CREATE TABLE PRODUCTS (

Barcode Int PRIMARY KEY NOT NULL,

Name Varchar(50) NOT NULL,

Price Money NOT NULL,

)

CREATE TABLE VERSIONS (

Product Int NOT NULL,

[Version Number] Int NOT NULL,

[Size–Width] Int NOT NULL,

[Size–Height] Int NOT NULL,

Shape Varchar(20) NOT NULL,

Material Varchar(20) NOT NULL,

Lamination Varchar(20) NOT NULL,

PRIMARY KEY (Product, [Version Number]),

CONSTRAINT fk\_VersionProduct FOREIGN KEY (Product)

REFERENCES PRODUCTS (Barcode),

CONSTRAINT ck\_Size\_Width CHECK ([Size–Width] > 0),

CONSTRAINT ck\_Size\_Height CHECK ([Size–Height] > 0)

)

CREATE TABLE MEMBERS (

Email Varchar(50) PRIMARY KEY NOT NULL,

[Name-First] Varchar(30) NOT NULL,

[Name-Last] Varchar(30) NOT NULL,

Password Varchar(30) NOT NULL,

[Phone Number] Int NOT NULL,

CONSTRAINT ck\_Email CHECK (Email LIKE '%@%.%'),

CONSTRAINT ck\_Password CHECK (len(Password) >= 8 AND

(Password like '%[a-z]%' OR Password like '%[A-Z]%') AND

(Password like '%[0-9]%' OR Password like '%[A-Z]%' OR Password like '%[!@#$%a^&\*()-\_+=.,;:"`~]%' )),

)

CREATE TABLE SEARCHES (

[IP Address] Varchar(50) NOT NULL,

[Search DT] DateTime NOT NULL,

Member Varchar(50) NULL,

PRIMARY KEY ([IP Address],[Search DT]),

CONSTRAINT fk\_SearchesMember FOREIGN KEY (Member)

REFERENCES MEMBERS (Email),

CONSTRAINT ck\_IP CHECK ([IP Address] like '%[0-9]%' AND [IP Address] like '%.%')

)

CREATE TABLE CREDITCARDS (

[Credit Number] Varchar(30) NOT NULL,

[Expiration] Date NOT NULL,

[CCType] Varchar(30) NOT NULL,

[CVV] Int NOT NULL,

[Name] Varchar(50) NOT NULL,

Owner Varchar(50) NULL,

PRIMARY KEY ([Credit Number]),

CONSTRAINT fk\_Owner FOREIGN KEY (Owner)

REFERENCES MEMBERS (Email),

CONSTRAINT ck\_CVV CHECK (len(CVV) = 3 OR len(CVV) = 4),

CONSTRAINT ck\_Expiration CHECK (Expiration LIKE '%/%')

)

CREATE TABLE ORDERS (

OrderID Int PRIMARY KEY NOT NULL,

[Order DT] DateTime NOT NULL,

[Delivery Method] Varchar(20)NOT NULL,

[IP Address] Varchar(50) NOT NULL,

[Search DT] DateTime NOT NULL,

[Credit Number] Varchar(30) NOT NULL,

CONSTRAINT fk\_CreditCard FOREIGN KEY ([Credit Number])

REFERENCES [CREDITCARDS] ([Credit Number]),

CONSTRAINT fk\_OrdersSearch FOREIGN KEY ([IP Address],[Search DT])

REFERENCES SEARCHES ([IP Address],[Search DT]),

)

CREATE TABLE ADDRESSES (

Member Varchar(50) NOT NULL,

Number Int NOT NULL,

State Varchar(50) NULL,

City Varchar(30) NOT NULL,

Street Varchar(30) NOT NULL,

[Zip Code] Int NOT NULL,

PRIMARY KEY (Member,Number),

CONSTRAINT fk\_AddressesMember FOREIGN KEY (Member)

REFERENCES MEMBERS (Email),

)

CREATE TABLE INCLUDES (

OrderID Int NOT NULL,

Product Int NOT NULL,

[Version Number] Int NOT NULL,

Quantity Int NOT NULL

PRIMARY KEY (OrderID,Product, [Version Number]),

CONSTRAINT fk\_IncludesOrderID FOREIGN KEY (OrderID)

REFERENCES ORDERS (OrderID),

CONSTRAINT fk\_IncludesProduct FOREIGN KEY (Product,[Version Number] )

REFERENCES VERSIONS (Product,[Version Number]),

CONSTRAINT ck\_Quantity CHECK (Quantity > 0)

)

