MODELO ENTIDAD-RELACION

DE LA APP ELECTRO-SALE

GA4-220501095-AA1-EV01

Aprendiz

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INTRODUCCION

A continuación, describiré el modelo entidad-relación aplicado a mi app de venda de electrodomésticas en línea a través de una aplicación móvil, con el fin de mostrar una información organizada por medio de la relación de los diferentes elementos q interactúan. La idea es identificar fácilmente las identidades, atributos y relaciones q existen entre los datos.

IDENTIFICACION DE ENTIDADES Y RELACIONES

|  |  |  |
| --- | --- | --- |
| USUARIO | PRODUCTO | PEDIDO |
| ID\_USUARIO (PK) | ID\_PRODUCTO(PK) | ID\_PEDIDO(PK) |
| NOMBRE | NOMBRE | FECHA |
| APELLIDO | DESCRIPCION | HORA |
| CORREO ELECTRONICO | PRECIO | ESTADO |
| TIPO DE USARIO | DISPONIBILIDAD | TOTAL |
| METODO DE PAGO |  |  |

IDENTIFICACION DE ENTIDADES Y RELACIONES

DETALLE\_PEDIDO METODO\_PAGO TRANSACCION

ID\_Detalle (PK) ID\_METODO(PK) ID\_TRANSACCION(PK)

ID\_Pedido (FK) TIPO(TD,TC) ID\_PEDIDO(FK)

ID\_Producto (FK) ID\_METODO(FK)

Cantidad MONTO

Subtotal FECHA

IDENTIFICACION DE ENTIDADES Y RELACIONES

PEDIDO FACTURA

ID\_PEDIDO(PK) ID\_FACTURA(PK)

FECHA ID\_PEDIDO(FK)

HORA FECHA DE EMISION

TOTAL PEDIDO

RELACIONES ENTRE ENTIDADES

Un Usuario puede realizar varios Pedidos. (Relación 1\*:N\*\*)\*

Un Pedido puede contener varios Productos a través de la entidad Detalle\_Pedido. (Relación M\*:N\*\*)\*

Un Pedido puede ser pagado con un Método de Pago. (Relación 1:1)

Un Pedido genera una Factura. (Relación 1:1)

Un Pedido genera una Transacción. (Relación 1:1)

**MODELO LOGICO**

-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE, SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- -----------------------------------------------------

-- Schema mydb

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema mydb

-- -----------------------------------------------------

CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 ;

-- -----------------------------------------------------

-- Schema phpmyadmin

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema phpmyadmin

-- -----------------------------------------------------

CREATE SCHEMA IF NOT EXISTS `phpmyadmin` DEFAULT CHARACTER SET utf8 COLLATE utf8\_bin ;

USE `mydb` ;

-- -----------------------------------------------------

-- Table `mydb`.`producto`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `mydb`.`producto` (

`id\_producto` INT UNSIGNED NOT NULL,

`nombre` VARCHAR(100) NOT NULL,

`precio` FLOAT NOT NULL,

`stock` INT(100) NOT NULL,

PRIMARY KEY (`id\_producto`))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `mydb`.`pedido`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `mydb`.`pedido` (

`id\_pedido` INT UNSIGNED NOT NULL AUTO\_INCREMENT,

`id\_producto` INT(100) NOT NULL,

`fecha` DATE NOT NULL,

`producto\_id\_producto` INT UNSIGNED NOT NULL,

PRIMARY KEY (`id\_pedido`),

INDEX `fk\_pedido\_producto1\_idx` (`producto\_id\_producto` ASC) VISIBLE,

CONSTRAINT `fk\_pedido\_producto1`

FOREIGN KEY (`producto\_id\_producto`)

REFERENCES `mydb`.`producto` (`id\_producto`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `mydb`.`cliente`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `mydb`.`cliente` (

