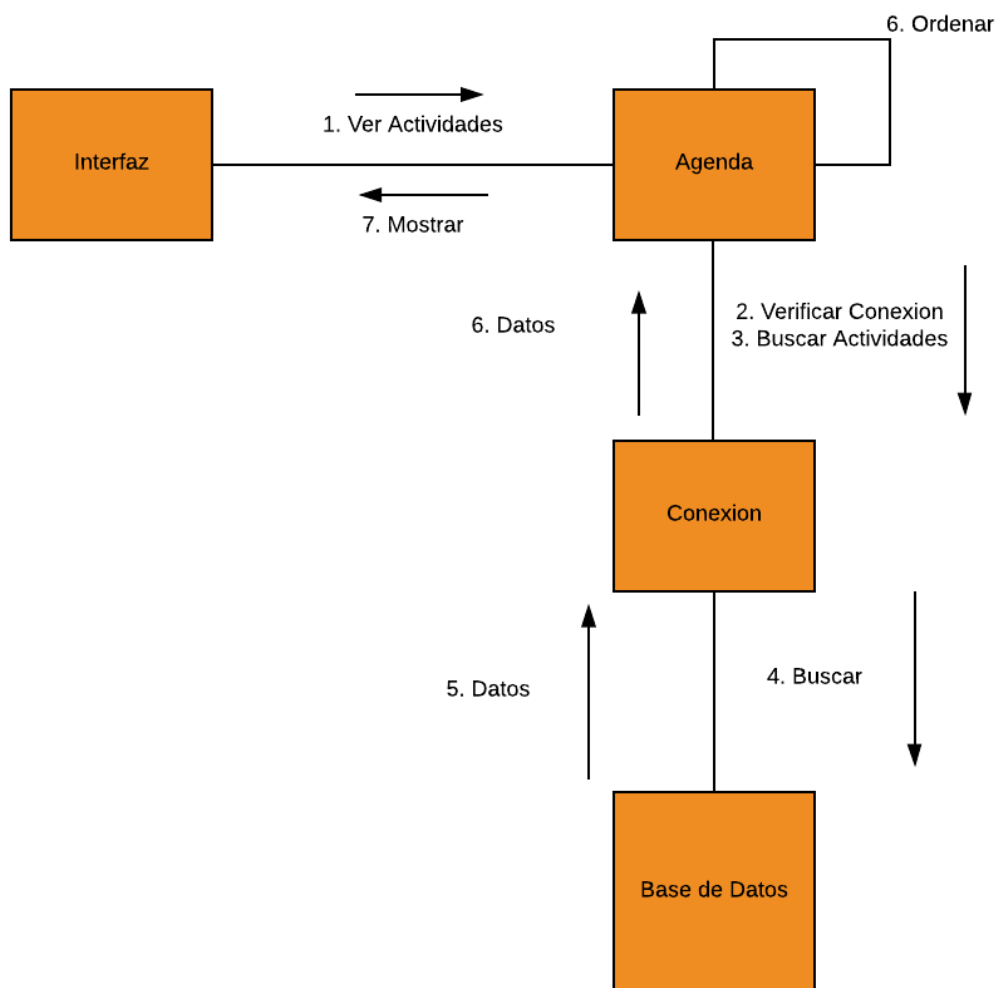
