

THE I-SHOPPER APPLICATION FOR MOBILE

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ABSTRACT

Due to cheap and advancement in technology many people started adopting the method of m-commerce. Still doing shopping from a large number of options present offline and online often shows a challenge for customer. In order to make this task easy, this paper deals with the isshopper for an intelligent way of shopping which will help the user for good product selection. The objective of the idea of the paper is to aid the user in selecting the best product of better payment option. This adopts the architecture of multi agent context aware for making negotiations in between customer and the seller. It is done through inferring the knowledge from semantic relationship which is defined on ontology and also on JESS rules.

Keywords: Ishopper, Paa, Ontology, Context Aware, Multi Agent

I. INTRODUCTION

The role of smart phones in our life has increased. Due to unstoppable growth of technology in communication, this has changed the way of execution of task for example: earlier, if we want to buy camera, we have to personally visit the various sellers and after that compare the prices offered by them and also the features of the camera. But now buyers can easily access by simply log in to any of the shopping portal available and also the portals recommend the buyer according to the requirements. All these portals also give the best payment option by negotiating with the sellers.

The agent technology and the contextual information provide aid in achievement of pro-activity. Any information which gives the status about the entities is context. In order to make context information good and effective, it should consist of:

1. Should be good in price selection.
2. Good in payment selection.
3. Good in preference of sellers.

II. RELATED WORK

The laboratories of AT&T Bell has made a guide for shopping assistant for the store, which will help in providing the item details, and location of items and also to point on sale items and also make the comparisons in prices of items. It maintains a profile of customers and divide it in two groups: regular customer and store customer. A restaurant has been established by Lukari and korhonen having the facility of payment through

mobile. Users can be connected to the service via mobile devices and it will give them the information about the delivery of food and the payment will relies on time and the location. All the earlier research has suggested making a system related to mobile shopping and also mobile payment with the context aware of PAA which helps the user to deal with the products easily.

III. SYSTEM ARCHITECTURE

This system is divided into 3 sud -system i.e. Application Layer, Core Layer and Data Layer

3.1 Application Layer

It consists of:

3.1.1 Authentication /Registration

In this section the first time user register its name in it and a password is given to the registered person and will be sent on his/her email id . Then user can log in using his email id and password given. If user forgets his password, a new password is send to his email id and user can also change the password. All these password allotted are saved in the form of encryption as backend.

3.1.2 PAA

It plays a important role in decreasing the complexity and give the serives having minimum stages of inputs. It gathers the information and requirements from the user and pass it to the next level (core layer) which is at main server using gprs/wifi.

3.1.3 Andriod Apps

It is implemented using android UI with JAVA, JDK 1.7, Jade Leap.

3.2 Core Layer

It is the most important part in making the ishopper . It has many subsystem which seamlessly with other layers and with other subsystem. Every subsystem has their own set of instruction which is done using JAVA for programming, JDK 1.7 and Jade. Jena/Spqrql is used for accesing domain ontology and for inference engine, Jess is used. JDBC is used to update and access MySQL database.

3.2.1 Processing Manager

The role of processing manager is to receives the request generated by the user and also the contextual data which is obtained through PAA. It is responsible for selecting the best product from repository and also to interact with negotiating manager for getting best seller. All these things are done using web ontology accessed through SPARQL.

3.2.2 Negotiating Manager

Theroleof negotiating manager is to give best sellers according to the requirements of the user and the contextual information given by the user. All these information is then collected in Application Database and then it will communicate to processing manager.

3.2.3 Payment Manager

The role of payment manager is to communicate with the merchant bank in order to complete payment when the user is satisfied with the product and price and make the payment through any medium like credit card, debit card, etc. Then informs about the success or failure of the transaction to the processing agent.

3.3 Data Layer

Data layer helps in storing the information related to profile of user and the information of the products and the services of ishoppe. Core layer is responsible for accessing and updating the Data Layer.

IV. TESTING AND EVALUATION OF SYSTEM

4.1 Data Evaluation And Set Testing

Different database are to be tested and to be evaluated in MySQL Database for iShopper Application. These data are stored in the form of tables in MySQL.

- ❖ Various details of the customer are stored in the data-set like name, address, phone number, login, etc.
- ❖ Various details of the sellers like name, address, phone number, etc.
- ❖ Various details of the goods like price, features, etc.
- ❖ Details of the order that is saved in XML.
- ❖ Details of the payment of the customer like debit card, credit card.

4.2 Domain Evaluation And Ontology

iShopperApplication has been tested and also evaluated for camera ontology for more than 450 cases were executed. The domain ontology for camera was created through protégé 4.3 and has been accessed through Sparql by core layer.

V. CONCLUSION AND FUTURE WORK

Generally, customer were always be confused in selecting the product from both the options i.e. online and offline and even they don't have that much time too. Even if the customer has selected the product, he was not sure about the quality, price, features, seller, etc. In order to solve these issues, Application of iShopper is designed to provide users best product with best prices. This system not only helps in selecting the best product according to user's requirement in best prices but also helps when user do not want to buy the product and just want to know the information regarding the product as recommendation. This application at present supports only androids phones but we will extend it to all kinds of phones. Also we will enhance the graphical representation more attractive and friendly and easy for user. Also we would like to increase accuracy rate of system by taking more inputs by the user.

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