Abstract

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Agent-Based Mobile Event Notification System

In recent years, the noticeable move towards using mobile devices (mobile phones, PDAs) and wireless technologies have made information available in the context of "anytime, anywhere using any mobile device" experience. Delivering information to mobile devices needs some sort of communication means such as push, pull, mixed (push-pull) technologies to deliver any chunk of information (events, ads, advisory tips, learning materials, etc.). Events are the most important pieces of information that should be delivered timely wherever the user is. Agent-based technology offers autonomous, flexible, adaptable, reliable way of delivering events to any device, anywhere, on time.

Publish/subscribe communication model is the basic infrastructure for event-based communication. In this paper, we define the need to mobilize the event notification process in educational environments-the possible categories of event notifications that students can receive from their educational institution. This paper also proposes a framework for agent-based mobile event notification system. The proposed framework is derived from the concept of push-based publish/subscribe communication model but taking advantage from software agents to serve in the mobile environment. Finally, the paper provides a detailed analysis for the proposed system.