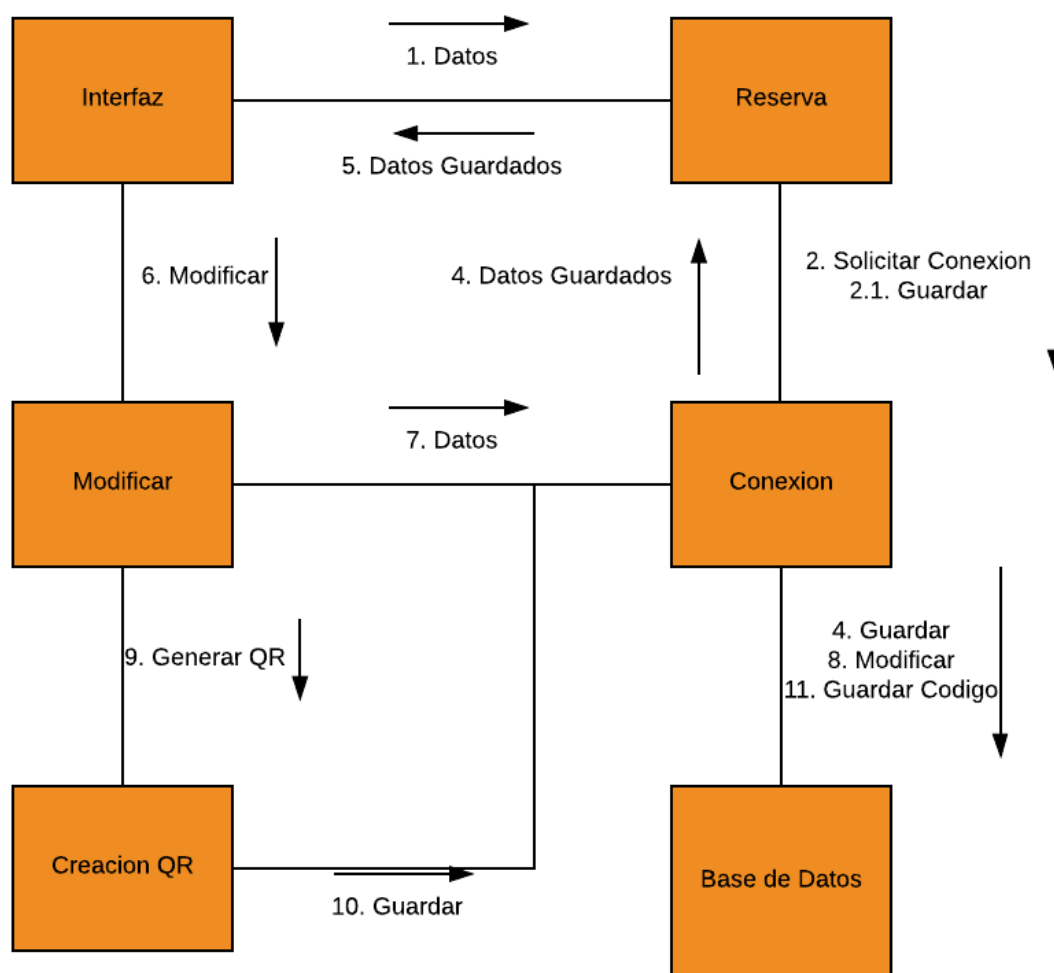


