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# Conceptual Design in Entity Relationship Diagram

## Relational Schema

1. **Clients** { ClientID, ClientName, ClientAddress, ClientEmail, ClientMobile }
2. **Employees** { EmployeeID, EmployeePayrollNumber, EmployeeName, EmployeeMobile }
3. **ServiceCatalogue** { ServiceID, ServiceName, ServiceDescription, ServiceHourlyRate }
4. **Invoices** { InvoiceID, InvoiceNumber, InvoiceCost, InvoiceDiscount, InvoiceTotal, InvoiceDate }
5. **ClientAppointments** { ClientAppointmentID, AppointmentDate, *ServiceID*, *ClientID*, *EmployeeID* }
6. **ServicesProvided** { *ServiceID*, *EmployeeID*, *ClientAppointmentID*, Expenses }
7. **InvoiceRows** { InvoiceRowID, *InvoiceID*, *ClientAppointmentID* }

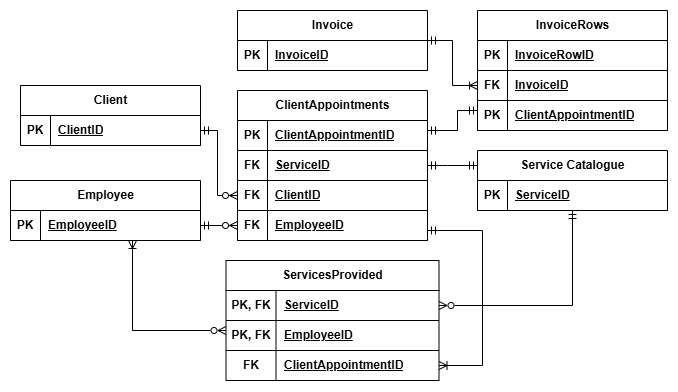
Represents Primary key

Represents Foreign key

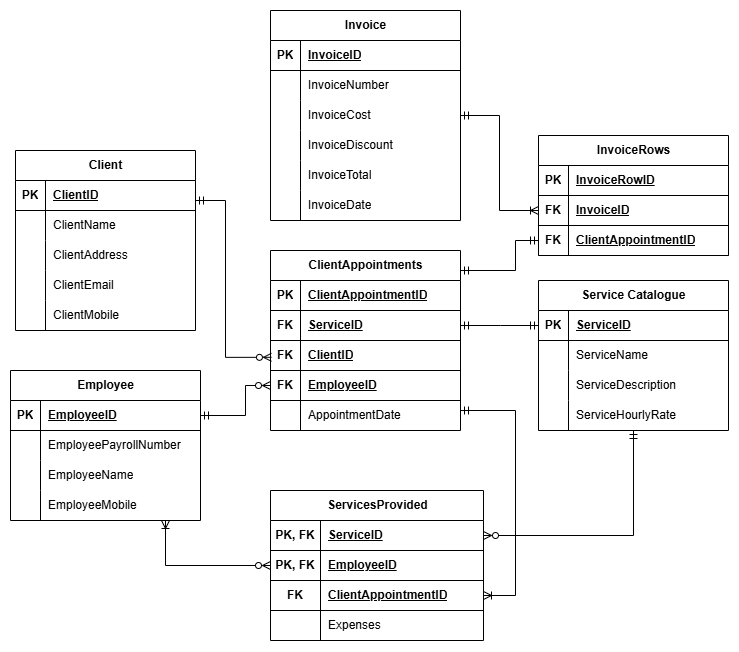
Represents both Primary and Foreign key

## Entity Relationship Diagram

### Partial Diagram with Primary and Foreign keys



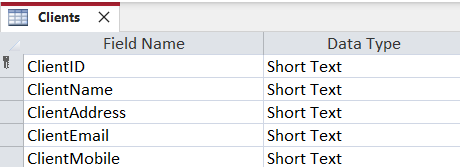
### Full Diagram with all Attributes



# Implementation in Microsoft Access

### Clients Table

Clients table has 5 attributes including ClientID, ClientName, ClientAddress, ClientEmail, ClientMobile and ClientID is the primary key. The below screenshot shows the table structure with data type.



Every attribute has a validation rule and must be provided some valid data. Input mask has been set for ClientID as **"CL-"099999** and ClientMobile as **"0"000\ 000\ 0000** is set, so user can easily enter data without confusions.

### Employees Table

Employees table has