

DBS MANAGEMENT

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AGENDA

- PROBLEM ANALYSIS
- OBJECTIVES
- SOLUTION PROPOSALS
- FINISH LINE

1 — PROBLEM ANALYSIS

OUR METHODOLOGY

PROBLEM ANALYSIS

OUR METHODOLOGY



INTRODUCTION

INITIALLY, THE RESTAURANT WANTS TO MIGRATE MANUALLY TO DIGITAL. TO CARRY OUT THIS REQUEST, WE MUST CREATE A DATABASE TO OPTIMIZE THE PROCESSING AND MANAGEMENT OF THE COMPANY.

THIS PROJECT AIMS TO DESIGN AND DEVELOP A DATABASE THAT OPTIMIZES AND STREAMLINES THE MANAGEMENT OF A RESTAURANT. THE DATABASE WILL ENABLE THE RECORDING OF ORDERS, CONTROL OF INVENTORY OF PRODUCTS (DISHERS AND BEVERAGES), AND MANAGEMENT OF RESTAURANT STAFF (WAITERS, COOKS, AND ADMINISTRATIVE PERSONNEL).

PROBLEM ANALYSIS

OUR METHODOLOGY

BENEFITS OF IMPLEMENTING THIS PROJECT

- **TANGIBLE BENEFITS:** REDUCTION OF ERRORS IN ORDERS, BETTER INVENTORY CONTROL, OPTIMIZATION OF PERSONNEL MANAGEMENT AND AVAILABILITY OF DATA FOR ANALYSIS AND REPORTS.
- **INTANGIBLE BENEFITS:** IMPROVED RESTAURANT REPUTATION, GREATER CUSTOMER SATISFACTION AND A MORE EFFICIENT WORK ENVIRONMENT FOR STAFF.





2 — OBJECTIVES



OBJECTIVES

OPTIMIZE COMMAND MANAGEMENT

Record and track the status of customer orders efficiently.

INVENTORY CONTROL

Monitor inventory of ingredients, dishes and beverages to ensure availability and reduce waste.

PERSONNEL MANAGEMENT

Maintain detailed records of employees, their roles and schedules.

PERFORMANCE EVALUATION

Facilitate the objective evaluation of employee performance.

3 – SOLUTION PROPOSALS

SOLUTION PROPOSALS

**The proposal is
based on the
segmentation of the
project**

At first

WE PERFORM THE REQUIREMENTS ANALYSIS WHERE THE REQUIREMENTS OF THE DATABASE SYSTEM ARE IDENTIFIED AND DOCUMENTED.

At Second

THE NEXT PHASE IS THE DESIGN OF THE DATABASE, WHICH IS BASED ON THE ENTITY-RELATIONSHIP MODEL, THE RELATIONAL MODEL AND THE PHYSICAL RELATIONAL MODEL.

Finally

WE PROCEED TO THE IMPLEMENTATION OF DEVELOPMENT, WHICH MAY INCLUDE THE CREATION OF TABLES, VIEWS, STORED PROCEDURES, TRIGGERS AND OTHER DATABASE OBJECTS, AS WELL AS THE DEVELOPMENT OF USER INTERFACES.