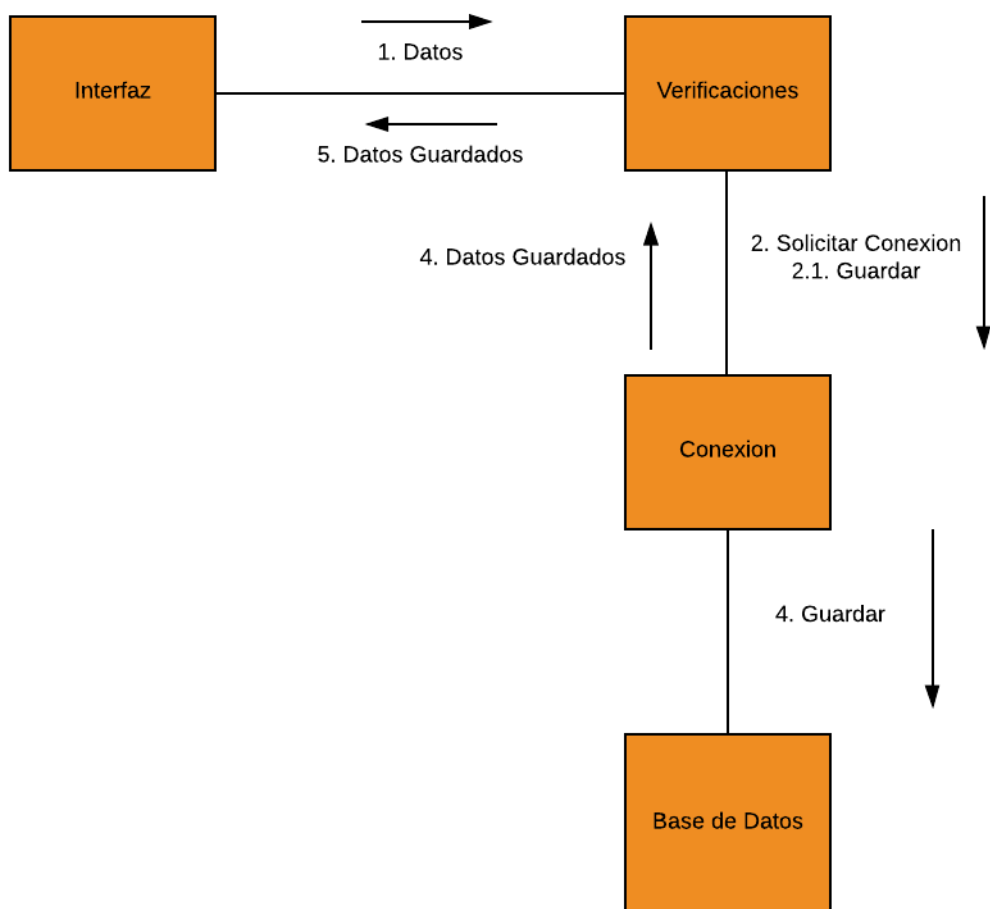
## Colaboración Calendario



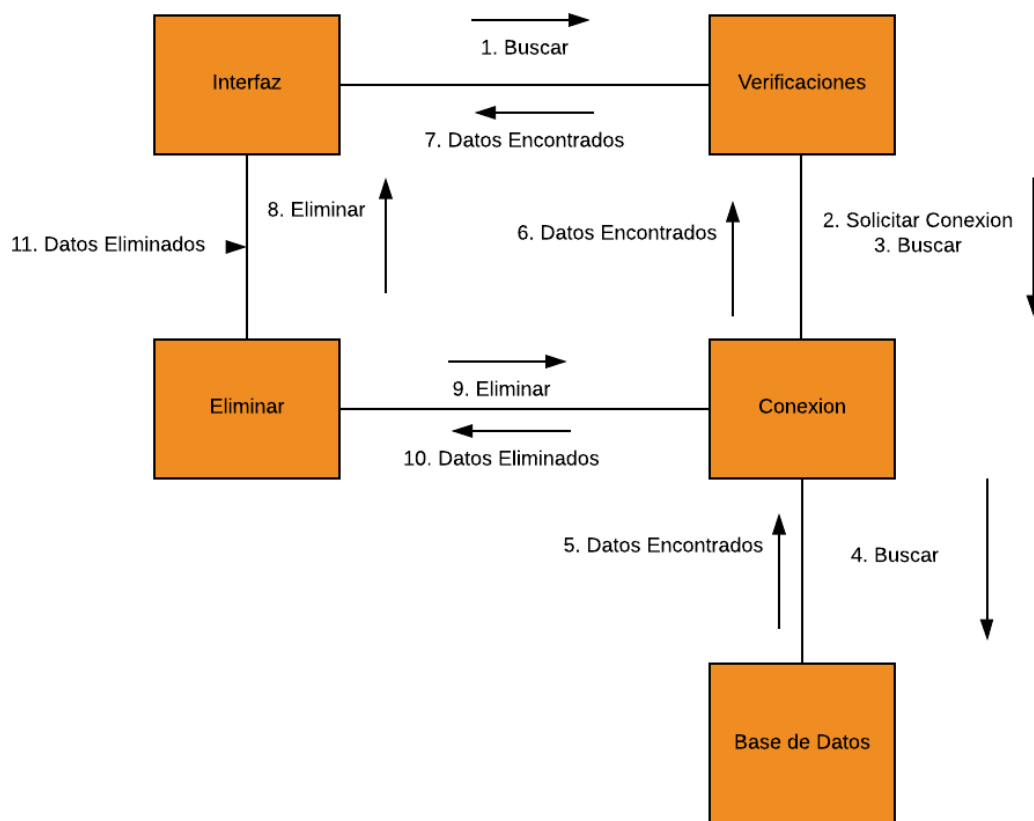
