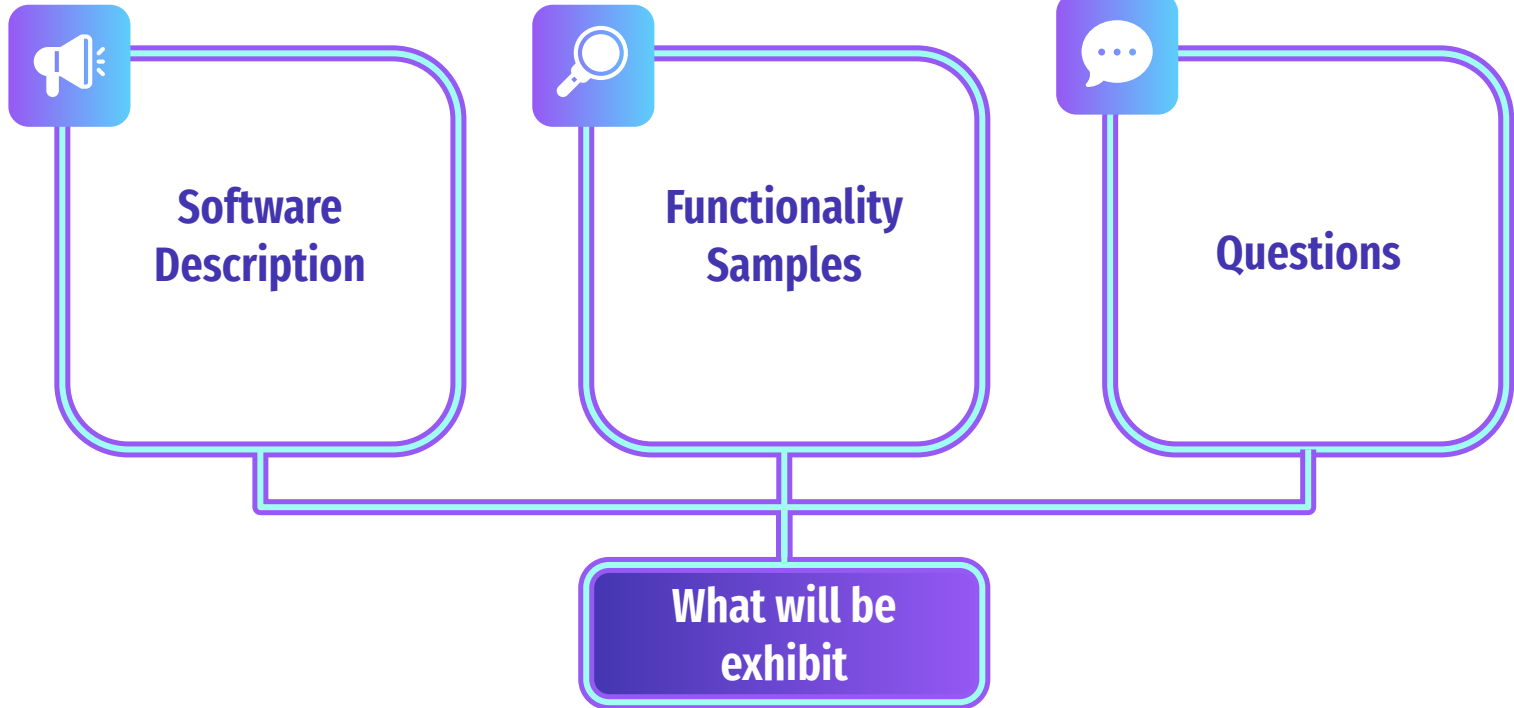


Data Base For a Restaurant

Workgroup: Señores del Señor



Presentation index



Implemented Solutions

Each of the solutions addressed for each requirement provided by our clients is described below.

