Shop While On Move

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ABSTRACT

A large home store came up with a unique idea of increasing its sales without adding additional stores. It was proposed to put up pictures of store shelves displaying fast moving retail items and groceries. Each item also had a corresponding QR Code embedded in its image. These pictures, in form of posters, will be placed at metro stations, bus stops, and other similar transit places. The commuters will be able to select the items they wish to buy by capturing the embedded QR Code and subsequently add to the shopping cart. Once an order is placed electronically, the items will be home delivered at a predetermined time by the home store. SWIM application will allow selection of items using QR Code (captured using phone camera), management of shopping cart, and the placement of the order. The solution has to be developed using IBM Work-light Studio and will be deployed on IBM WAS, DB2,and Work-light Server. The target device will be an Android Phone. The development will follow the IBMs Rational Unified Process.

Keyword: *- QR code , Android , Online shopping ..*

Introduction

The focus of this paper is on one specific type of commercial use of interactive media: shopping in online environments. A consumer can engage in online shopping in any location, but our conceptualization is based on the assumptions that the products of interest are not physically present at the time and no face-to-face assistance is available to the shopper. As mobile devices are rapidly changing consumer preferences and transforming the way consumer shopping experience, consumers are expected to use their mobile devices to make purchases and to buy anything which they possibly need and want immediately from anywhere and accessed at anytime .Online shopping brings many advantages to the customers. Customers can shop from any place and need not physically visit the shops/outlets for shopping purposes. Therefore, even if customer is staying in remote area, he/she can easily shop through internet. The customer can shop any day of the year on any time of the day. This also helps in customers' time and energy saving.

Literature Survey

The history of ecommerce shopping carts began immediately after the World Wide Web, or WWW, became a major medium to communicate information around the world. Ecommerce shopping-cart applications allow consumers to buy goods or services directly over the internet using a web browser. This online shopping evokes the business-to-consumer (B2C) process where a consumer buys directly from the business. The process where a business buys from another business is called a business-to-business (B2B) process. The best examples of shopping-cart applications using B2B process are eBay and Amazon, both of which were launched in 1995. At present, most users of these online shopping-cart applications are people who have higher levels of education, have exposure to technological advancements, and are in a better income group. Such users develop a positive attitude towards these convenient shopping techniques.[1] According to a study in December 2011, Equation Research surveyed 1,500 online shoppers and found that 87% of tablet owners made online transactions during the early Christmas shopping season. [2] Building a new successful shopping cart is simple because of high competition in the market, and the designer of a shopping-cart application must consider the information load, complexity, and novelty.[3] Complexity refers to the number of features available on the shopping cart and the levels of marketing, whereas novelty involves the unexpected or unfamiliar aspects of the site. A designer must also consider the consumers' needs and expectations. A user-friendly design is very critical to the success of any shopping-cart application because, unlike physical stores, consumers at online stores come from all ages, genders, and cultures.[4] Logistics clearly says that, to have a successful and profitable online shopping application, businesses have to spend a significant amount of time and money for designing, developing, testing, and maintaining the application.

Problem Defination

Online shopping is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. But sometimes it is very time consuming for a user to go to the shopping portal search for the product to be purchased and then order. So, SWIM will help the user to get there order placed simply by scanning the QR code and getting the home delivery of the order.

Proposed System

To overcome the disadvantages of other shopping applications , we are developing an Application SWIM which will help the user to get there order placed simply by scanning the QR code and getting the home delivery of the order. In today's world, people are busy in their work and because of which they don't get time for household chores for example-grocery shopping. To make grocery shopping easy we have developed an application called SWIM. By using this application the user is able to shop grocery anytime, anywhere without going to the grocery shop. In this application the concept of QR code is used, which is printed on posters and that would be displayed on public places. As people travelling in bus, trains can see the posters which contains the grocery items each containing a QR code for it.Just by scanning the QR code, the order of that particular item will be placed. And by providing the address the home delivery of the item will be done
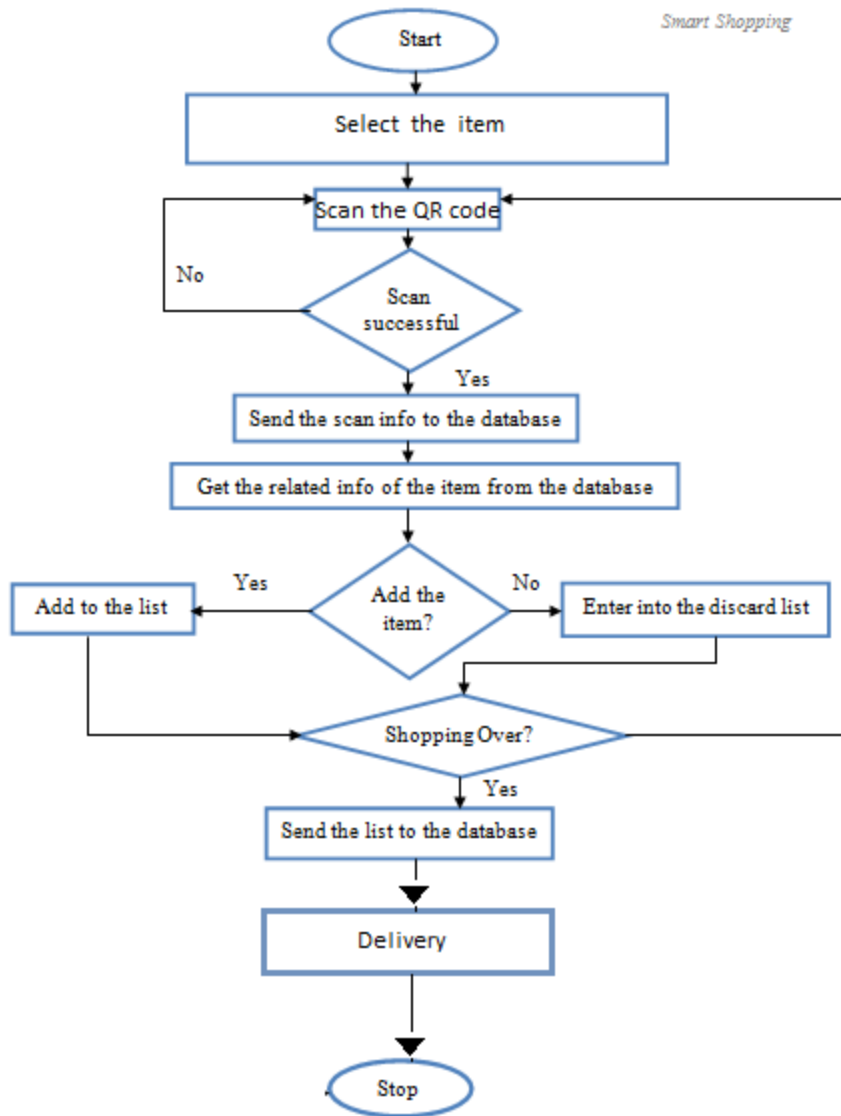
Flow Graph