## Colaboración Reserva



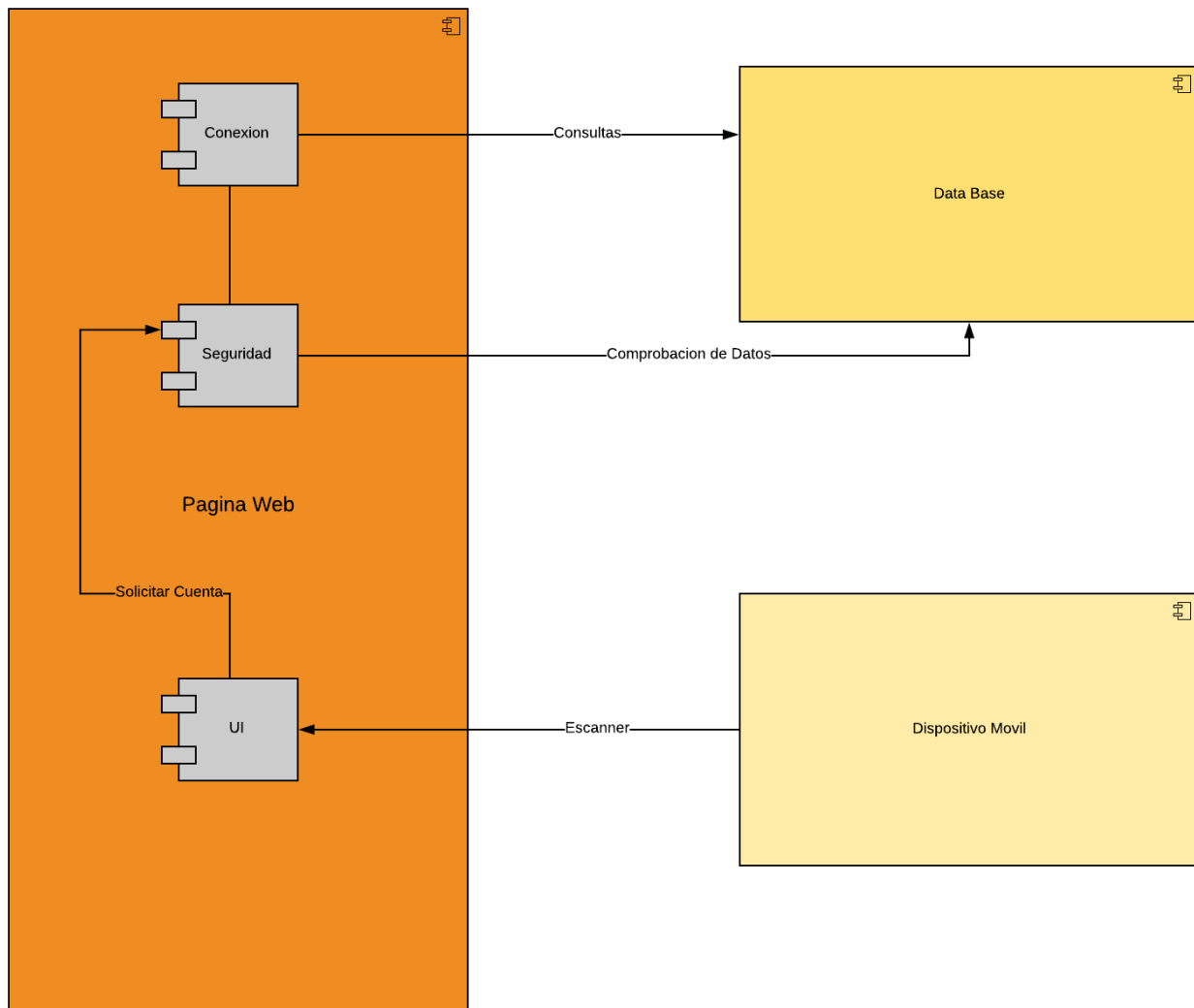
Colaboración Crear Usuario – Añadir salón – Añadir Insumo – Crear Reserva



