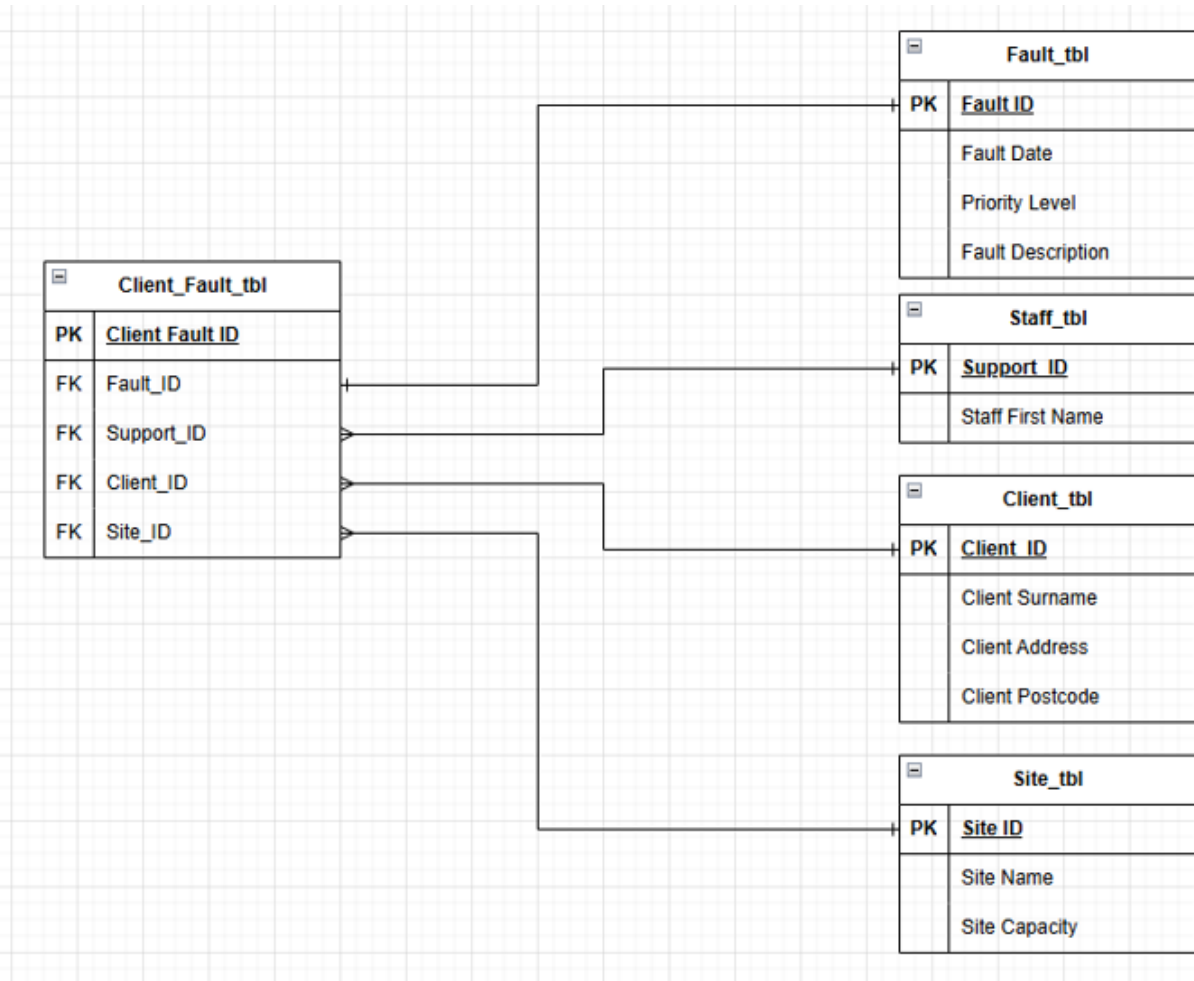


Client ID	Client Surname	Client Address	Client Postcode	Support Staff ID	Staff First Name	Site ID	Site Name	Site Capacity	Fault ID	Fault Date	Priority Level	Fault Description	Client Fault ID	Fault ID	Support Staff ID	Client ID	Site ID
1	Mitchell	352 Cornwall Avenue	QJ2 7YN	1	Mariya	1	North Plant	120	1	10/01/2025	High	Conveyor belt jam in packaging area	1	1	3	1	1
2	Gilbert	126 Vane Avenue	MW6 6KZ	2	Aranos	2	East Works	200	2	12/01/2025	Medium	Hydraulic leak near press machine	2	2	1	2	2
3	Fields	314 Clifton Street	BV5 1OA	3	Pauline	3	South Facility	150	3	13/01/2025	Medium	Sensor calibration issue	3	3	3	3	1
4	Ferguson	94 Deans Avenue	FQ4 2PH						4	15/01/2025	Critical	Overheating motor on Line 3	4	4	2	1	3
5	Wallace	142 Viaduct Street	DA0 8SD						5	16/01/2025	High	PLC system error code 45	5	5	3	4	3
6	Spencer	75 Broughton Row	AE5 9QA						6	17/01/2025	Medium	Air pressure drop in assembly unit	6	6	1	5	2
7	Medina	112 Hillview	DV0 6QF						7	18/01/2025	High	Robotic arm misalignment	7	7	3	6	2
8	Cooper	114 Albert Avenue	MF3 5MC						8	20/01/2025	Low	Minor vibration detected in gearbox	8	8	2	7	3
									9	21/01/2025	Critical	Emergency shutdown triggered unexpectedly	9	9	1	8	2

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Fault_tbl								
NameID	Data Type	Format / Size	Primary key	Foreign key	Example	Null	Description	Data validity
Fault_ID	Integer	Auto Increment	Yes	No	1	No	A unique identifier for all the faults.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Fault Date	Datetime	Date	No	No	10/12/2025	No	A date for when the fault occurred / was reported.	Must be in the date time format. In DD/MM/YYYY. Must not be empty.
Priority Level	varchar	10 characters	No	No	High	No	An identifier for the level of priority given to the fault.	Must be low, medium high or critical. Must be a string. Must not be above 10 characters. Must not be empty.
Fault Description	varchar	100 characters	No	No	PLC system error code 45	No	A description of what the fault was	Must be a string value. Must not be above 100 characters. Must not be empty.
Staff_tbl								
NameID	Data Type	Format / Size	Primary key	Foreign key	Example	Null	Description	Data validity