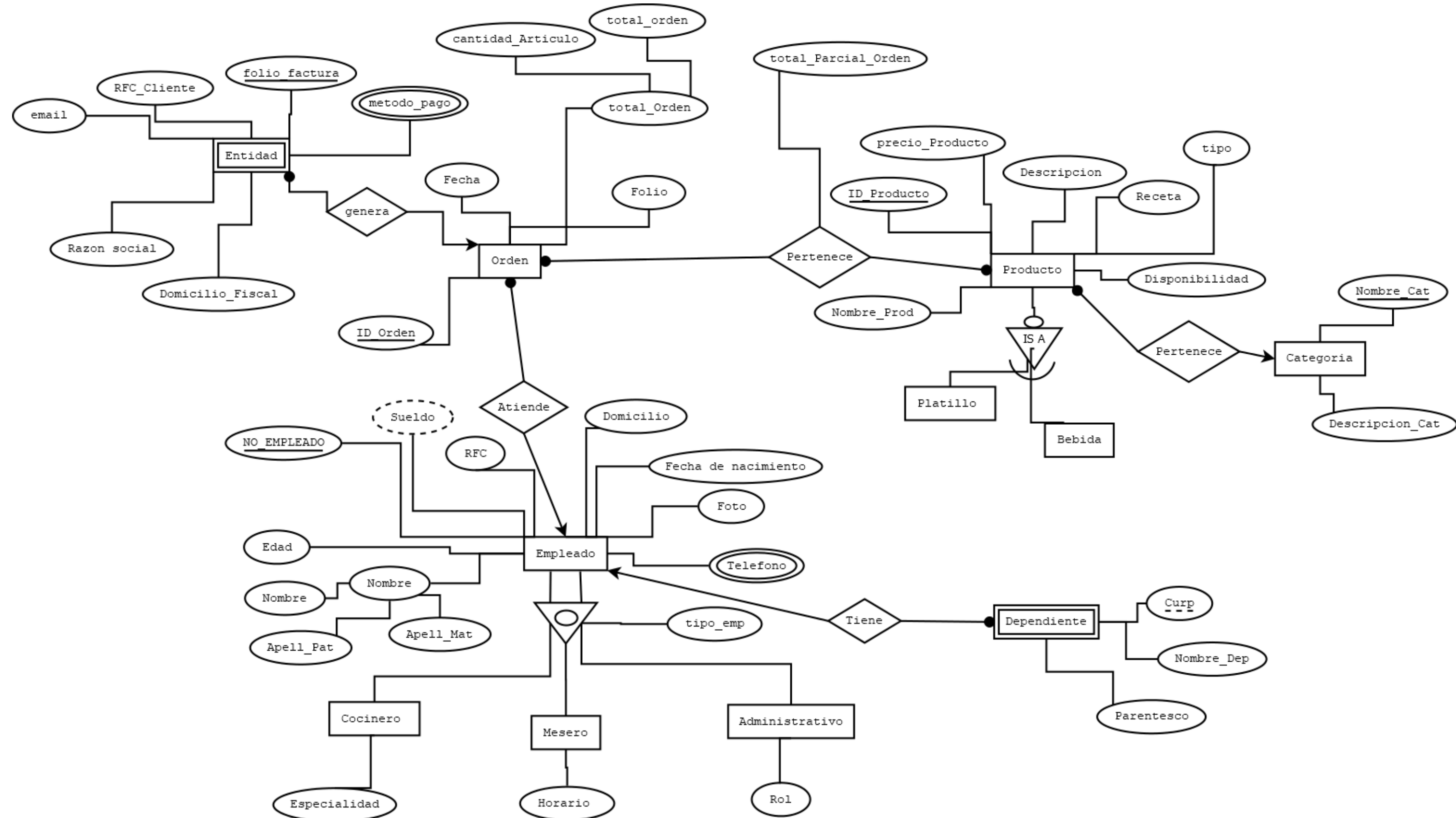
**SOLUTION
PROPOSALS**

DATABASE DESIGN

ABOUT THE DATABASE MODEL...

IT IS THE CORE OF THE SYSTEM
AND IS DESIGNED TO STORE AND
MANAGE ALL THE INFORMATION
NECESSARY FOR THE EFFICIENT
OPERATION OF THE RESTAURANT.
THE MAIN TABLES AND THEIR
RELATIONSHIPS ARE DETAILED
BELOW.

Entity-Relationship Model



Relational Model

Empleado{No_Empleado Smallint [PK],
RFC Char (13) [UQ],
Edad Smallint,
Nombre Varchar (100),
Sueldo Numeric (8,2),
Ap_Pat Varchar (100),
Ap_Mat Varchar (100) Null,
Domicilio Text,
F_Nacimineto Date,
Foto Bytea,
Tipo_Emp Char (1)}

Telefonos{ Telefono Char (10) [PK],
No_Empleado Smallint [FK]}

Cocinero{No_Empleado Smallint [PK][FK]
Especialidad Varchar (100)}

Mesero {No_Empleado Smallint [PK][FK],
Horario Time}

Administrativo {No_Empleado Smallint [PK][FK],
Rol Varchar (100)}

Asegurado {No_Empleado Smallint [PK][FK] null,
Carp Char (18) [PK],
Nombre_asegurado Varchar (100) Null,
Parentesco Varchar (50) Null}