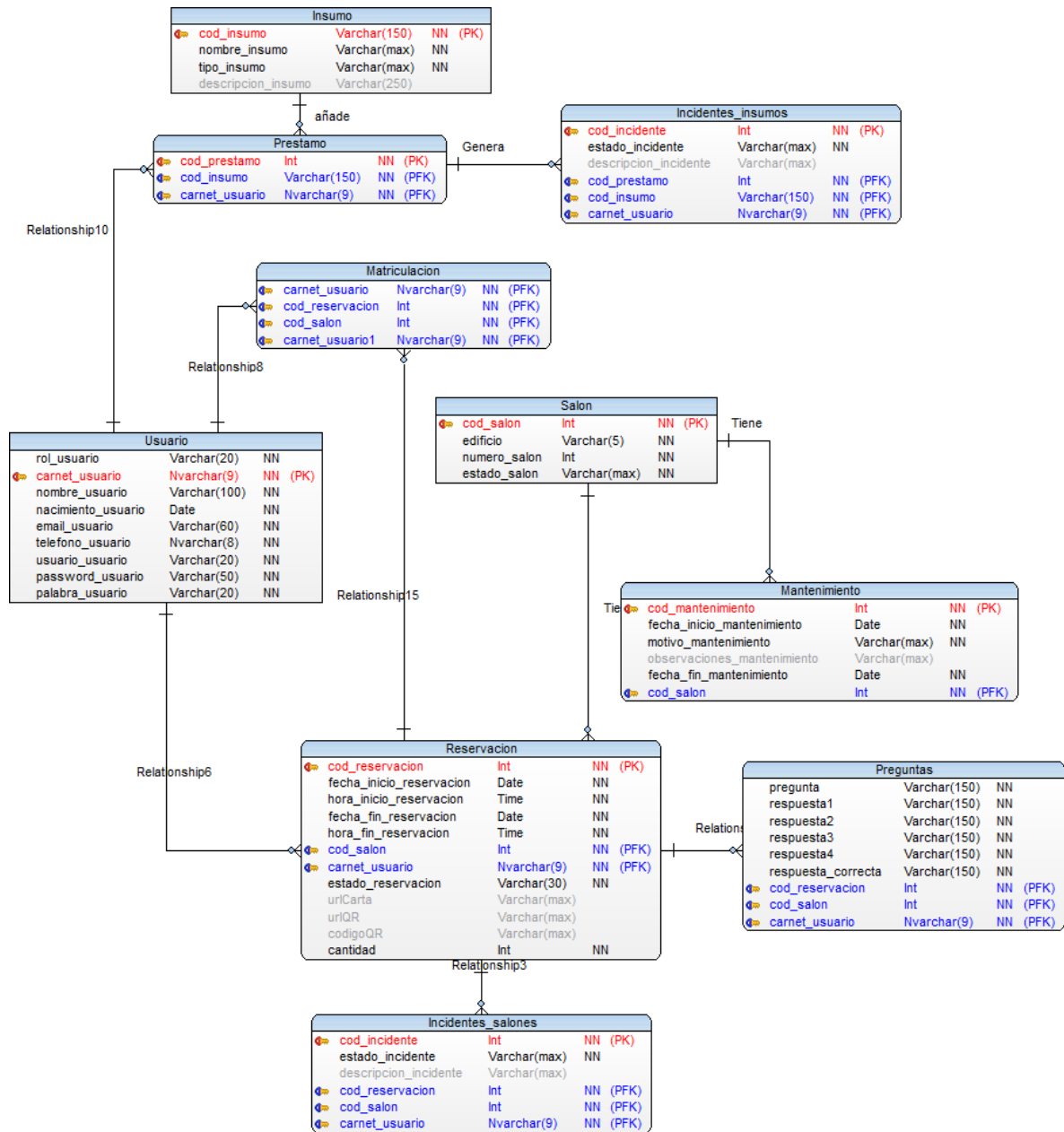
## Colaboración Eliminar Usuario – Eliminar salón – Eliminar Insumo – Eliminar Reserva



## Componentes



## Entidad Relacion



Querys

Crear Tablas

/\*

Created: 3/09/2018

Modified: 14/10/2018

Model: Microsoft SQL Server 2017

Database: MS SQL Server 2017

\*/

-- Create tables section -----

-- Table Salon

CREATE TABLE [Salon]

(

[cod\_salon] Int IDENTITY(1,1) NOT FOR REPLICATION NOT NULL,

[edificio] Varchar(5) NOT NULL,

[numero\_salon] Int NOT NULL,

[estado\_salon] Varchar(max) NOT NULL

)

-- Add keys for table Salon

ALTER TABLE [Salon] ADD CONSTRAINT [Key1] PRIMARY KEY ([cod\_salon])

