,Start_date,Product_code,Client_id) VALUES
(129743567,'2022-03-15',998913324,458953788),
(129913567,'2022-10-03',998913567,556119345);
```

**c. Product Table- 21 Records:**

```
INSERT INTO Product (Product_code,Product_type) VALUES

(997603763,'Website Development'),

(997613363,'Website Development'),

(998603763,'Website Development'),

(998613363,'Website Development'),

(998613622,'Website Development'),

(998613763,'Website Development'),

(998614362,'Website Development'),

(998903783,'Website Development'),

(998913000,'Website Development'),

(998913222,'Website Maintenance');

INSERT INTO Product (Product_code,Product_type) VALUES

(998913324,'Website Development'),

(998913333,'Website Maintenance'),

(998913452,'Website Development'),

(998913546,'Website Development'),

(998913555,'Website Development'),

(998913567,'Website Development'),

(998913783,'Website Maintenance'),

(998913878,'Website Development'),

(998913999,'Website Maintenance'),

(998914392,'Website Maintenance');

INSERT INTO Product (Product_code,Product_type) VALUES

(999999999,'Website Maintenance');
```

**d. Portfolio Table- 23 Records:**

```
INSERT INTO Portfolio
(Portfolio_id,Employee_id,Product_code,Start_date,End_date) VALUES
```



```

(222000883,408900000,998913333,'2022-12-26','2022-12-26'),
(222010883,406900435,998913567,'2022-10-03','2022-10-10'),
(222111883,406900435,998913878,'2022-05-13','2022-05-20'),
(222222083,406900435,998913324,'2022-03-15','2022-03-22'),
(222333803,408900123,998913878,'2022-04-13','2022-04-20'),
(222444183,408900123,998913452,'2022-04-09','2022-05-09'),
(222555283,408900123,998913555,'2022-03-19','2022-04-19'),
(222666383,408900123,998913000,'2022-01-01','2022-02-01'),
(222777003,408900000,998903783,'2022-10-11','2022-11-11'),
(222888983,408900000,998913222,'2022-01-03','2022-01-11');

INSERT INTO Portfolio
(Portfolio_id,Employee_id,Product_code,Start_date,End_date) VALUES

(222913283,408767783,998913999,'2022-09-01','2022-10-01'),
(222923583,408777783,998914392,'2022-01-02','2022-01-10'),
(222933883,408888783,998913333,'2022-12-25','2022-12-25'),
(222943983,408888783,998913222,'2022-01-20','2022-02-01'),
(222952383,408900222,998913000,'2022-02-01','2022-03-01'),
(222954283,408900111,998913555,'2022-03-01','2022-04-01'),
(222955183,408900999,998913452,'2022-04-09','2022-05-09'),
(222956083,408900000,998913324,'2022-03-26','2022-04-02'),
(222958803,408900123,998913878,'2022-04-03','2022-04-10'),
(222958883,405901234,998913878,'2022-05-03','2022-05-10');

INSERT INTO Portfolio
(Portfolio_id,Employee_id,Product_code,Start_date,End_date) VALUES

(222959883,406900435,998913567,'2022-10-03','2022-12-10'),
(222963003,408888783,998903783,'2022-11-01','2022-12-01'),
(222999283,408900000,998913999,'2022-08-02','2022-10-03');

```

**e. Employee Table- 31 Records:**

```

INSERT INTO Employee
(Employee_id,First_name,Last_name,Job_title,Address,Date_of_hire,Date_of_birt
h,Employee_email,Nationality,Employee_Type) VALUES

(401910435,'Chris','Ned','Sales / BD Representative','567 Blue
Road','2021-12-11','2001-10-12','chrisned@gmail.com',NULL,'S'),

(403900435,'Shansel','Spata','Web Designer','123 Yellow Lane','2021-
02-06','2001-12-03','shanselspata@gmail.com','Austrian','D'),

(403901234,'Abby','Manning','Web Designer','123 Yellow Road','2021-10-
10','2001-07-11','abbymanning@gmail.com','German','D'),

(404900435,'Ronaldo','Joe','Web Developer','123 Red Lane','2021-12-
10','2001-11-11','ronaldojoe@gmail.com','German','W'),

(405901234,'Messi','Pogba','Web Developer','223 Red Lane','2021-10-
11','2001-07-11','messipogba@gmail.com','Welsh','W'),

(406900435,'Phil','Foden','Sales / BD Representative','333 Red
Drive','2021-08-08','2001-03-11','philfoden@gmail.com','Welsh','S'),

