Abstract:

The rapid development of wireless technology has changed the traditional Personal Digital Assistant (PDA) by spawning the development of new PDA and Cell Phone hybrids such as the Mobile Pocket PC and Smartphone. By embedding digital cellular telephone technology into these hybrid devices, users can benefit from the functionality of a cell phone and a PDA in one instrument. The popularity of cell phones has generated a profound interest in communicating by text message (also known as a Short Message Service (SMS) message). Standard SMS messaging is transmitted as-is over the Global System for Mobile Communications (GSM) network; consequently all textual conversation can be compromised at any time. As a result, more secure solution is needed to maintain the integrity of communications for corporate and personal users while solving confidentiality and privacy concerns for these devices. SMS Encrypt is an application that allows users to send secure SMS messages from one Pocket PC Mobile device to another. The application is the first SMS application that offers standard message encryption, for all Pocket PC Mobile devices, out of the box. The combination of the PDA and cell phone technology allows SMS Encrypt to utilize the Microsoft languages C#.Net and Embedded Visual C++ to provide the ability to encrypt/decrypt messages; communicate with the handheld’s Subscriber Identity Module (SIM) for sending and receiving messages; and for managing users, user profiles, contacts and message history.