Support_ID	Integer	Auto Increment	Yes	No	1	No	A unique identifier for all the staff members.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Staff First Name	varchar	100 characters	No	No	John	No	The staffs first name.	Must be a string value. Must not be above 100 characters. Must not be empty.
Client_tbl								
NameID	Data Type	Format / Size	Primary key	Foreign key	Example	Null	Description	Data validity
Client_ID	Integer	Auto Increment	Yes	No	1	No	A unique identifier for all the clients.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Client Surname	varchar	100 characters	No	No	Gilbert	No	The surname for the client.	Must be string. Must not be above 100 characters. Must not be empty.
Client Address	varchar	100 characters	No	No	126 Vane Avenue	No	The address of the client.	Must be string. Must not be above 100 characters. Must not be empty.
Client Postcode	varchar	10 characters	No	No	MW6 6KZ	No	The postcode of the client.	Must be string. Must not be above 10 characters. Must not be empty.
Site_tbl								
NameID	Data Type	Format / Size	Primary key	Foreign key	Example	Null	Description	Data validity
Site_ID	Integer	Auto Increment	Yes	No	1	No	A unique identifier for all the sites.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Site Name	varchar	50 characters	No	No	North Plant	No	The sites name.	Must be a string value. Must not be above 50 characters. Must not be empty.
Site Capacity	Integer	Whole number	No	No	200	No	The capacity of the given site.	Must be numeric. Must be greater than 0. No text allowed. Must not be empty.
Client Fault_tbl								
NameID	Data Type	Format / Size	Primary key	Foreign key	Example	Null	Description	Data validity
Client_Fault_ID	Integer	Auto Increment	Yes	No	1	No	A unique identifier for all the client's faults.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Fault_ID	Integer	Auto Increment	No	Yes	1	No	A unique identifier for all the faults.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Support_ID	Integer	Auto Increment	No	Yes	1	No	A unique identifier for all the staff members.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Client_ID	Integer	Auto Increment	No	Yes	1	No	A unique identifier for all the clients.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.
Site_ID	Integer	Auto Increment	No	Yes	1	No	A unique identifier for all the sites.	Cannot be changed manually. Is Unique. Numeric and generated by the system. Must not be empty.