(407901234,'Erling','Haal','Sales / BD Representative','444 Blue
Lane','2021-09-09','2001-09-09','erlinghaal@gmail.com','Mexican','S'),

(408444783,'Joey','Chambers','Finance Associate','999 Blue
Drive','2022-03-13','2001-12-05','joeychambers@gmail.com','Canadian','F'),

(408767783,'Alex','Johnston','Finance Associate','788 Blue
Lane','2021-02-02','2001-12-06','alexjohnston@gmail.com','Canadian','F'),

(408777783,'Alexa','Robertson','Finance Associate','9133 Team
Drive','2020-08-08','2001-07-12','alexarobertson@gmail.com','Canadian','F');

INSERT INTO Employee
(Employee_id,First_name,Last_name,Job_title,Address,Date_of_hire,Date_of_birt
h,Employee_email,Nationality,Employee_Type) VALUES

(408888783,'Harry','Andrews','Finance Associate','9123 Teal
Road','2019-12-12','1989-05-04','harryandrews@gmail.com','Mexican','F'),

(408900000,'Rick','Reid','Finance Associate','444 Farm Road','2016-09-
09','1988-12-12','rickreid@gmail.com','Chinese','F'),

(408900111,'Conny','Moore','Finance Associate','222 Green
Drive','2018-04-12','1999-09-03','connymoore@gmail.com','Japanese','F'),

(408900123,'Lisa','Fleming','Finance Associate','777 Farm
Drive','2020-12-12','2001-03-11','lisafleming@gmail.com','Vietnamese','F'),

(408900222,'Matt','Hamilton','Finance Associate','111 Green
Road','2022-01-01','2001-12-04','matthamilton@gmail.com','Japanese','F'),

(408900435,'John','Spata','Finance Associate','123 Grey Lane','2021-
12-10','2001-07-07','johnspata@gmail.com','Vietnamese','F'),

```

```

(408900783,'Bob','Dunk','Finance Associate','1000 Yellow Lane','2021-12-12','2001-12-12','bobdunk@gmail.com',NULL,'F'),

(408900999,'Cam','Lowe','Finance Associate','333 Farm Lane','2017-12-12','1989-10-10','camlove@gmail.com','Chinese','F'),

(408901234,'Mike','Manning','Finance Associate','123 Purple Lane','2021-10-10','2001-09-08','mikemanning@gmail.com','Vietnamese','F'),

(409044783,'Joey','Keller','Finance Associate','3943 George Avenue','2022-03-13','2001-12-05','joeykeller@gmail.com','Canadian','F');

INSERT INTO Employee
(Employee_id,First_name,Last_name,Job_title,Address,Date_of_hire,Date_of_birth,Employee_email,Nationality,Employee_Type) VALUES

(409900000,'Rick','Lowe','Finance Associate','2394 Hillside Drive','2016-09-09','1988-12-12','ricklowe@gmail.com','Chinese','F'),

(409900111,'Anika','Pierce','Finance Associate','4173 Camel Back Road','2018-04-12','1999-09-03','anikapierce@gmail.com','Japanese','F'),

(409900123,'Jonas','Walton','Finance Associate','4408 Elm Drive','2020-12-12','2001-12-12','jonaswalton@gmail.com','Vietnamese','F'),

(409900222,'Keller','Garza','Finance Associate','401 Adams Drive','2022-01-01','2001-12-04','kellergarza@gmail.com','Japanese','F'),

(409900435,'Lowe','Walton','Finance Associate','2802 Arthur Avenue','2021-12-10','2001-07-07','lowewalton@gmail.com','Vietnamese','F'),

(409900999,'Nicola','Knox','Finance Associate','2178 Joes Road','2017-12-12','1989-10-10','nicolaknox@gmail.com','Chinese','F'),

(409901234,'Gabriel','Jesus','Sales / BD Representative','1234 Green Lane','2022-10-10','2001-12-10','bobdunk@gmail.com',NULL,'S'),

(409967783,'Pauline','Johnston','Finance Associate','236 Timbercrest Road','2021-02-02','2001-12-06','paulinejohnston@gmail.com','Canadian','F'),

(409977783,'Alvarez','Alex','Finance Associate','760 Shady Pines Drive','2020-08-08','2001-07-12','alaverezalex@gmail.com','Canadian','F'),

(409988783,'Chase','Tilly','Finance Associate','2806 Sussex Court','2019-12-12','1989-05-04','chasetilly@gmail.com','Mexican','F');