`idcliente` INT UNSIGNED NOT NULL AUTO\_INCREMENT,

`nombe` VARCHAR(45) NOT NULL,

`direccion` VARCHAR(250) NOT NULL,

`correo\_electronico` VARCHAR(250) NOT NULL,

`metodo\_pago` VARCHAR(45) NULL,

`pedido\_id\_pedido` INT UNSIGNED NOT NULL,

PRIMARY KEY (`idcliente`),

INDEX `fk\_cliente\_pedido\_idx` (`pedido\_id\_pedido` ASC) VISIBLE,

CONSTRAINT `fk\_cliente\_pedido`

FOREIGN KEY (`pedido\_id\_pedido`)

REFERENCES `mydb`.`pedido` (`id\_pedido`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `mydb`.`admon`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `mydb`.`admon` (

`id\_admon` INT UNSIGNED NOT NULL AUTO\_INCREMENT,

`nombre` VARCHAR(250) NOT NULL,

`pedido\_id\_pedido` INT UNSIGNED NOT NULL,

PRIMARY KEY (`id\_admon`),

INDEX `fk\_admon\_pedido1\_idx` (`pedido\_id\_pedido` ASC) VISIBLE,

CONSTRAINT `fk\_admon\_pedido1`

FOREIGN KEY (`pedido\_id\_pedido`)

REFERENCES `mydb`.`pedido` (`id\_pedido`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `mydb`.`chat`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `mydb`.`chat` (

`idchat` INT NOT NULL,

`pedido\_id\_pedido` INT UNSIGNED NOT NULL,

PRIMARY KEY (`idchat`),

INDEX `fk\_chat\_pedido1\_idx` (`pedido\_id\_pedido` ASC) VISIBLE,

CONSTRAINT `fk\_chat\_pedido1`

FOREIGN KEY (`pedido\_id\_pedido`)

REFERENCES `mydb`.`pedido` (`id\_pedido`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `mydb`.`pagos`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `mydb`.`pagos` (

`id\_pagos` INT NOT NULL AUTO\_INCREMENT,

`metodo\_pago` VARCHAR(100) NOT NULL,

`id\_factura` INT(100) NOT NULL,

`detalles\_factura` VARCHAR(100) NOT NULL,

PRIMARY KEY (`id\_pagos`))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `mydb`.`producto\_has\_pagos`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `mydb`.`producto\_has\_pagos` (

`producto\_id\_producto` INT UNSIGNED NOT NULL,

`pagos\_id\_pagos` INT NOT NULL,

PRIMARY KEY (`producto\_id\_producto`, `pagos\_id\_pagos`),

INDEX `fk\_producto\_has\_pagos\_pagos1\_idx` (`pagos\_id\_pagos` ASC) VISIBLE,

INDEX `fk\_producto\_has\_pagos\_producto1\_idx` (`producto\_id\_producto` ASC) VISIBLE,

CONSTRAINT `fk\_producto\_has\_pagos\_producto1`

FOREIGN KEY (`producto\_id\_producto`)

REFERENCES `mydb`.`producto` (`id\_producto`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_producto\_has\_pagos\_pagos1`

FOREIGN KEY (`pagos\_id\_pagos`)

REFERENCES `mydb`.`pagos` (`id\_pagos`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

USE `phpmyadmin` ;

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_bookmark`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_bookmark` (

`id` INT(10) UNSIGNED NOT NULL AUTO\_INCREMENT,

`dbase` VARCHAR(255) NOT NULL DEFAULT '',

`user` VARCHAR(255) NOT NULL DEFAULT '',

`label` VARCHAR(255) CHARACTER SET 'utf8' NOT NULL DEFAULT '',

`query` TEXT NOT NULL,

PRIMARY KEY (`id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Bookmarks';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_central\_columns`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_central\_columns` (