-- Table Mantenimiento

```
CREATE TABLE [Mantenimiento]
(
    [cod_mantenimiento] Int IDENTITY(1,1) NOT FOR REPLICATION NOT NULL,
    [fecha_inicio_mantenimiento] Date NOT NULL,
    [motivo_mantenimiento] Varchar(max) NOT NULL,
    [observaciones_mantenimiento] Varchar(max) NULL,
    [fecha_fin_mantenimiento] Date NOT NULL,
    [cod_salon] Int NOT NULL
)
```

-- Add keys for table Mantenimiento

```
ALTER TABLE [Mantenimiento] ADD CONSTRAINT [Key2] PRIMARY KEY
([cod_mantenimiento],[cod_salon])
```

-- Table Reservacion

```
CREATE TABLE [Reservacion]
(
    [cod_reservacion] Int IDENTITY(1,1) NOT NULL,
    [fecha_inicio_reservacion] Date NOT NULL,
    [hora_inicio_reservacion] Time NOT NULL,
    [fecha_fin_reservacion] Date NOT NULL,
    [hora_fin_reservacion] Time NOT NULL,
    [cod_salon] Int NOT NULL,
    [carnet_usuario] Nvarchar(9) NOT NULL,
    [estado_reservacion] Varchar(30) NOT NULL,
    [urlCarta] Varchar(max) NULL,
```



```
[urlQR] Varchar(max) NULL,  
[codigoQR] Varchar(max) NULL  
)
```

```
-- Add keys for table Reservacion
```

```
ALTER TABLE [Reservacion] ADD CONSTRAINT [Key3] PRIMARY KEY  
([cod_reservacion],[cod_salon],[carnet_usuario])
```

```
-- Table Preguntas
```

```
CREATE TABLE [Preguntas]  
(  
[pregunta] Varchar(150) NOT NULL,  
[respuesta1] Varchar(150) NOT NULL,  
[respuesta2] Varchar(150) NOT NULL,  
[respuesta3] Varchar(150) NOT NULL,  
[respuesta4] Varchar(150) NOT NULL,  
[respuesta_correcta] Varchar(150) NOT NULL,  
[cod_reservacion] Int NOT NULL,  
[cod_salon] Int NOT NULL,  
[carnet_usuario] Nvarchar(9) NOT NULL  
)
```

```
-- Add keys for table Preguntas
```

```
ALTER TABLE [Preguntas] ADD CONSTRAINT [Key6] PRIMARY KEY  
([cod_reservacion],[cod_salon],[carnet_usuario])
```

-- Table Matriculacion

```
CREATE TABLE [Matriculacion]
(
    [carnet_usuario] Nvarchar(9) NOT NULL,
    [cod_reservacion] Int NOT NULL,
    [cod_salon] Int NOT NULL,
    [carnet_usuario1] Nvarchar(9) NOT NULL
)
```

-- Add keys for table Matriculacion

```
ALTER TABLE [Matriculacion] ADD CONSTRAINT [Key9] PRIMARY KEY
([carnet_usuario],[cod_reservacion],[cod_salon],[carnet_usuario1])
```

