Classified Posting Application Using Peer To Peer Network

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Abstract: The proposed system permits best peers matching across an ad-hoc network on a requisite basis, in an appropriate and control traditional manner. Location coordinates are not sent with each request. The client is built on top of the Haggle middleware, leveraging its desired discovery and need-based forwarding. The client is entirely implemented as an Android application on top of the Haggle middleware. This arrangement consists also of a cloud-based server, used only when announcement is accessible before and afterward the matching of requirement. The server is used for profiling users and producing personalized advertisements for the users. When communication is reestablished, it can be leveraged for gathering information for other users’ advertisements. The server is implemented as a web service. Matching is further leveraged for a smart forwarding, allowing the request to reach the best matching user in the vicinity.

1. Introduction

These days shopping and doing transaction over internet based applications and websites is done for the sake of convenience and reducing human efforts. The sites like amazon, flipcart, shopclues, olx, quicker etc. are shopping sites where user can buy various things. Out of that sites like amazon, flipcart provide users services to view the products and do transactions online whereas sites like olx let users view products and give contact details of the seller so that buyer can do further transactions with the seller. But in this case the security of a seller is not taken into consideration, the details of users is open to everybody which gives anybody to misuse the details either purposefully or mischievously. And even to make the application global the internet connection is made a must to have thing which again could be a major disadvantage for the people not having internet service available on their devices all the time. It even reduces chances of successful transactions as the seller and buyer could be in nearer vicinity.

Hence in concern to the users’ personal information security and to make the application more local to increase chances of successful transactions and to remove internet dependency we have proposed a system to overcome existing system’s limitations. An ad-hoc application that can be operated at a keystroke, and communicate with neighboring smartphones over Wi-Fi or cellular network can be used to post advertisements free of cost. Such communication does not only enable users to convey needs, but can also facilitate the organization of spontaneous, self-organized transactions. At later times, the system can be useful for communicating with users in need if their requirements can be satisfied by other trailer.

1.1 Statement of the problem

In most of the classified applications identity or privacy of the user is revealed before performing the transaction despite the fact that the viewer may not be interested in that transaction. These applications can be used by fake users. And in such applications users need to remove their advertisements manually. And if there is no network, users cannot use the application.

2. Aim and Objectives of the Study

The aim of this work is to develop an android application which will help users to post classified locally without internet connection and identity of user would not be disclosed with other users without their mutual agreement. It will use GPS coordinates of user to find his location and establish connection between all users in same locality to exchange classifieds.

The objectives of the study include:
1. To develop an application that will allow users to buy and sell products.
2. To implement a neutral mechanism which will provide desired services.
3. To provide environment for micro businesses.
4. To provide better understanding between advertisement posters and its viewers.
5. To provide a user friendly environment so that the advertisement posters can post their advertisements easily and free of cost.
6. To provide excellent and easy to access means of communication medium between advertisement posters and its viewers

3. Design & Implementation

- There are four Users: 1, 2, 3, 4 which are transferring information from one Mobile to other.
- Database Server: It is used for authorization of users and prevents the fake users to use this application.
- Blue Arrow: It indicates the transaction between different mobile phones.
- Black Arrow: It indicates the data exchange between user’s mobile phone and the server.

3.1 The system architecture is mainly consist of 3 modules:

1. Registration and authentication
2. Information exchange
3. Connection- observer pattern
4. Transaction

3.1.1 Registration and Authentication: The users who want to use the application will first register themselves. If the user is an authorized user, then only that user will be registered.

3.2.2 Information Exchange: Information is shared between the users using Master-Slave algorithm and Mesi Protocol.

3.2.3 Connection-observer pattern: Server/Observer continuously observes every users activity. It observes whether the requirements are fulfilled and it also checks if the advertisement has expired or not.

3.2.4 Transaction: After the mutual agreement of the users i.e. when both the users will like each other’s advertisement, then only they will be able to see each other’s details.

3.2 Results:

In this section different final result assessments of the system are shown.

3.2.1 Home Page: With this page users can login in the application using server’s IP address and port number. For the coordinates, users can either use GPS or GPRS.

3.2.3 Registration Page: The registration page consists of users personal details like name and phone number.

3.2.3 Home Page: Here all the classifieds will be shown.
4. System Implementations

The simplicity of the programming language used in the progress of any system makes the whole development progression less tasking, which is a very important feature of software development.

4.1 Choice of Programming Language

The choice of a programming language to use when developing a software program is vigorous in the development process of any software program. The kind of programming language you use is reliant on the platform the software is envisioned for, and the kind of users matter a lot too. The proposed system is intended to be accessible to course advisers in the university. The following are the programming language we have chosen for the development of the proposed system:

4.2.1 Java Programming Language: Java is a general-purpose computer program design language that is synchronized, class-based, object-oriented, and precisely designed to have as few operation addictions as imaginable. It is intended to let application designers “write once, run anyplace” (WORA), sense that compiled Java code can run on all platforms that sustenance Java without the need for recompilation. Java applications are classically compiled to byte code that can run on any Java virtual machine (JVM) irrespective of computer architecture. As of 2016, Java is one of the most popular programming languages in use, mainly for client-server web applications, with a stated 9 million developers.

4.2.2 SQL (Structured Query Language): It is a special-purpose programming language intended for managing data held in a relational database management system (RDBMS), or for stream processing in a relational data stream management system (RDSMS). SQL contains of a data meaning language, data operation language, and a data controller language. The scope of SQL includes data insert, query, update and delete, schema creation and change, and data access control. Although SQL is often described as, and to a great range is, a declarative language (4GL), it also includes technical elements.

5. Acknowledgment

We here by wish to take this prospect to express our appreciation to our teachers and networks and all who have helped toward the accomplishment of our project. We also like to give thanks to our
Guide Mrs. Mugdha Kirkire for serving us and guiding us throughout our endeavor. We are very grateful to our teaching staff for guiding us all over the extent of the degree. They were very helpful to us, as and when we required their help. We are also actual grateful to non-teaching staff to support us in the research laboratory in numerous ways.

6. Conclusion and Future Scope

6.1 Conclusion

Classified advertisements websites are a one stop shop for all from jobs to apartments to furniture. However, users don’t buy anything directly on classified sites, they use the sites to set up meetings, and dealings are conducted in person or by mail a characteristic which splits online classifieds from public sale or shopping websites like eBay and Amazon. Functionalities of these advertisement sites have been reduced to local groups to remove dependence of internet and make it more usable for local crowd.

6.2 Future scope

- Globalization of numerous local service providers.
- Bluetooth based communication.
- Dynamic application for both local and global use.

7. References