Design and Implementation of a Database

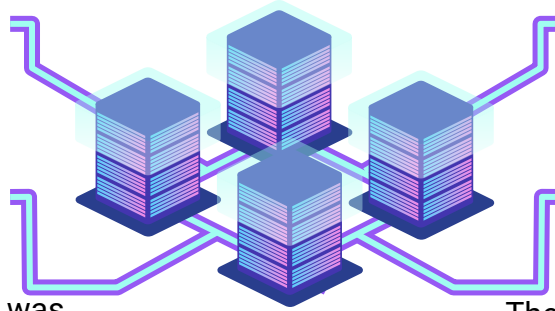
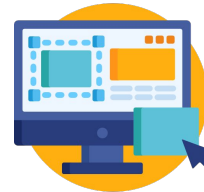
In the first instance, a database was created following the various stages of database design itself, these being:

- Requirements analysis
- Conceptual design
- Logical design
- Physical design



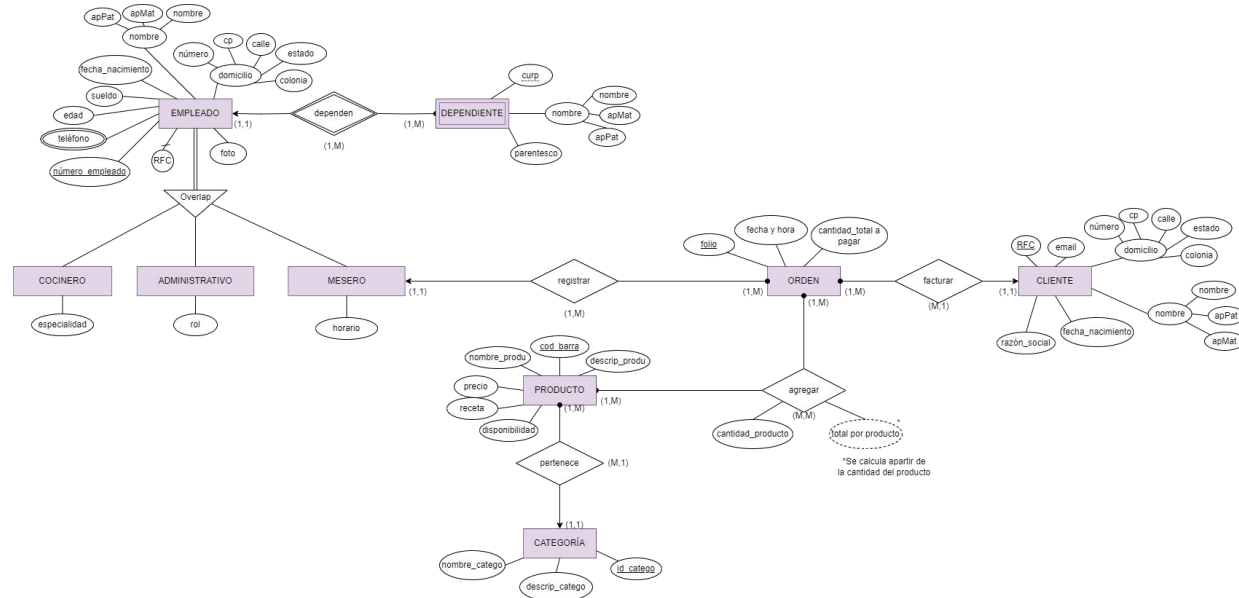
Requirements Analysis

The solutions that will be covered throughout this stage were defined, after analyzing the specific requirements defined by our client. Likewise, during this stage, we define various elements that seek to generate value for our client's business, such as the implementation of the web interface.