-- Table Usuario

```
CREATE TABLE [Usuario]
(
    [rol_usuario] Varchar(20) NOT NULL,
    [carnet_usuario] Nvarchar(9) NOT NULL,
    [nombre_usuario] Varchar(100) NOT NULL,
    [nacimiento_usuario] Date NOT NULL,
    [email_usuario] Varchar(60) NOT NULL,
    [telefono_usuario] Nvarchar(8) NOT NULL,
    [usuario_usuario] Varchar(20) NOT NULL,
    [password_usuario] Varchar(50) NOT NULL,
```

```
[palabra_usuario] Varchar(20) NOT NULL  
)
```

```
-- Add keys for table Usuario
```

```
ALTER TABLE [Usuario] ADD CONSTRAINT [Key11] PRIMARY KEY ([carnet_usuario])
```

```
-- Table Prestamo
```

```
CREATE TABLE [Prestamo]  
(  
    [cod_prestamo] Int IDENTITY(1,1) NOT NULL,  
    [cod_insumo] Varchar(150) NOT NULL,  
    [carnet_usuario] Nvarchar(9) NOT NULL  
)
```

```
-- Add keys for table Prestamo
```

```
ALTER TABLE [Prestamo] ADD CONSTRAINT [Key12] PRIMARY KEY  
([cod_prestamo],[cod_insumo],[carnet_usuario])
```

```
-- Table Insumo
```

```
CREATE TABLE [Insumo]  
(  
    [cod_insumo] Varchar(150) NOT NULL,  
    [nombre_insumo] Varchar(max) NOT NULL,
```

```
[tipo_insumo] Varchar(max) NOT NULL,  
[descripcion_insumo] Varchar(250) NULL  
)
```

```
-- Add keys for table Insumo
```

```
ALTER TABLE [Insumo] ADD CONSTRAINT [Key13] PRIMARY KEY ([cod_insumo])
```

```
-- Table Incidentes_insumos
```

```
CREATE TABLE [Incidentes_insumos]  
(  
    [cod_incidente] Int IDENTITY(1,1) NOT NULL,  
    [estado_incidente] Varchar(max) NOT NULL,  
    [descripcion_incidente] Varchar(max) NULL,  
    [cod_prestamo] Int NOT NULL,  
    [cod_insumo] Varchar(150) NOT NULL,  
    [carnet_usuario] Nvarchar(9) NOT NULL  
)
```

```
-- Add keys for table Incidentes_insumos
```

```
ALTER TABLE [Incidentes_insumos] ADD CONSTRAINT [Key14] PRIMARY KEY  
([cod_incidente],[cod_prestamo],[cod_insumo],[carnet_usuario])
```

```
-- Table Incidentes_salones
```

```
CREATE TABLE [Incidentes_salones]
(
    [cod_incidente] Int IDENTITY(1,1) NOT NULL,
    [estado_incidente] Varchar(max) NOT NULL,
    [descripcion_incidente] Varchar(max) NULL,
    [cod_reservacion] Int NOT NULL,
    [cod_salon] Int NOT NULL,
    [carnet_usuario] Nvarchar(9) NOT NULL
)
```

-- Add keys for table Incidentes\_salones

```
ALTER TABLE [Incidentes_salones] ADD CONSTRAINT [Key15] PRIMARY KEY
([cod_incidente],[cod_reservacion],[cod_salon],[carnet_usuario])
```

-- Create foreign keys (relationships) section -----

```
ALTER TABLE [Reservacion] ADD CONSTRAINT [Tiene] FOREIGN KEY ([cod_salon]) REFERENCES
[Salon] ([cod_salon]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Mantenimiento] ADD CONSTRAINT [Tiene] FOREIGN KEY ([cod_salon]) REFERENCES
[Salon] ([cod_salon]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Prestamo] ADD CONSTRAINT [añade] FOREIGN KEY ([cod_insumo]) REFERENCES [Insumo] ([cod_insumo]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Incidentes_insumos] ADD CONSTRAINT [Genera] FOREIGN KEY ([cod_prestamo], [cod_insumo], [carnet_usuario]) REFERENCES [Prestamo] ([cod_prestamo], [cod_insumo], [carnet_usuario]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Incidentes_salones] ADD CONSTRAINT [Relationship3] FOREIGN KEY ([cod_reservacion], [cod_salon], [carnet_usuario]) REFERENCES [Reservacion] ([cod_reservacion], [cod_salon], [carnet_usuario]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Reservacion] ADD CONSTRAINT [Relationship6] FOREIGN KEY ([carnet_usuario]) REFERENCES [Usuario] ([carnet_usuario]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Matriculacion] ADD CONSTRAINT [Relationship8] FOREIGN KEY ([carnet_usuario]) REFERENCES [Usuario] ([carnet_usuario]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Prestamo] ADD CONSTRAINT [Relationship10] FOREIGN KEY ([carnet_usuario]) REFERENCES [Usuario] ([carnet_usuario]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Preguntas] ADD CONSTRAINT [Relationship11] FOREIGN KEY ([cod_reservacion],  
[cod_salon], [carnet_usuario]) REFERENCES [Reservacion] ([cod_reservacion], [cod_salon],  
[carnet_usuario]) ON UPDATE NO ACTION ON DELETE NO ACTION
```

```
ALTER TABLE [Matriculacion] ADD CONSTRAINT [Relationship15] FOREIGN KEY ([cod_reservacion],  
[cod_salon], [carnet_usuario1]) REFERENCES [Reservacion] ([cod_reservacion], [cod_salon],  
[carnet_usuario]) ON UPDATE NO ACTION ON DELETE NO ACTION
```