CREATE TABLE RETRIEVES (

Product Int NOT NULL,

[IP Address] Varchar(50) NOT NULL,

[Search DT] DateTime NOT NULL,

PRIMARY KEY (Product, [IP Address]),

CONSTRAINT fk\_RetrievesSearch FOREIGN KEY ([IP Address],[Search DT])

REFERENCES SEARCHES ([IP Address],[Search DT]),

CONSTRAINT fk\_RetrievesProduct FOREIGN KEY (Product)

REFERENCES PRODUCTS (Barcode)

)

CREATE TABLE CCTYPES (

[CC-Type] Varchar(30) PRIMARY KEY NOT NULL

)

CREATE TABLE CCTYPES (

[CC-Type] Varchar(30) PRIMARY KEY NOT NULL

)

INSERT INTO CCTYPES VALUES ('Visa'),('Master Card'),('DISCOVER'),('American Express')

ALTER TABLE CREDITCARDS ADD CONSTRAINT fk\_ccType FOREIGN KEY (CCType)

REFERENCES CCTYPES ([CC-Type])

)

CREATE TABLE States(

StateName varchar(50) PRIMARY KEY NOT NULL

)

ALTER TABLE Addresses ADD CONSTRAINT fk\_States FOREIGN KEY (State)

REFERENCES States (StateName)

INSERT INTO States VALUES ('Alabama'),( 'Alaska'),( 'Arizona'),('Arkansas'),('California'),('Colorado'),('Connecticut'),('Delaware'),('District of Columbia'),('Florida'),('Georgia'),('Hawaii'),('Idaho'),('Illinois'),

('Indiana'),('Iowa'),('Kansas'),('Kentucky'),('Louisiana'),('Maine'),('Maryland'),('Massachusetts'),('Michigan'),('Minnesota'),('Mississippi'),('Missouri'),('Montana'),('Nebraska'),('Nevada'),('New Hampshire'),('New Jersey'),('New Mexico'),('New York'),('North Carolina'),('North Dakota'),('Ohio'),('Oklahoma'),('Oregon'),('Pennsylvania'),('Rhode Island'),('South Carolina'),('South Dakota'),('Tennessee'),('Texas'),( 'Utah'),

('Vermont'),('Virginia'),('Washington'),('West Virginia'),('Wisconsin'),('Wyoming')

INSERT INTO PRODUCTS

VALUES (1907 ,'Custom Clear Stickers',45)

INSERT INTO PRODUCTS

VALUES (1908,'Die Cut Stickers', 57)

INSERT INTO PRODUCTS

VALUES (10678,' Circle Stickers', 89.4)

INSERT INTO PRODUCTS

VALUES (789543,' Transfer Stickers', 59)

INSERT INTO PRODUCTS

VALUES (657,' Custom Cling Stickers', 72)

INSERT INTO VERSIONS

VALUES (1907 ,12 , 12.5, 17.5,'oval', 'white cling' , 'gloss')

INSERT INTO VERSIONS

VALUES (1908, 123 , 15, 16 , 'rectangle', 'clear cling' , 'matte')

INSERT INTO VERSIONS

VALUES (10678, 496, 14, 20, 'rectangle', 'white cling' , 'matte')

INSERT INTO VERSIONS

VALUES (789543, 9543, 19,14, 'rounded corner', 'clear cling' , 'gloss')

INSERT INTO VERSIONS

VALUES (657, 6, 14, 13,'oval', 'white cling' , 'gloss')

INSERT INTO MEMBERS

VALUES ('shani@gmail.com','shani','bar','lfdijwlfh',0505800409)

INSERT INTO MEMBERS

VALUES ('shachar@gmail.com','shachar','aloosh','ksdjbksdn',0505400409)

INSERT INTO MEMBERS

VALUES ('sagi@gmail.com','sagi','sameach','dslfksdl',0534560125)

INSERT INTO MEMBERS

VALUES ('yossi@walla.com','yossi','aviv','kjsks7sf',0501244343)

INSERT INTO MEMBERS

VALUES ('ronen@gmail.com','ronen','cohen','rjnkwelkr',0541023043)

INSERT INTO SEARCHES

VALUES ('111.156.211.111', '2021-3-12 22:22:00.000','shani@gmail.com')

INSERT INTO SEARCHES

VALUES ('001.201.101.097', '2022-4-14 11:11:00.000','shachar@gmail.com')

INSERT INTO SEARCHES

VALUES ('211.221.176.111', '2021-3-19 11:54:00.000','sagi@gmail.com')

INSERT INTO SEARCHES

VALUES ('222.222.222.222', '2022-2-28 12:34:00.000','yossi@walla.com')

INSERT INTO SEARCHES

VALUES ('201.143.012.013', '2021-1-10 06:04:00.000','ronen@gmail.com')