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ABSTRACT

The paper reviews a unique procedure of participating in the e-commerce world by preserving the core objective of recycling, i.e. to use and reuse a single product several times with its worth intact. With the technology emerging every day, people buy and sell products on a large scale which results in increasing household and electronic waste. This is the outcome of lack of alternatives available to people when they neither want to sell their product, nor want to discard it away.

Rental Webshop is an online platform which is an extended structure of a rental shop. It is a single platform which extends out to provide the option of two-way renting of several categories of products- books, electronics, fashion and musical instruments, that is, 'lending' and 'borrowing', both. The lenders have to set the price of the product, the rental duration, detailed description of the product and whether the price is negotiable. The product will then be verified by the administrators, and uploaded in the Store. The Store is a form of electronic commerce which allows consumers to directly buy goods from the internet.

This project is designed to reach out to the users based on the regions they are located. In other words, product available in a particular city will be delivered to a borrower of the same city. A user can upload his/her product in the 'lend' section, the details of the user as well as the product will be stored in the database and displayed in the 'borrow' section. Users borrowing products then have to select a payment option and checkout.

In previously applied similar concepts, there are online platforms that support either lending or borrowing of one or several categories of products. Major section of the current ecommerce market consist of platforms where one can only borrow products for a limited time, creating a lack of opportunities for people who wish to lend their day-to-day usable products for a price set by themselves. Also, there are online companies that support the alternative of lending, but only for the businesses.

Thus, it is hoped that development in this spectrum of e-commerce will bring a new leap in the market of electronic commerce, and recycling of products will not only help in conservation of the planet, but also provide financial security to some extent to the users.

INTRODUCTION

OVERVIEW

The paper reviews a unique procedure of participating in the e-commerce world by preserving the core objective of recycling, i.e. to use and reuse a single product several times with its worth intact. With the technology emerging every day, people buy and sell products on a large scale which results in increasing household and electronic waste. This is the outcome of lack of alternatives available to people when they neither want to sell their product, nor want to discard it away.

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PROBLEM STATEMENT

The section describes the survey and issues of existing e-commerce system. This project provides the software for online renting of several categories of products which are Electronics, Books, Fashion and Musical instruments to a wide range of public in the Indian subcontinent. With the emerging technology in a continuous fashion with respect to time, the availability of products in a web based platform has increased with a great rate as well. This stands as an advantage as well as disadvantage to the planet and society. The problem area of the society has been studied and categorized into sections:-

Waste generation due to non reusability of products

Since the golden era of technology arrived, the household and electronic wastes from daily households have not only increased, but now possess as threat to the planet since most of them are non-renewable. In addition to that, some products have certain emotional values attached to them that makes it difficult for the owner to throw the product away.

Unavailability of alternative to selling a product

Reusability of a product is a characteristic most of the products lack due to the current e-commerce market structure. Often, it is observed that people who purchase products fail to maintain its usability after a certain period of time and face the difficulty of neither being able to sell the product, nor discard it.

Unavailability of alternative to purchasing a product whose requirement is very short

Reusability and recycling is again an issue when it comes to e-commerce marketers since people have always been in situations where they have no alternative to purchasing a product that will either be used for a very short time or will not be used at all.

1.3 OBJECTIVES

Web applications (or web apps) are programs on the internet that can be accessed in web browsers (Firefox, Chrome, Safari, IE, etc). These programs can provide any kind of functionality that one needs to help his/her business or organization run more smoothly.

OBJECTIVES OF RENTAL WEBSHOP

1. To create a site that would automatically update for people as they used it – the number of parts in the system changes as the number of parts grows or shrinks.
2. To keep a static web site up-to-date with inventory, counts, orders, etc.
3. To create a database for smooth functionality. A database is a place to keep your data, and is (usually) centrally accessed. This central access to data gives everyone the same view of the system (that there are no more replacement blades available, for example). Based on the data that is retrieved from the database, the web app chooses a course of action. By merging the dynamic abilities of the web app with the data storage/searching abilities of the database, we can create this very efficient and time-saving app.
4. To develop a friendly, efficient and responsive user interface using technologies as HTML, CSS, PHP, JavaScript, Ajax. Etc. and Dreamweaver as the software tool.
5. To create interactive forms for registration, login and product upload process.