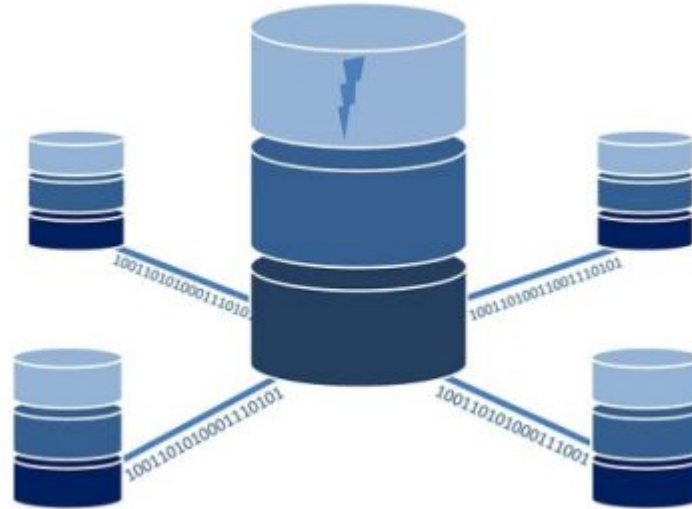
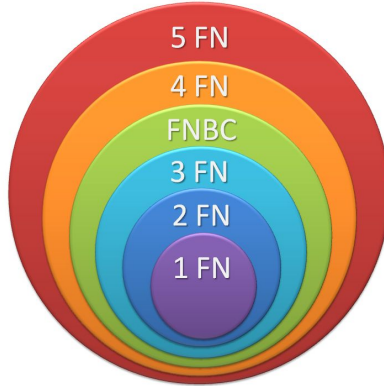
Conceptual design of the DB

During this stage, the design of the base entity-relationship model was first carried out, taking as a source the storage requirements defined by the client. That said, this model is the one that defined the behavioral relationships of the base. Furthermore, based on this design, the intermediate relational model was created, this as a good practice which will ensure the integrity of the model.



Logical design of the DB

After the previous stage and in a dependent manner, the final relational model of the base was created, a model which defined the implementation and programming of the database. It should be noted that it was during this stage that the normalization process was carried out, this as a good practice and as a way to maintain the integrity of both the database and the information it stores.



Intermediate Relational Model

<u>A</u>	B	C	D	E	F	G	H	I	J	K	L	M	N
<u>num</u> <u>em</u> <u>plea</u> <u>do</u>	RFC	edad	suel do	feh a_na cimie nto	foto	nom bre	ap_p at	ap mat	num ero domi cilio	cod post al	calle	esta do	colo nia

Datos personales del empleado: $B \Rightarrow \{C, E, G, H, I\}$

Empleado: $A \Rightarrow \{B\}$

Domicilio $A \Rightarrow \{J, K, L, M, N\}$

<u>A</u>	B
<u>num empleado</u>	especialidad

Cocinero $A \Rightarrow B$

Intermediate Relational Model

<u>A</u>	B
<u>num_empleado</u>	rol

Administrativo $A \Rightarrow B$

<u>A</u>	B
<u>num_empleado</u>	especialidad

Cocinero $A \Rightarrow B$

<u>A</u>	<u>B</u>	C	D	E	F
<u>CURP</u>	<u>num_empleado</u>	nombre	<u>ap_pat</u>	<u>ap_mat</u>	parentesco

Datos del dependiente $A \Rightarrow C, D, E$

Parentesco $\{A, B\} \Rightarrow F$

Intermediate Relational Model

A	B	C	D	E
<u>folio</u>	fecha_y_hora	<u>cantidad_a_pagar</u>	<u>rfc_cliente</u>	<u>num_empleado_m</u> <u>esero</u>

Orden $A \Rightarrow \{B, C\}$

Mesero $E \Rightarrow$

Cliente $D \Rightarrow \{C\}$

A	B	C	D	E	F	G
<u>cod_barra</u>	<u>nombre_pro</u> <u>du</u>	precio	receta	<u>descrip_prod</u> <u>u</u>	disponibilida d	id_categoria

datos del producto $A \Rightarrow \{B, C, D, E, G\}$

disponibilidad $A \Rightarrow F$

Intermediate Relational Model

<u>A</u>	B	C
<u>id_categoria</u>	<u>nombre_catego</u>	<u>descrip_catego</u>

Categoría $A \Rightarrow \{B, C\}$

<u>A</u>	<u>B</u>	C	D
<u>cod_barra</u>	<u>folio</u>	<u>cantidad_producto</u>	<u>total_producto</u>

