

**LOCATION BASED MOBILE SOCIAL NETWORKING**

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**ABSTRACT**

*The widespread use of cellular telephones and the availability of user-location information are facilitating personalized location-based applications. This paper just analyzes and compares the existing MSNS applications, and proposes the concept of MSNS mobile social networking (MSN) systems have emerged rapidly, being a revolution for our everyday life. Based on the analysis of general requirements of MSN and location-based services (LBS), this paper presents the design of a mobile social networking system, as well as a Scheduler, Instant messaging implementation. Scheduler is an important service to business people to remind our daily schedule. In this paper, we present a distributed multi-agent meeting scheduling system for mobile devices. This mobile system supports people on the move to locate feasible timeslots to meet with each other, using their mobile devices. An interactive, multi-media, location-based application approach has been proposed to address the needs that frequently arise in the field work of providing supportive social services. Combining location aware search technology and personnel profile matching, the proposed modular and general architecture enables social workers, their colleagues, and other participating professionals to keep each other connected, informed, and organized as a mobile community and a supportive network for those in need.*

**Keywords:** *Mobile Social Network Service, Scheduler & Instant Messaging Service, Geographic Information System, Global Positioning System.*

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## 1. INTRODUCTION

In this paper, we study a general architecture for building mobile social network services (MSNSs). Social networks are personal or professional sets of relationships between individuals. MSNSs are technology-enabled services that adopt wireless and mobile communications to increase the closeness of one's social networks. People often seek information by asking other people in their social network even when they have access to vast reservoirs of information such as the Internet and libraries. This is because people are great sources of unique information, especially that which is location-specific, community-specific and time-specific. However, after the investigations of existing mobile society network websites and the research on MSNS, most of the research is focus on the development or the technical architecture of MSNS, but not on the location based service (LBS). Mobile social networking is a typical social network where one or more individuals of similar interests or commonalities, conversing and connecting with one another using mobile phones. Meeting scheduling is navigation process in which private information About the participant is transmitted exchanged and processed in order to location. With the robust development of mobile platform, plenty of functions are supported by smart cell-phone, such as GPS (Global Positioning Systems) module. The GPS module in cell-phone can conveniently accept the GPS data from satellite, and the user's current physical position information can be resolved from the GPS data. The service pattern that applied the position information is LBS (location based service). The LBS is an extremely important feature of MSNS, it accelerates the migration from SNS to MSNS. We can list a lot of advantage of the LBS in mobile social network. The obvious point is that the implement of LBS in original social network is nearly impossible, but easy in mobile social network, that is one of the reasons why mobile social network become so popular recently.

## 2. LOCATION BASED SOCIAL NETWORKING

Dodgeball<sup>2</sup> is one of the first LSN service that relies heavily on SMS to allow users to "check in" their current location and to find their friends and friends-of-friends within 10 block radius [10]. On the other hand, Loopt<sup>3</sup> leverages GPS and other signal triangulation technologies to automatically sense device location, without requiring manual location updates. Brightkite<sup>4</sup> is a Denver-based startup, founded in 2005, that allows users to share their location, to post notes, and to upload photos through a number of interfaces, including Web, SMS, and Email. Recently, the company has also released a native client application on Apple iPhone and is planning a version for Google Android phones. These native client applica-

tions, like Loop clients, leverage GPS and other on device technologies for automatic location sensing, though still requiring users to hit “check in” button to update location. Brightkite allows users to define their friends and subscribe to their activity streams, including locations they checked in, their posted notes, and their uploaded photos. A note is limited to contain maximum 140 characters, for users to share quick thoughts and short status updates. The “friendship” relation is mutual: a user X accepting Y’s friend request means that X and Y become each other’s friend. A user may choose to protect her activity stream so only her friends can see her location/note/photo updates. A user may discover nearby people and browse their public activity streams. The posted notes and the photos are all tagged with user’s most recent checked-in location. Once a user checked in at a location, she is assumed to stay at that place until she explicitly checked in at another location. This mechanism gives users a complete control on when and where to share their location, addressing some privacy issues when sharing sensitive location information. When sharing user’s current location, Brightkite allows users to control the “granularity.” Namely, users can check in at a country, a city, or a zip code, without specifying the exact address.

### **3. MEETING SCHEDULING CONCEPT**

In our opinion a modern scheduling-support system should be capable in supporting a wide variety of different clients including desktop clients and mobile clients. For better flexibility a proprietary centralised architecture should be avoided and open standards for communication and negotiations are preferable to allow a broad range of services to connect to this system. In this section we introduce the Meeting scheduling concept which is important and attractive business application for people cancel the meeting scheduling process. In this section we introduce the Meeting scheduling concept which is important and attractive business application for people Coordinator The host that technically coordinates the scheduling of the meeting. This is the point where all messages and responses intersect during the scheduling process. The coordinating agent requests the timetables from the participants, calculates the best fitting time slots, distributes the calculation result, matches the preferences and instructs the participants’ agents to add the final result to their users calendars. Furthermore the coordinating agent keeps the initiator up-to-date, by sending status messages and answering status requests. Participant One or more invitee(s), that are supposed to attend a meeting. The coordinator and the initiator can be participants as well. Participants are classified as Very important, Mandatory, Minor or Info. Attendees characterised as Very important or Mandatory have to be available for the meeting to be confirmed. When no time slot can be found, where

all of the mandatory participants are free, the initiator receives an error message. The meeting can also not be scheduled, if one or more of the Very important or Mandatory participants reject the final result. The people which is the part of that meeting are also able to find the shortest path to reach the destination among the all possible path. To reach the destination as early as possible. For calculating the shortest path we can use the dijkstra algorithm to easily find the path.

#### **4. INSTANT MESSAGING**

Instant Messaging allows sending and receiving messages in real time independent of locale. The primary difference between instant messaging and that instant messaging is intended for limited end-user delivering. Instant messaging (IM) has become increasingly popular due to its quick response time, its ease of use, and possibility of multitasking. It is estimated that there are several millions of instant messaging users who use IM for various purposes: simple requests and responses, scheduling face to face meetings, or just to check the availability of colleagues and friends. Despite its popularity and user base, little has been done to characterize IM traffic. One reason might be its relatively small traffic volume, although this is changing as more users start using video or voice chats and file attachments. Moreover, all major instant messaging systems route text messages through central servers. While this facilitates firewall traversal and gives instant messaging companies more control, it creates a potential bottleneck at the instant messaging servers. This is especially so for large instant messaging operators with tens of millions of users and during flash crowd events. Another reason for the lack of previous studies is the difficulty in getting access to instant messaging traces due to privacy concerns.

#### **CONCLUSION**

This paper has described a new service pattern (A-LBS) on mobile social network. The proposed service pattern is a general design method, which could support the MSNS design both at present and in the future.. this a framework of mobile social networking named was proposed, and the design and implementation of LBMSN system which was established automatically based on interests raised by mobile phone equipped users were presented. Also we introduced the design and implementation of Meeting scheduler, a distributed multi t meeting scheduling system for mobile devices. The Meeting scheduler support mobile people finding feasible times to meet, using their mobile devices .also find the shortest path to reach the destination. Schedule the meeting also possible. also use the features of social networking such as instant messaging ,we can also find out shortest path between source and destination.

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