

UPRM “La Tiendita”

Icom 5016

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I. Introduction

The UPRM book store on campus tends to suffer from long waiting lines, which discourage people from purchasing. The “UPRM Library Online Inventory Store” is a web service which will increase the productivity and the sales of the book store by allowing online purchasing. With a modern, easy and intuitive user interface the store will be able to provide a greater service for the students in-campus and other foreign users. To help promote the service, the system could offer discounts from time to time to the students; this will undoubtedly motivate students to use the service to buy the available merchandise in the store and thus, increasing sales. This application will be implemented as a web application because it will be more accessible for the general public. The technologies that are going to be used to do this project will be: Java, HTML5, CSS, AngularJS, PostgreSQL and Java Play.

NOTE

Application could provide delivery service (e.g. postal service, UPS) or in store pickup. (**Subject to change**)

II. Client App Description

The user will be able to access the webpage without sign in. While the user is in the webpage he will be able to navigate through different links that will provide information for the products (e.g. Books, clothing, school supplies etc). The user will also have access to a search bar to find a specific item and to put items in a “shopping cart”. In the shopping cart, the user can put any item he desires to buy and keep navigating through the store until he decide to pay the items he currently has in the shopping cart. At the moment of paying, the

user will need to sign in. If the user already has an account, the user must sign in or create a new account if he does not have one. To create an account, the user will have to put his personal information and a method of paying (optional), if the user want to make a purchase then he will be asked to input his method of payment. The webpage also provides the store’s general contact information and a “My Account” section. In the “My Account” section, the user can change his payment method, password and other personal info. To implement this webpage we will use: HTML, CSS and AngularJS.

III. Server App Description

The server app will have a connection with the client app and the Database Management System (DBMS). This server app will receive requests (REST calls) from the client app and depending on the request, the server app will access the database and return the information depending on the REST call. An email will be sent to the user’s email for account confirmation when an account is initially created. For the purchase process, the server app will receive a request for “proceed to checkout” or delete cart. If the request received is to proceed, the server app will make an authentication of the user. After authentication, the server will send a request to the payment provider and finish the payment process. Finally, it will notify the user if the order was processed or not. The technologies to implement this server app will be SQL, PgAdmin, PostgreSQL and Java Play.

Tables to be used:

- **Item:** general item data including name, description and price
- **Book:** Books additional information (author, year, etc.)

- **Clothes:** clothes sizes and gender
- **Electronics:** Usb drives, calculators, etc.
- **User account:** usernames, passwords, emails, etc.
- **History:** Sales history
- **Transaction:** transaction numbers and id's
- **Inventory:** Product availability
- **Shirts:** List of available shirts and additional information
- **Pants:** List of available pants and additional information
- **Hats:** List of available hats and additional information
- **Collectables:** UPRM's memorabilia and collectable items
- **Payment method:** Credit card information
- **Miscellaneous:** Key chains, umbrellas, etc.
- **Discount:** Items with price discounts and their time frame
- **Material:** Book materials (physics, mathematics, Spanish, etc.)

IV. Division of Labor

Task	Roberto	Giovani	Cristian	All Members
Skeleton	▲			
Sign in				▲
Authentication				▲
Account management				▲
Payment and Shipping			▲	
Search Features		▲		
Displayed Information		▲		
Inventory Management			▲	