`db\_name` VARCHAR(64) NOT NULL,

`col\_name` VARCHAR(64) NOT NULL,

`col\_type` VARCHAR(64) NOT NULL,

`col\_length` TEXT NULL DEFAULT NULL,

`col\_collation` VARCHAR(64) NOT NULL,

`col\_isNull` TINYINT(1) NOT NULL,

`col\_extra` VARCHAR(255) NULL DEFAULT '',

`col\_default` TEXT NULL DEFAULT NULL,

PRIMARY KEY (`db\_name`, `col\_name`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Central list of columns';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_column\_info`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_column\_info` (

`id` INT(5) UNSIGNED NOT NULL AUTO\_INCREMENT,

`db\_name` VARCHAR(64) NOT NULL DEFAULT '',

`table\_name` VARCHAR(64) NOT NULL DEFAULT '',

`column\_name` VARCHAR(64) NOT NULL DEFAULT '',

`comment` VARCHAR(255) CHARACTER SET 'utf8' NOT NULL DEFAULT '',

`mimetype` VARCHAR(255) CHARACTER SET 'utf8' NOT NULL DEFAULT '',

`transformation` VARCHAR(255) NOT NULL DEFAULT '',

`transformation\_options` VARCHAR(255) NOT NULL DEFAULT '',

`input\_transformation` VARCHAR(255) NOT NULL DEFAULT '',

`input\_transformation\_options` VARCHAR(255) NOT NULL DEFAULT '',

PRIMARY KEY (`id`),

UNIQUE INDEX `db\_name` (`db\_name` ASC, `table\_name` ASC, `column\_name` ASC) VISIBLE)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Column information for phpMyAdmin';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_designer\_settings`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_designer\_settings` (

`username` VARCHAR(64) NOT NULL,

`settings\_data` TEXT NOT NULL,

PRIMARY KEY (`username`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Settings related to Designer';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_export\_templates`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_export\_templates` (

`id` INT(5) UNSIGNED NOT NULL AUTO\_INCREMENT,

`username` VARCHAR(64) NOT NULL,

`export\_type` VARCHAR(10) NOT NULL,

`template\_name` VARCHAR(64) NOT NULL,

`template\_data` TEXT NOT NULL,

PRIMARY KEY (`id`),

UNIQUE INDEX `u\_user\_type\_template` (`username` ASC, `export\_type` ASC, `template\_name` ASC) VISIBLE)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Saved export templates';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_favorite`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_favorite` (

`username` VARCHAR(64) NOT NULL,

`tables` TEXT NOT NULL,

PRIMARY KEY (`username`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Favorite tables';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_history`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_history` (

`id` BIGINT(20) UNSIGNED NOT NULL AUTO\_INCREMENT,

`username` VARCHAR(64) NOT NULL DEFAULT '',

`db` VARCHAR(64) NOT NULL DEFAULT '',

`table` VARCHAR(64) NOT NULL DEFAULT '',

`timevalue` TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP(),

`sqlquery` TEXT NOT NULL,

PRIMARY KEY (`id`),

INDEX `username` (`username` ASC, `db` ASC, `table` ASC, `timevalue` ASC) VISIBLE)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'SQL history for phpMyAdmin';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_navigationhiding`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_navigationhiding` (

`username` VARCHAR(64) NOT NULL,

`item\_name` VARCHAR(64) NOT NULL,

`item\_type` VARCHAR(64) NOT NULL,

`db\_name` VARCHAR(64) NOT NULL,

`table\_name` VARCHAR(64) NOT NULL,

PRIMARY KEY (`username`, `item\_name`, `item\_type`, `db\_name`, `table\_name`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Hidden items of navigation tree';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_pdf\_pages`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_pdf\_pages` (

`db\_name` VARCHAR(64) NOT NULL DEFAULT '',

`page\_nr` INT(10) UNSIGNED NOT NULL AUTO\_INCREMENT,

`page\_descr` VARCHAR(50) CHARACTER SET 'utf8' NOT NULL DEFAULT '',

PRIMARY KEY (`page\_nr`),

INDEX `db\_name` (`db\_name` ASC) VISIBLE)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'PDF relation pages for phpMyAdmin';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_recent`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_recent` (