Fig : Flow Graph

The above flow graph shows the overview of the application.

System Architecture

Fig : System Architecture

The above diagram shows the working of SWIM application .As shown in the diagram , the user scans the QR code from the posters .The posters displays the grocery items with a QR code for every item. These posters are displayed on public places like bus stand , railway stations. When they scan a QR code of a particular item, the order is placed for that item. The Scan QR Code will be compared with the one stored into the database. Then the order for the particular item will be placed and then the user have to add the address. After adding the address and confirmation of order , home delivery of the product is done.

Database

SWIM will be a HTML5 application. It's high-level architecture is explained in the system architecture given above. SWIM mobile application will be loaded from worklight server. It communicates with the server to transfer the order cart form along with the item code, description, and obtain details of product along with rate and discount if any.A SQL adapter posts the order into cart   as per the QR code associated with the product , maintains queries database for all the orders and status of processing since the last time of order submission for user ,etc. A SQL adapter posts the order into cart as per the QR code associated with the product , maintains queries database for all the orders and status of processing since the last time of order submission for user,etc. The database in DB2 holds the "user_details", "product_details", "order_details","Querry_details" the actions requested by adapters -

a) inserting new order cart record.

b) viewing processing status of orders , etc
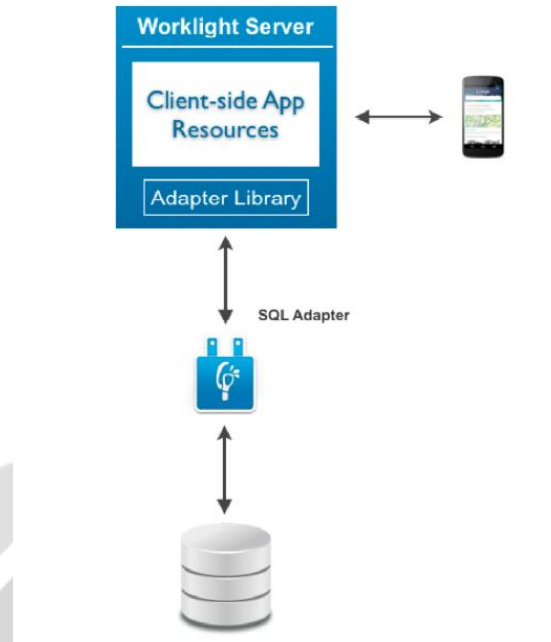
Fig : Flow Graph

Conclusion

The main objective of the application is to help consumers to improve their shopping experience just by being able to order the desired product just by scanning QR code of the product. The purpose of this project was to develop an android application for purchasing items from a shop without browsing through the items/product lists. Instead just by scanning the QR code embedded into the posters which will be placed at all the public places in metropolitan cities such as parks, railway stations ,etc Thus, user will be able to place the order on the way to the work or while doing any regular day-to-day activities. Without browsing through the list of items and then placing the order.

REFERENCES

[1] Bigne, Enrique. (2005). The Impact of internet user shopping patterns and demographics on consumer mobile buying behavior. Journal of Electronic Commerce Research, 6(3).

[2] "More Consumers Using Tablets to Holiday Shop [STUDY]." Retrieved on *Mashable*. December 8, 2011. " http://mashable.com/2011/12/08/tablets-to-holiday-shop/"

[3] Falk, Louis K., Sockel, Hy, and Chen, Kuanchin. (2005). E-Commerce and consumer's expectations: what makes a website work. Journal of Website Promotion, 1:65–75.

[4] Elliot, Steve, and Fowell, Sue. (2000). Expectations versus reality: a snapshot of consumer experiences with Internet retailing", International Journal of Information Management 20: 323–336.

[5] Smart Shopping- An Android Based Shopping Application.