

ABSTRACT

The evolution of mobile and wireless technology has to be able to provide various services. Communication services that provided is not only voice service, but it has been developed in another service such as data, image and video as Value Added Service. One of favorite communication service is chatting. Chatting is real time communication that possible to exchange text message, image or audio. The paradigm of chatting changes from PC to mobile device in different platform. Hence, there must multiplatform chat protocol for mobile device.

This minor thesis describes the design and implementation of chat protocol for mobile device. Step of design has started from requirement specification, then doing service design to produce service specification. Service specification will deliver to protocol Specification that use Formal Description Technique SDL. Chat protocol consist of two block system i.e chat client and chat server.

Chat protocol is implemented using Java. Chat client using J2ME which is java technology for limited resource device, whereas chat server using J2SE. Chat client running on Java Emulator WTK 2.2. Mobile chat protocol implementation provides user to exchange text message. User joined in virtual room, can sending private and public message. Users can also know list of joined user. Chat protocol testing doing by observe behaviour of system. Its can be observe through result of input and output PDU, what its conform with protocol specification that designed.

Keywords : : *Value Added Service, mobile device, chat protocol, Specification Description Language, J2ME, J2SE*