`username` VARCHAR(64) NOT NULL,

`tables` TEXT NOT NULL,

PRIMARY KEY (`username`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Recently accessed tables';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_relation`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_relation` (

`master\_db` VARCHAR(64) NOT NULL DEFAULT '',

`master\_table` VARCHAR(64) NOT NULL DEFAULT '',

`master\_field` VARCHAR(64) NOT NULL DEFAULT '',

`foreign\_db` VARCHAR(64) NOT NULL DEFAULT '',

`foreign\_table` VARCHAR(64) NOT NULL DEFAULT '',

`foreign\_field` VARCHAR(64) NOT NULL DEFAULT '',

PRIMARY KEY (`master\_db`, `master\_table`, `master\_field`),

INDEX `foreign\_field` (`foreign\_db` ASC, `foreign\_table` ASC) VISIBLE)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Relation table';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_savedsearches`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_savedsearches` (

`id` INT(5) UNSIGNED NOT NULL AUTO\_INCREMENT,

`username` VARCHAR(64) NOT NULL DEFAULT '',

`db\_name` VARCHAR(64) NOT NULL DEFAULT '',

`search\_name` VARCHAR(64) NOT NULL DEFAULT '',

`search\_data` TEXT NOT NULL,

PRIMARY KEY (`id`),

UNIQUE INDEX `u\_savedsearches\_username\_dbname` (`username` ASC, `db\_name` ASC, `search\_name` ASC) VISIBLE)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Saved searches';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_table\_coords`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_table\_coords` (

`db\_name` VARCHAR(64) NOT NULL DEFAULT '',

`table\_name` VARCHAR(64) NOT NULL DEFAULT '',

`pdf\_page\_number` INT(11) NOT NULL DEFAULT 0,

`x` FLOAT UNSIGNED NOT NULL DEFAULT 0,

`y` FLOAT UNSIGNED NOT NULL DEFAULT 0,

PRIMARY KEY (`db\_name`, `table\_name`, `pdf\_page\_number`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Table coordinates for phpMyAdmin PDF output';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_table\_info`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_table\_info` (

`db\_name` VARCHAR(64) NOT NULL DEFAULT '',

`table\_name` VARCHAR(64) NOT NULL DEFAULT '',

`display\_field` VARCHAR(64) NOT NULL DEFAULT '',

PRIMARY KEY (`db\_name`, `table\_name`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Table information for phpMyAdmin';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_table\_uiprefs`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_table\_uiprefs` (

`username` VARCHAR(64) NOT NULL,

`db\_name` VARCHAR(64) NOT NULL,

`table\_name` VARCHAR(64) NOT NULL,

`prefs` TEXT NOT NULL,

`last\_update` TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP() ON UPDATE CURRENT\_TIMESTAMP(),

PRIMARY KEY (`username`, `db\_name`, `table\_name`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Tables\' UI preferences';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_tracking`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_tracking` (

`db\_name` VARCHAR(64) NOT NULL,

`table\_name` VARCHAR(64) NOT NULL,

`version` INT(10) UNSIGNED NOT NULL,

`date\_created` DATETIME NOT NULL,

`date\_updated` DATETIME NOT NULL,

`schema\_snapshot` TEXT NOT NULL,

`schema\_sql` TEXT NULL DEFAULT NULL,

`data\_sql` LONGTEXT NULL DEFAULT NULL,

`tracking` SET('UPDATE', 'REPLACE', 'INSERT', 'DELETE', 'TRUNCATE', 'CREATE DATABASE', 'ALTER DATABASE', 'DROP DATABASE', 'CREATE TABLE', 'ALTER TABLE', 'RENAME TABLE', 'DROP TABLE', 'CREATE INDEX', 'DROP INDEX', 'CREATE VIEW', 'ALTER VIEW', 'DROP VIEW') NULL DEFAULT NULL,

