Using crowd sourcing to provide QoS for mobile cloud computing

Quality of cloud service (QoS) is one of the crucial factors for the success of cloud providers in mobile cloud computing. Context-awareness is a popular method for automatic awareness of the mobile environment and choosing the most suitable cloud provider. Lack of context information may harm the users’ confidence in the application rendering it useless. Thus, mobile devices need to be constantly aware of the environment and to test the performance of each cloud provider, which is inefficient and wastes energy. Crowd sourcing is a considerable technology to discover and select cloud services in order to provide intelligent, efficient, and stable discovering of services for mobile users based on group choice. This article introduces a crowd sourcing-based QoS supported mobile cloud service framework that fulfils mobile users’ satisfaction by sensing their context information and providing appropriate services to each of the users. Based on user’s activity context, social context, service context, and device context, our framework dynamically adapts cloud service for the requests in different kinds of scenarios. The context-awareness based management approach efficiency achieves a reliable cloud service supported platform to supply the Quality of Service on mobile device.