USERNAMEPASSWORD

UserID (pk) -> Username, Password

 PERSONALINFO

PersonInfoID (pk) -> FirstName, MiddleName, LastName, DateOfBirth

 TICKETS

TicketID (pk) -> Price, BelongsToPerson (fk), Event (fk), SeatNumber

EVENTS

EventID -> Venue, Date, StartingTime, EndingTime

LINEITEM

LineItemID (pk) -> BelongsToReceipt (fk), LineNumber, TicketItem (fk), ItemPrice, bIsRefund

RECEIPT

ReceiptID (pk) -> BillingInfo (fk), BelongsToUser (fk), DateTimeOfTransaction

BILLINGINFO

BillingInfoID (pk) -> BelongsToUser (fk), Billing\_FirstName, Billing\_LastName, Email, Address, Billing\_PostalCode (fk)

POSTALCODEINFO

PostalCode (pk) -> Country, State/Province, City

**3NF**

USERNAMEPASSWORD

UserID (pk) -> Username, Password

 PERSONALINFO

PersonInfoID (pk) -> FirstName, MiddleName, LastName, DateOfBirth

 TICKETS

TicketID (pk) -> Price, BelongsToPerson (fk), Event (fk), SeatNumber

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RECEIPT

ReceiptID (pk) -> BillingInfo (fk), BelongsToUser (fk), DateTimeOfTransaction

BILLINGINFO

BillingInfoID (pk) -> BelongsToUser (fk), Billing\_FirstName, Billing\_LastName, Email, Address, Billing\_PostalCode (fk)

POSTALCODEINFO

PostalCode (pk) -> Country, State/Province, City

CREATE TABLE ` Main`.`USERNAMEPASSWORD` (

`UserID` INT NOT NULL AUTO\_INCREMENT,

`Username` VARCHAR(15) NOT NULL,

`Pass` VARCHAR(20) NOT NULL,

PRIMARY KEY (`UserID`),

UNIQUE INDEX `Username\_UNIQUE` (`Username` ASC) VISIBLE,

UNIQUE INDEX `UserID\_UNIQUE` (`UserID` ASC) VISIBLE);

CREATE TABLE `Main`.`EVENTS` (

`EventID` INT NOT NULL AUTO\_INCREMENT,

`Venue` VARCHAR(38) NOT NULL,

`Date` DATE NOT NULL,

`StartingTime` TIME NOT NULL,

`EndingTime` TIME NOT NULL,

PRIMARY KEY (`EventID`),

UNIQUE INDEX `EventID\_UNIQUE` (`EventID` ASC) VISIBLE);

ALTER TABLE `Main`.`EVENTS`

ADD COLUMN `Name` VARCHAR(38) NOT NULL AFTER `EventID`,

ADD COLUMN `Description` VARCHAR(190) NOT NULL AFTER `Name`;

CREATE TABLE `Main`.`PERSONALINFO` (

`PersonalInfoID` INT NOT NULL AUTO\_INCREMENT,

`FirstName` VARCHAR(45) NOT NULL,

`LastName` VARCHAR(45) NOT NULL,

PRIMARY KEY (`PersonalInfoID`),

UNIQUE INDEX `PersonalInfoID\_UNIQUE` (`PersonalInfoID` ASC) VISIBLE);

CREATE TABLE `Main`.`TICKETS` (

`TicketID` INT NOT NULL AUTO\_INCREMENT,

`Price` FLOAT UNSIGNED NOT NULL,

`BelongsToPerson` INT NULL,

`Event` INT NOT NULL,

`SeatNumber` VARCHAR(20) NULL,

PRIMARY KEY (`TicketID`),

UNIQUE INDEX `TicketID\_UNIQUE` (`TicketID` ASC) VISIBLE);

CREATE TABLE `Main`.` POSTALCODEINFO` (

`PostalCode` INT NOT NULL,

`Country` VARCHAR(30) NULL,

`StateOrProvince` VARCHAR(15) NULL,

`City` VARCHAR(15) NULL,

PRIMARY KEY (`PostalCode`),

UNIQUE INDEX `PostalCode\_UNIQUE` (`PostalCode` ASC) VISIBLE);

CREATE TABLE `Main`.`BILLINGINFO` (

`BillingInfoID` INT NOT NULL AUTO\_INCREMENT,

`BelongsToUser` INT NULL,

`Billing\_FirstName` VARCHAR(45) NOT NULL,

`Billing\_LastName` VARCHAR(45) NOT NULL,

`Email` VARCHAR(45) NOT NULL,

`Address` VARCHAR(45) NOT NULL,

`Billing\_PostalCode` INT NOT NULL,

PRIMARY KEY (`BillingInfoID`),

UNIQUE INDEX `BillingInfoID\_UNIQUE` (`BillingInfoID` ASC) VISIBLE);