`tracking\_active` INT(1) UNSIGNED NOT NULL DEFAULT 1,

PRIMARY KEY (`db\_name`, `table\_name`, `version`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'Database changes tracking for phpMyAdmin';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_userconfig`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_userconfig` (

`username` VARCHAR(64) NOT NULL,

`timevalue` TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP() ON UPDATE CURRENT\_TIMESTAMP(),

`config\_data` TEXT NOT NULL,

PRIMARY KEY (`username`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'User preferences storage for phpMyAdmin';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_usergroups`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_usergroups` (

`usergroup` VARCHAR(64) NOT NULL,

`tab` VARCHAR(64) NOT NULL,

`allowed` ENUM('Y', 'N') NOT NULL DEFAULT 'N',

PRIMARY KEY (`usergroup`, `tab`, `allowed`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

COMMENT = 'User groups with configured menu items';

-- -----------------------------------------------------

-- Table `phpmyadmin`.`pma\_\_users`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `phpmyadmin`.`pma\_\_users` (

`username` VARCHAR(64) NOT NULL,

`usergroup` VARCHAR(64) NOT NULL,

PRIMARY KEY (`username`, `usergroup`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8

COLLATE = utf8\_bin

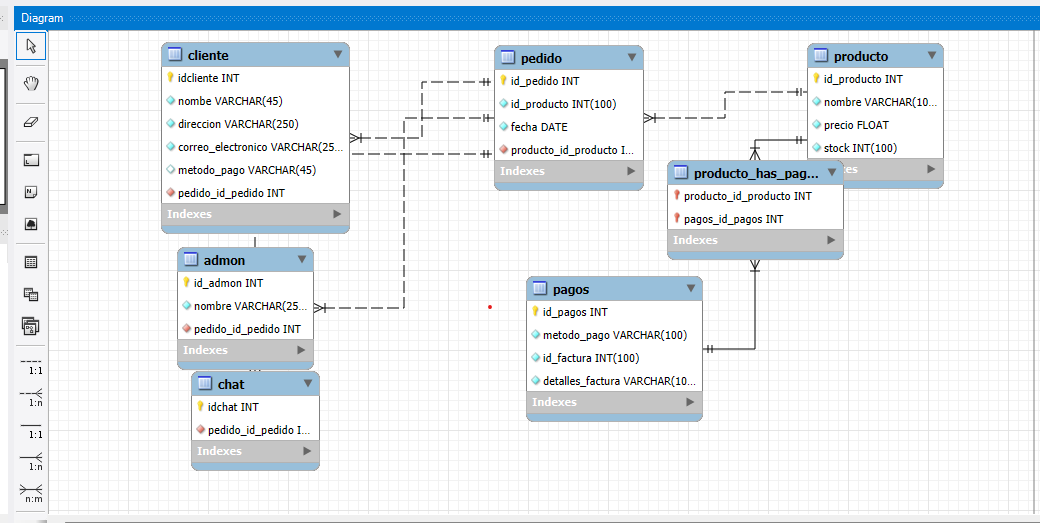
COMMENT = 'Users and their assignments to user groups';

SET SQL\_MODE=@OLD\_SQL\_MODE;

SET FOREIGN\_KEY\_CHECKS=@OLD\_FOREIGN\_KEY\_CHECKS;

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;

**MODELO ENTIDAD-RELACION**



CONCLUSION

El modelo entidad-relación diseñado para la app ELECTRO-SALE permite una adecuada estructuración de la información, asegurando integridad y eficiencia en la gestión de los datos.

La definición clara de entidades y relaciones facilita la implementación de la base de datos y su integración con el sistema de software. Además, la normalización del modelo contribuye a minimizar la redundancia de datos y optimizar el rendimiento de consultas y transacciones.

Este modelo servirá como base para futuras mejoras y ampliaciones del sistema, adaptándose a los requerimientos próximos a surgir