Categoria {Nombre_cat Varchar (100) [PK],
Descripcion_cat Text}

Producto {Id_Producto Serial [PK],
Precio_Producto Numeric(8,2) Not Null,
Descripcion Text
Receta Text ,
Disponibilidad Int ,
Nombre_Prod Varchar (100) ,
Nombre_Cat Varchar (100)[FK],
Tipo Char (1) [CK]}

Platillo {Id_Producto Serial [PK][FK]}

Bebida {Id_Producto Serial [PK][FK]}

Orden{Id_Orden Serial [PK],
Folio Varchar (20),
Fecha Timestamp
Cantidad_Parcial_Articulo Numeric (8,2),
Total_Orden Numeric(8,2),
No_Empleado Smallint [FK]}

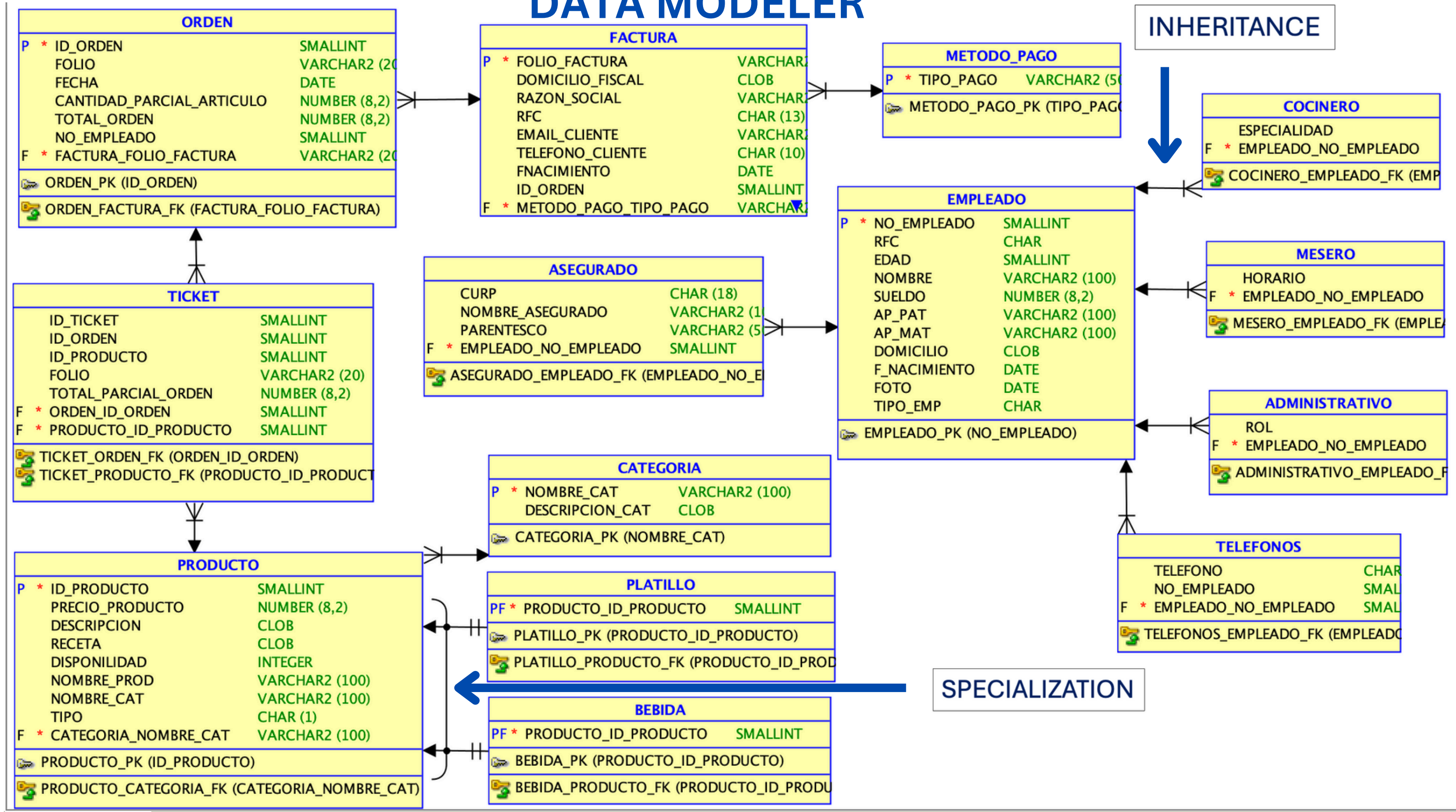
Pertenece (Ticket) {
ID_Orden Serial [PK][FK],
ID_Producto Serial [PK][FK],
Total_Parcial_Orden Numeric(8,2)}