Agrega $\{A, B\} \Rightarrow \{C, D\}$

Intermediate Relational Model

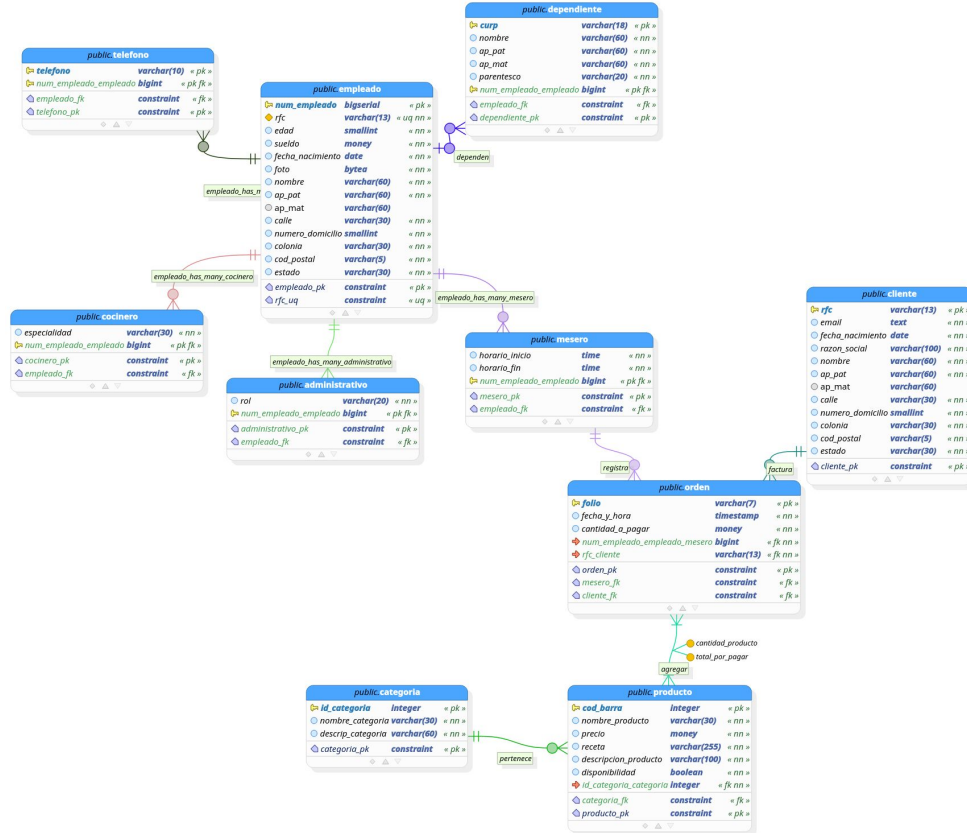
<u>A</u>	B	C	D	E	F	G	H	I	J	K	L
<u>rfc</u>	email	fecha _naci mient o	razon _socia l	nombr e	ap_pa t	ap_m at	numer o_do micilio	cod_p ostal	calle	estad o	coloni a