CREATE TABLE `Main`.`RECEIPT` (

`ReceiptID` INT NOT NULL AUTO\_INCREMENT,

`BillingInfo` INT NOT NULL,

`BelongsToUser` INT NOT NULL,

`DateTimeOfTransaction` DATETIME NOT NULL,

PRIMARY KEY (`ReceiptID`),

UNIQUE INDEX `ReceiptID\_UNIQUE` (`ReceiptID` ASC) VISIBLE);

CREATE TABLE `Main`.`LINEITEM` (

`LineItemID` INT NOT NULL AUTO\_INCREMENT,

`BelongsToReceipt` INT NOT NULL,

`LineNumber` INT UNSIGNED NOT NULL,

`TicketItem` INT NOT NULL,

`ItemPrice` FLOAT UNSIGNED NOT NULL,

`bIsRefund` TINYINT NOT NULL,

PRIMARY KEY (`LineItemID`),

UNIQUE INDEX `LineItemID\_UNIQUE` (`LineItemID` ASC) VISIBLE);

**KEYS:**

ALTER TABLE `Main`.`BILLINGINFO`

ADD INDEX `BillingInfo\_PostalCodeInfo\_key\_idx` (`Billing\_PostalCode` ASC) VISIBLE,

ADD INDEX `BillingInfo\_UsernamePassword\_key\_idx` (`BelongsToUser` ASC) VISIBLE;

;

ALTER TABLE `Main`.`BILLINGINFO`

ADD CONSTRAINT `BillingInfo\_PostalCodeInfo\_key`

FOREIGN KEY (`Billing\_PostalCode`)

REFERENCES `Main`.`POSTALCODEINFO` (`PostalCode`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

ADD CONSTRAINT `BillingInfo\_UsernamePassword\_key`

FOREIGN KEY (`BelongsToUser`)

REFERENCES `Main`.`USERNAMEPASSWORD` (`UserID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;

ALTER TABLE `Main`.`RECEIPT`

ADD INDEX `Receipt\_BillingInfo\_key\_idx` (`BillingInfo` ASC) VISIBLE,

ADD INDEX `Receipt\_UsernamePassword\_key\_idx` (`BelongsToUser` ASC) VISIBLE;

;

ALTER TABLE `Main`.`RECEIPT`

ADD CONSTRAINT `Receipt\_BillingInfo\_key`

FOREIGN KEY (`BillingInfo`)

REFERENCES `Main`.`BILLINGINFO` (`BillingInfoID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

ADD CONSTRAINT `Receipt\_UsernamePassword\_key`

FOREIGN KEY (`BelongsToUser`)

REFERENCES `Main`.`USERNAMEPASSWORD` (`UserID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;

ALTER TABLE `Main`.`LINEITEM`

ADD INDEX `LineItem\_Receipt\_key\_idx` (`BelongsToReceipt` ASC) VISIBLE,

ADD INDEX `LineItem\_Tickets\_key\_idx` (`TicketItem` ASC) VISIBLE;

;

ALTER TABLE `Main`.`LINEITEM`

ADD CONSTRAINT `LineItem\_Receipt\_key`

FOREIGN KEY (`BelongsToReceipt`)

REFERENCES `Main`.`RECEIPT` (`ReceiptID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

ADD CONSTRAINT `LineItem\_Tickets\_key`

FOREIGN KEY (`TicketItem`)

REFERENCES `Main`.`TICKETS` (`TicketID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;

ALTER TABLE `Main`.`TICKETS`

ADD INDEX `Tickets\_PersonalInfo\_key\_idx` (`BelongsToPerson` ASC) VISIBLE,

ADD INDEX `Tickets\_Events\_key\_idx` (`Event` ASC) VISIBLE;

;

ALTER TABLE `Main`.`TICKETS`

ADD CONSTRAINT `Tickets\_PersonalInfo\_key`

FOREIGN KEY (`BelongsToPerson`)

REFERENCES `Main`.`PERSONALINFO` (`PersonalInfoID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

ADD CONSTRAINT `Tickets\_Events\_key`

FOREIGN KEY (`Event`)

REFERENCES `Main`.`EVENTS` (`EventID`)

ON DELETE NO ACTION

ON UPDATE NO ACTION;