CS59P Project Proposal
Carmelo Lattuca
POS – Point of Sale

Purpose:
The purpose if this web site is to provide small retailers an on line POS system. The application will provide web pages to manage store inventory, customers, users and capture sale transactions. The web site will also provide a sales table which provides the store owner a list of total sales made with the system.

MySQL Tables:

Inventories Table

id	id unsigned not null auto_increment primary key
product_upc	integer - UPC code of the product
product_desc	tinytext – short description of the product
product_notes	longtext – specific notes about a product
category	tinytext - this specifics the product category, for example:
	Food products — typically require cold storage facilities.
	H**ard goods or durable goods** — automobiles, appliances, electronics, furniture, sporting goods, lumber, etc., and parts for them. Goods that do not quickly wear out and provide utility over time.
	Soft goods or consumables — clothing, other fabrics, footwear, cosmetics, medicines and stationery. Goods that are consumed after one use or have a limited period (typically under three years) in which you may use them.
	Arts — Contemporary art galleries, Bookstores, Handicrafts, Musical instruments, Gift shops, and supplies for them.
qty	integer – the number of product in stock. This field is decremented whenever a sale is completed.
price	float – this is the selling price of the product
cost	float – this is the cost of the product for the retailers
last_update	timestamp – provides date and time when the last time record was updated by user. The format is YYYY-MM-DD HH:MM:SS.
available	boolean – is this product available or unavailable for sale

Users Table

id	int unsigned not null auto_increment primary key
first	tinytext – first name
last	tinytext – last name
email	tinytext – user's email address, also used to login into the system
password	tinetext – user's password, password will be encrypted
last_update	timestamp – provides date and time when the last time record was updated by user. The format is YYYY-MM-DD HH:MM:SS.

Customers Table

id	int unsigned not null auto_increment primary key, will also be used as customer number.
name	tinytext – customer name
phone	tinytext – customer phone number
email	tinytext – customer's email address. This will be s unique key used to lookup customer's information.
state_code	tinytex – customer's state, used to calculate sales tax if any.
last_update	timestamp – provides date and time when the last time record was updated by user. The format is YYYY-MM-DD HH:MM:SS.

Sale Transactions Table

id	id unsigned not null auto_increment primary key
customer_id	id unsigned – this is a foreign key into customer table. If the value is 0, customer was not registered at time of sale.
inventory_id	id unsigned - this is a foreign key into inventory table. This is a mandatory field.
user_id	id unsigned - this is a foreign key into user table to identify who made the sale. This is a mandatory field.
price	float – this is the selling price of the product at time of sale
transaction_date	timestamp – provides date and time when the last time record was updated by user. The format is YYYY-MM-DD HH:MM:SS.

Sales Table

id	id unsigned not null auto_increment primary key.
sale_transaction_id	id unsigned – this is a foreign key into sale transactions table.
payment_type	tinytext – This is how the customer paid the sale. The values are credit card, atm, cash, or check.
total_amount	float – this is the total of the sale transactions includes sales tax.
sale_date	timestamp – provides date and time when the last time record was updated by user. The format is YYYY-MM-DD HH:MM:SS.

Web Pages:

Login Page:
Page to enable the user to login to POS system

Inventory Page:
Page enables user to update the inventory.

POS page:
Page to capture to perform the POS. This page enables the user to enter the product_upc codes of product purchased, enable to enter customer information and record all the products sold in the Sale Transaction table.

Complete Sale Page.
Page to accept customer payment, record transactions and sale into the sale transactions and sales tables.

User Page:
Page to enter a user in the users table

Customer Page:
Page to enter customer in the customers table.

POS Data and Web Page Flow Diagram

POS Data and Web Page Flow

Legend:
- 1 to many relation
- CRUD Flow
- Data Flow
- Screen Flow