Datos personales del cliente $A \Rightarrow \{B, C, E, F, G\}$

Domicilio $A \Rightarrow \{H, I, J, K, L\}$

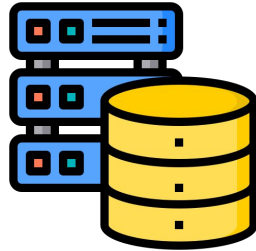
Razón social $A \Rightarrow D$

Final Relational Model

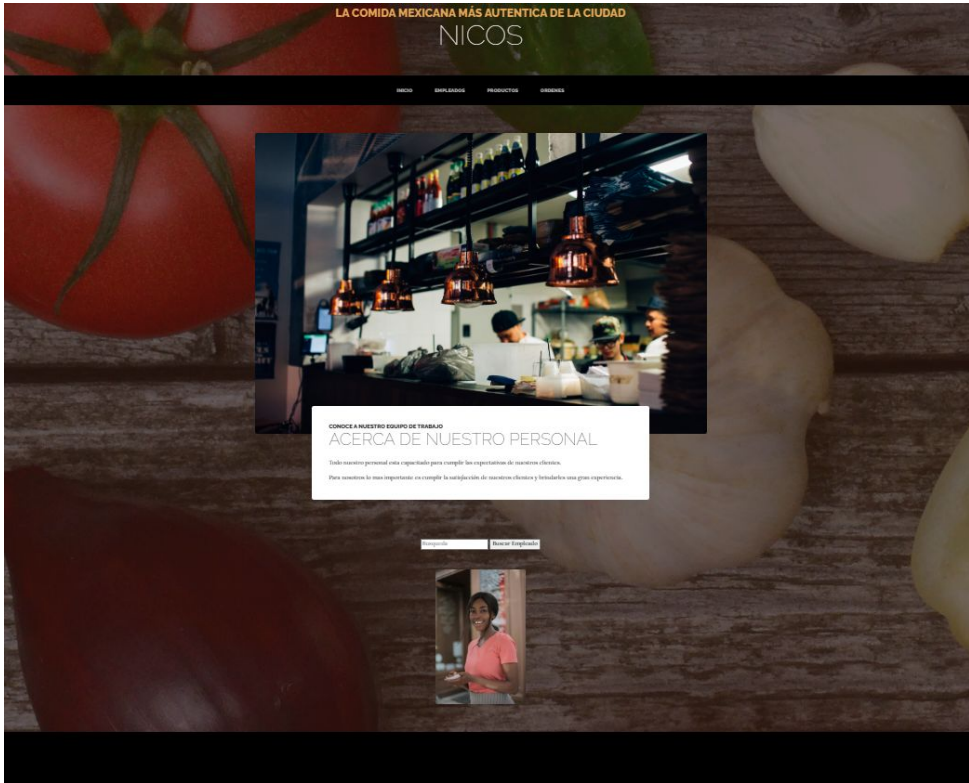
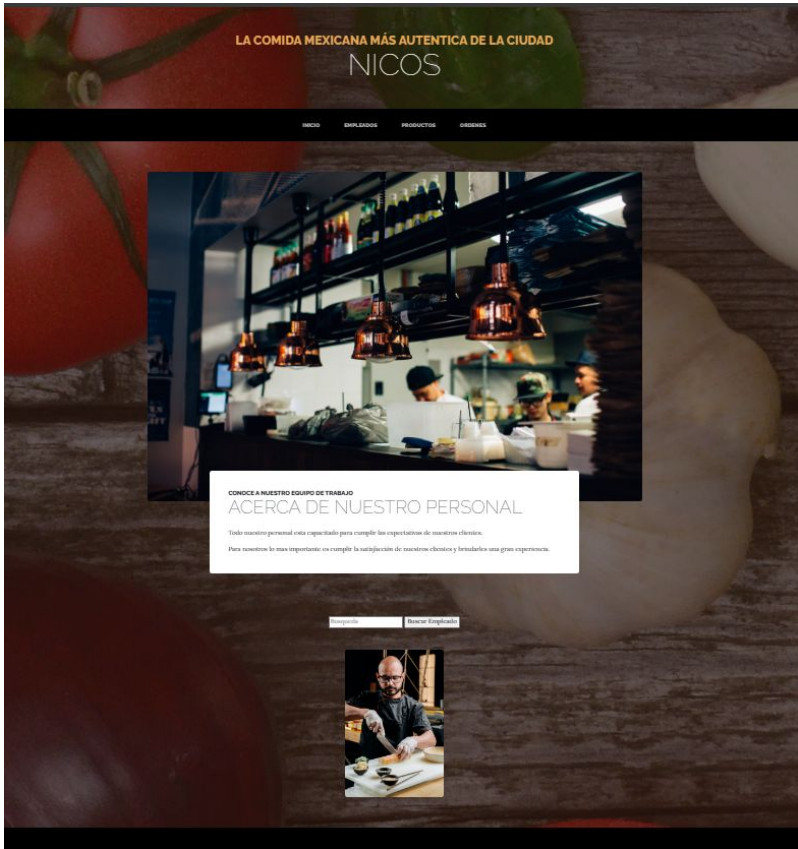


Physical design of the DB

During this stage, the implementation and programming of the database were carried out, all based on what was previously done. Thanks to this stage, subsequent solutions to the explicitly defined requirements could be implemented.



DEMO



Any Questions?