6. To create an interactive and responsive shopping cart using ajax, PHP, HTML and CSS that displays products along with their titles, prices and quantity. As well as, functional efficiency of the cart that can remove and add products with the updating of total price and cart quantity.

LITERATURE SURVEY

Introduction

In the rising market of e-commerce and the increase in online shopping websites, our project is an online platform not for buyers and sellers, but for the lenders and the borrowers to meet their demands. Rent is the option which is seldom available online for the user who wants to own a commodity temporarily. Similarly, lending an item for a certain price is the best option for a user who neither wants to sell his/her commodity, nor discard it. In previously applied similar concepts, there are online platforms that support either lending or borrowing of one or several categories of products. Major section of the current ecommerce market consist of platforms where one can only borrow products for a limited time, creating a lack of opportunities for people who wish to lend their day-to-day usable products for a price set by themselves. Also, there are online companies that support the alternative of lending, but only for the businesses. Thus, it is hoped that development in this spectrum of e-commerce will bring a new leap in the market of electronic commerce, and recycling of products will not only help in conservation of the planet, but also provide financial security to some extent to the users.

Existing System

Any internet user can use this existing website to search for any kind of products,select particular product from a wide range of products.Once they make of their mind to rent any particular thing they can place an order and make a payment through various available payment option. There are online websites for selling and purchasing products of any category on a single platform. Example- OLX, Quickr,online website for renting furniture. Example- RentMojo, online websites for renting clothing and accessories. Example- Flyrobe, Style Lend.

Issues in Existing system

- Increasing platforms for buying and selling products, very few options available for lending and borrowing on the same platform.
- Lack of different categories of products in a single application.
- It is difficult to identify the required product.
- Description of the product limited.
- Not in reach of distant users.

Summary of Literature survey

i-SHOP: A Model for Smart Shopping

Online shopping is an easy and comfortable way of shopping from a large range of products. There are innumerable advantages of online shopping. Customers can save a lot of time which they normally need to physically go to the retail shop and buy the products that customers want. We have set up a fully functional e-commerce website that has the capacity to be extended to a smarter model by incorporating data mining to understand customer buying habits and traits to predict future trends. We have utilized a free CMS system and developed the website using MYSQL database and PHP programming language. Firstly it is a free CMS system so others can use without paying. This smart shopping model is divided into 9 modules. The Registration Module which allows users and customers to register on the i-shop website in order to use it. The Products Browse and Products Search Module allow the customers easy access to search the website for their preferred products. The Shopping cart Module which has multiple currency capability to allow customers to use the website in their preferred currency. Also implemented is the Shipping & Billing Module which allows the vendor to control the amount of shipping charges. The Payment Module allows the customer many methods to make payments. The Admin User Management, Admin Catalog Management and Admin Order Management Module allow the admin of

i-shop model to manage, control and monitor the overall website in a seamless manner. Finally this study attempts to examine how a smarter shopping model will influence consumers' online shopping attitude.

Proposed work:-

The paper focuses on the implementation of the database in a way that the database that is to be implemented is high in terms of its efficiency and reliability. Thus, the factors presented by the paper were taken as a reference while constructing the database for the proposed system.

Authentication technique for e-commerce applications review

E-commerce applications are nowadays facilitating users to access resources spread at different places. It has increased the reach of people and has shortened the horizon. There can be many threats and attacks scenarios possible in the completion of an e-commerce application. So security must be intact at every step in this process. User authentication is a very challenging aspect of e-commerce application. Which is secured and being backed up by remote user authentication technique. There are many schemes presently available for remote user authentication like smart card based, password based, dynamic id based and cookie based authentication. This paper analyses the various authentication techniques of remote user authentication used in e-commerce applications these days.

Proposed work:-

Algorithm:-

Step 1: Initialization Username and Password.

Step 2: Check the Username and Password. If Invalid Username and Password then Go To Step 1 otherwise Go To Step 3.

Step 3: Check Enter Operator is Admin or User. If Admin Go To Step 4 otherwise Go To Step 8.

Step 4: If create a new user Go To step 5 otherwise Go To Step 6.