Data dictionary

Fault_tbl

CREATE TABLE Fault_tbl (
Fault_ID INT NOT NULL AUTO_INCREMENT,
Fault_Date DATETIME NOT NULL,
Priority_Level VARCHAR(10) NOT NULL,
Fault_Description VARCHAR(100) NOT NULL,

PRIMARY KEY (Fault_ID)
);

Example Inserts

INSERT INTO Fault_tbl (Fault_Date, Priority_Level, Fault_Description)
VALUES ('2025-01-10', 'High', 'Conveyor belt jam in packaging area');

INSERT INTO Fault_tbl (Fault_Date, Priority_Level, Fault_Description)
VALUES ('2025-01-12', 'Medium', 'Hydraulic leak near press machine');

Example Selects

SELECT Fault_ID, Fault_Date, Priority_Level, Fault_Description
FROM Fault_tbl
WHERE Priority_Level = 'Critical';

Fault ID	Fault Date	Priority Level	Fault Description
4	15/01/2025	Critical	Overheating motor on Line 3
9	21/01/2025	Critical	Emergency shutdown triggered unexpectedly

Staff_tbl

CREATE TABLE Staff_tbl (
Support_ID INT NOT NULL AUTO_INCREMENT,
Staff_First_Name VARCHAR(100) NOT NULL,

PRIMARY KEY (Support_ID)
);

Example Inserts

INSERT INTO Staff_tbl (Staff_First_Name)
VALUES ('Mariya');

INSERT INTO Staff_tbl (Staff_First_Name)
VALUES ('Aranos');

Example Selects

SELECT Support_ID, Staff_First_Name
FROM Staff_tbl
WHERE Staff_First_Name = 'Mariya';

Support Staff ID	Staff First Name
1	Mariya

Client_tbl

CREATE TABLE Client_tbl (
Client_ID INT NOT NULL AUTO_INCREMENT,
Client_Surname VARCHAR(100) NOT NULL,
Client_Address VARCHAR(100) NOT NULL,
Client_Postcode VARCHAR(10) NOT NULL,

PRIMARY KEY (Client_ID)
);

Example Inserts

INSERT INTO Client_tbl (Client_Surname, Client_Address, Client_Postcode)
VALUES ('Mitchell', '352 Cornwall Avenue', 'Q12 7YN');

INSERT INTO Client_tbl (Client_Surname, Client_Address, Client_Postcode)
VALUES ('Gilbert', '126 Vane Avenue', 'MW6 6KZ');

Example Selects

SELECT Client_ID, Client_Surname, Client_Postcode
FROM Client_tbl
WHERE Client_Postcode = 'MW6 6KZ';

Client ID	Client Surname	Client Address	Client Postcode
2	Gilbert	126 Vane Avenue	MW6 6KZ

Site_tbl

CREATE TABLE Site_tbl (
Site_ID INT NOT NULL AUTO_INCREMENT,
Site_Name VARCHAR(50) NOT NULL,
Site_Capacity INT NOT NULL CHECK (Site_Capacity > 0),

PRIMARY KEY (Site_ID)
);

Example Inserts

INSERT INTO Site_tbl (Site_Name, Site_Capacity)
VALUES ('North Plant', 120);

INSERT INTO Site_tbl (Site_Name, Site_Capacity)
VALUES ('East Works', 200);

Example Selects

SELECT Site_ID, Site_Name, Site_Capacity
FROM Site_tbl
WHERE Site_Capacity > 150;

Site ID	Site Name	Site Capacity
2	East Works	200

Client_Fault_tbl

CREATE TABLE Client_Fault_tbl (
Client_Fault_ID INT NOT NULL AUTO_INCREMENT,
Fault_ID INT NOT NULL,
Support_ID INT NOT NULL,
Client_ID INT NOT NULL,
Site_ID INT NOT NULL,

PRIMARY KEY (Client_Fault_ID),

FOREIGN KEY (Fault_ID) REFERENCES Fault_tbl(Fault_ID),
FOREIGN KEY (Support_ID) REFERENCES Staff_tbl(Support_ID),
FOREIGN KEY (Client_ID) REFERENCES Client_tbl(Client_ID),
FOREIGN KEY (Site_ID) REFERENCES Site_tbl(Site_ID)
);

Example Selects

SELECT Client_Fault_ID, Fault_ID, Client_ID, Site_ID
FROM Client_Fault_tbl
WHERE Site_ID = 1;

Client Fault ID	Fault ID	Support Staff ID	Client ID	Site ID
1	1	3	1	1
3	3	3	3	1

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