INSERT INTO Employee
(Employee_id,First_name,Last_name,Job_title,Address,Date_of_hire,Date_of_birth,Employee_email,Nationality,Employee_Type) VALUES

(458953783,'Joe','Rog','Finance Associate','1532 Crim Lane','2020-12-12','2000-12-12','joerog@gmail.com',NULL,'F');

```

**f. FinanceDepartment Table- 22 Records:**

```
INSERT INTO FinanceDepartment (FD_employee_id,Subdepartment) VALUES
(408444783,'Accounting'),
(408767783,'Accounting'),
(408777783,'Accounting'),
(408888783,'Accounting'),
(408900000,'Accounting'),
(408900111,'Accounting'),
(408900123,'Budget Forecasting'),
(408900222,'Budget Forecasting'),
(408900435,'Budget Forecasting'),
(408900783,'Budget Forecasting');

INSERT INTO FinanceDepartment (FD_employee_id,Subdepartment) VALUES
(408900999,'Budget Forecasting'),
(408901234,'Budget Forecasting'),
(409044783,'Accounting'),
(409900000,'Budget Forecasting'),
(409900111,'Budget Forecasting'),
(409900123,'Budget Forecasting'),
(409900222,'Budget Forecasting'),
(409900435,'Budget Forecasting'),
(409900999,'Budget Forecasting'),
(409967783,'Accounting');

INSERT INTO FinanceDepartment (FD_employee_id,Subdepartment) VALUES
(409977783,'Accounting'),
(409988783,'Accounting');
```

**g. Invoice Table- 22 Records:**

```
INSERT INTO Invoice
(Invoice_ID,FD_employee_ID,Order_ID,Date_of_payment,due_date,Bank_account_num
ber,Routing_number,Amount) VALUES

(111000783,408900123,124313567,'2022-10-03','2022-10-
03',777399997,888119667,7461.47),

(111868744,408900222,125013567,'2022-03-01','2022-03-
01',777373567,888183567,492.18),

(111868783,408900222,125013567,'2022-03-01','2022-03-
01',777353567,888583567,37492.13),

(111871006,408900435,126713567,'2022-05-12','2022-05-
09',777344567,888194467,44440.44),

(111878755,408900435,126513567,'2022-04-01','2022-04-
01',777383567,888193567,50000.65),

(111878783,408900435,126513567,'2022-04-01','2022-04-
01',777393567,888993567,60770.65),

(111879956,408900435,126713567,'2022-05-12','2022-05-
09',777344567,889123467,22220.65),

(111880083,408900999,124113567,'2022-12-22','2022-12-
25',777344567,889194467,44440.44),

(111891004,408900222,126713567,'2022-05-12','2022-05-
09',777374467,878184467,4444.48),

(111898783,408900999,124113567,'2022-12-22','2022-12-
25',777374467,868184467,4444.48);

INSERT INTO Invoice
(Invoice_ID,FD_employee_ID,Order_ID,Date_of_payment,due_date,Bank_account_num
ber,Routing_number,Amount) VALUES

(111899754,408900222,126713567,'2022-05-12','2022-05-
09',777374467,858184467,2222.18),

(112280083,408900999,124113567,'2022-12-22','2022-12-
25',707123567,888123467,1230.24),

(112280993,408900999,124113567,'2022-12-22','2022-12-
25',717999967,889999467,1299.24),

(112299983,408900999,124113567,'2022-12-22','2022-12-
25',719999967,888199997,1299.48),

(124280993,408777783,127813567,'2022-04-02','2022-04-
02',717777777,881777367,657.54),

(124299983,408777783,127813567,'2022-04-02','2022-04-
02',702954367,881854397,6677.48),
```

```
(129980113,408777783,127813567,'2022-04-02','2022-04-02',757111777,881111367,951.19),
```

```
(129980993,408777783,127813567,'2022-04-02','2022-04-02',707777777,881777367,957.99),
```

```
(129999113,408777783,127813567,'2022-04-02','2022-04-02',700911117,881811197,9911.99),
```

```
(129999983,408777783,127813567,'2022-04-02','2022-04-02',700954367,880854397,9977.99);
```

```
INSERT INTO Invoice
```

```
(Invoice_ID,FD_employee_ID,Order_ID,Date_of_payment,due_date,Bank_account_number,Routing_number,Amount) VALUES
```

```
(144280993,408900000,124213567,'2022-01-10','2022-01-10',717543967,881954367,757.24),
```

```
(144299983,408900000,124213567,'2022-01-10','2022-01-10',755954367,881854397,777.48);
```

```
* * * * *
```