Step 5: Fill up the information in registration form and create a Username and Password and fill up other information of this new User. Go To Step 9.

Step 6: Written detail of following in the User table. Username, password, Firstname, Last name, Gender, Address, City, State, Zip-code, Contact no, Email id and ISAdmin

Step 7: If Request Issue then Update user ISAdmin or not information and entry in the User table. Go To Step 9.

Step 8: Go To Step 6.

Step 9: End

Joint decisions on pricing and capacity allocation for cyberspace rental services

For cyberspace rental service providers with multiple services, study about how to control capacity allocation on fixed aggregate capacity and how to price services is a significant problem. This paper firstly reviews some research about pricing and capacity control, and then builds models relevant to consumers' reservation price and preferences, based on the assumption that customer arrival process is a Poisson process. Next expected revenue under different situations and solutions to it is presented. Finally, numerical examples are given to calculate the optimal price and allocation as well as its expected revenue, so that relations between the optimal value, expected revenue and reservation price and preferences are verified. From the analysis the following conclusions are drawn: 1) The greater the customer subjective value variability of some service is, the higher its price and capacity allocation are; and the price of its substitute service will rise, but the capacity allocation of its substitute service will drop. 2) When the performance of some service is strengthened, its price will rise as well as its capacity allocation and expected revenue; and the price of its substitute service will rise, but the capacity allocation of its substitute service will drop. So service providers should strive to upgrade service performances.

Proposed work:-

The paper consists of the information and the technique in which the prices are ranged between the various items. Every item has a fluctuating value of cost with a formal consideration on its revenue gained and its performance in the market. An item will lower down its cost if there is not enough popularity and sales on the market thus, shows a decline on the performance. Thus, with a

proper study on the various ways of costing a product, this paper has been taken as a reference while working with the proposed system.

SPECIFICATION

INTRODUCTION

PURPOSE

The purpose of this project is to develop an alternative to the common e-commerce procedures like buying and selling, and to highlight the main objective that is, recycling. The project highlights the solutions to the problem of exponential increase of electronic and household waste with respect to time and emerging technologies. Mainly, to develop a single platform where users can upload their day-to-day usable products that they seldom use themselves and where users can also borrow the uploaded products from the same region, is one of the prime aspect of the application. The problem area of the current technology savvy society has been studied and divided into two parts, one, people have to purchase certain products in certain situations, when they are aware that the product will have very low to no use in the future. This is a situation which leads to unfruitful expenditure. Two, people often buy products that they hardly use after purchasing it, that they can neither sell nor discard. This leads to a decrease in the product's value. Additionally, to implement the solutions in such a way that the products uploaded in the website stays in the same region where they are uploaded, in order to protect and maintain the integrity and security of the product, is also one of the main objective of the project.

PROJECT SCOPE

For the purpose of this project, the scope of Rental Webshop is limited to the following functionality:-

Users should be able to set a quotation for the product they are lending. To facilitate this, they should enter the price they wish to set, in the 'Product Upload' form along with the actual MRP of the product giving the borrowers a scope for comparison. Also, they should be able to choose if the price they set is negotiable by checking or unchecking the corresponding label in the 'Product Upload' form. In addition to this, the 'Product Upload' form has some required fields, which are Product Name, Product Description, Product Price, MRP, location. Also, it is required to upload three images of the product that is being uploaded in the website in order to protect the authenticity of the product. On the other hand, users browsing the Store to borrow a product, should be able to view the products category-wise. They should be provided with an image, price and the MRP of each product in the product categories. Additionally, a detailed description of the product should appear if the product is selected, along with all its images. Most importantly, every user of the application should be able to register in the application in order to proceed with renting. The registration form contains the required fields, which are First Name, Last Name, Address, Gender, Phone Number and Aadhar Number, username and Password. User authentication is based on Password.

OVERALL DESCRIPTION

PROJECT FEATURES

The characteristics of the project in accordance with its purpose and objectives are as follows:-

1. Users can borrow the products they need from people in their neighborhood.
The website is based region-wise. A lender has to enter the location of the product in the 'Product Upload' form which gets stored in the database. Through back-end support, it gets displayed in the Store. A borrower can rent the product based on his/her own location by viewing the Product Description.
2. Easy registration.
Every user of the application has to register in the Registration Form which has text fields with placeholders stating the required fields of First Name, Last Name, Address, Gender, Phone Number, Aadhar Number, username and Password. The user can set his/her own password given the minimum length is 6 characters.