Factura{Folio_Factura Varchar (20) [PK],
Domicilio_fiscal Text Not Null,
Razón_Social Varchar (50) Not Null,
Rfc Char (13) [UQ],
Email_Cliente Varchar (100),
Telefono_Cliente Char (10),
Fecha_de_Nacimiento Date,
Id_Orden Serial [PK]}

Método_Pago{Tipo_pago Varchar (50) [PK],
Folio_Factura Varchar (20) Not Null [FK]}

PHYSICAL RELATIONAL MODEL

DATA MODELER



SOLUTION PROPOSALS

Friendly Website

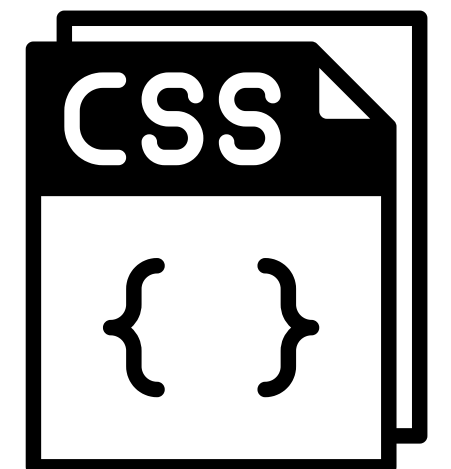
Homepage

WELCOME: BASIC INFORMATION
ABOUT THE SYSTEM AND ITS USE.

Employee Management

EMPLOYEE LIST: VIEW ALL
EMPLOYEES WITH THEIR
INFORMATION.

Used technology



4 – FINISH LINE

WHERE DO WE WANT TO GO?

FINISH LINE

KEY RESULTS

- IMPROVED OPERATIONAL EFFICIENCY: ORDER PROCESSING TIME HAS DECREASED SIGNIFICANTLY, REDUCING ERRORS AND IMPROVING CUSTOMER SERVICE.
- PERSONNEL MANAGEMENT: SHIFT PLANNING AND PERSONNEL PERFORMANCE EVALUATION HAVE BEEN SIMPLIFIED, ALLOWING FOR MORE EFFECTIVE ADMINISTRATION.
- DATA FOR DECISION MAKING: THE ABILITY TO GENERATE DETAILED AND ACCURATE REPORTS HAS PROVIDED A SOLID FOUNDATION FOR STRATEGIC DECISION MAKING.

NEXT STEPS

- STAFF TRAINING: CONDUCT ADDITIONAL TRAINING SESSIONS TO ENSURE THAT ALL EMPLOYEES ARE FAMILIAR WITH THE SYSTEM AND CAN USE IT EFFECTIVELY.
- SUPPORT AND UPDATES: ESTABLISH A TECHNICAL SUPPORT CHANNEL TO RESOLVE ANY QUESTIONS OR PROBLEMS THAT MAY ARISE AND PLAN FUTURE SYSTEM UPDATES BASED ON STAFF FEEDBACK.

FINISH LINE

Monitoring and evaluation

- Performance Monitoring: Continuously monitor system performance and its impact on restaurant operations, making adjustments as necessary.
- Periodic Evaluation: Carry out periodic evaluations of the system and personnel to ensure that the objectives are being met and the expected benefits are being obtained.



— THANKS FOR WATCHING