3. Connect with lenders/borrowers in your area.
This application lets the users connect with other users through the rental process of lending and borrowing on the internet based platform.
4. Several categories.
The Rental Web shop features a range of categories as options in the Product Upload Form to the users who wish to upload their products in the website. Similarly, the Store features all the products uploaded based on Categories for easy selection and smooth browsing experience.
5. Negotiable price.
Users who upload their products on the website through Product Upload Form have to fill a required field which is a checkbox with a label of 'Price Negotiable'. Through back-end support, the responses of the users of this field in the Product Upload Form are displayed on the Store in the Product Description section of every product.
6. Interactive store design.
Category-wise selection of products. Every product in each category is displayed on the store with its image, title, Price and MRP. If a product is selected, all its images along with its detailed description and location appears in the description page of the product. The menu section displays the total cart items and total price.
7. Password based user authentication.
Secured and backed-up by user authentication technique using JavaScript.
8. Home page integrating all the modules.
Interactive Home page containing all the modules in the menu section and a slider containing featuring images of the products that have been uploaded in the application recently.
9. Feedback form- directly connect with the developers.
This feature lets the users bring up issues and suggestions directly to the developers.
10. Interactive shopping cart
An easy-to-use shopping cart containing the items that are selected for the procedure of borrowing. It is interactive, giving the users the option to add and remove products, simultaneously displaying the calculated total of the prices of the products.

USER CHARACTERISTICS

The Rental Webshop user is simply anyone that has access to the Internet and a web browser and is a citizen of India. It is assumed that the user is familiar enough with a computer to operate the browser, keyboard and mouse and is capable of browsing to, from and within simple websites.

There are three kinds of user for the proposed system.

- Administrators: Administrators are the ones who adds or administers the categories for the products and administers the lenders and borrowers.
- Lenders: Lenders will add their products to the database, which will be seen in the website to the end users, or say borrowers who can rent the products by selecting the ones, they need. Lenders will have special privileges than the end users and have ability to manage the products added by them.
- End Users/ Borrowers: The end user will be the one who visits the website and rents product online, from the ones added by the lenders.

EXTERNAL INTERFACE REQUIREMENTS

USER INTERFACE

Each part of the user interface intends to be as user-friendly as possible. The fonts and buttons used will be intended to be very fast and easy to load on webpages. The pages will be kept light in space, so that it won't take a long time for the page to upload.

HARDWARE INTERFACE

- PROCESSOR : Pentium or Higher
- RAM : 312MB or Higher

SOFTWARE INTERFACE

- OPERATING SYSTEM: Unix, Linux, Mac, Windows, etc..
- DEVELOPMENT TOOL : PHP, HTML, CSS, JavaScript, Ajax, Dreamweaver
- DATABASE : MySQL

COMMUNICATION INTERFACE

The Rental Webshop shall send an email confirmation to the customer that the items they ordered will be delivered to the shipping address along with user identification.

FUNCTIONAL REQUIREMENTS

USER MODULE

This module consists of information about the lenders and borrowers such as their names, addresses, phone numbers, Aadhar numbers, Gender, unique User ID, username and Password.

PRODUCT MODULE

Product Module includes the information of each product in the form of Product title, description, product location, product price and MRP.

CART MODULE

Cart Module consists of cart information of every user of the application. This module mainly consists the information of IP Address of the user and the Product IDs of the products that have been selected by the user for borrowing and also the Product prices of the products.

ADMIN MODULE

This module contains the information of all the end users of the project and the products being uploaded in the application. This module manages and administers the working of the application.

TRANSACTIONS

All transactions undergoing in the website will be controlled and managed by this module. Transactions in the sense, the checkout process.

REPORTING

This module deals with the report management of the entire system. This includes three sub-modules Stock Report, Order Report and Delivery Report.

SYSTEM DESIGN

Introduction

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System Architecture

