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**System for mobile information services, based on short
messages**

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Date for defence: October 2007

Annotation

Mobile technologies are used with great popularity among mobile operators users. There are different services: voice service, sms, mms and etc. Each of these services has own advantages and disadvantages. Unusual interest among mobile operators users behave services bound up with short messages giving them opportunity to join in different games (radio, TV etc.) or to receive useful information (for traffic jam, weather forecast, TV and cinema program, information for currency or information for bank accounts, etc.)

Application, subject of this work is a system, which provides a definite information service based on short messages. From user's viewpoint the service gives opportunity for sending a short message to short number and receiving information, which depends on text of the message. Processing of the message and what kind of answer will be send to user is implemented by application. The system contains three modules: base module, web module and communication module. Each of them does definite work. Base module analyses the receiving message and decides, which answer must send to user. Web module gives opportunity for fast and easy editing of the sending information bound up with the service. Communication module is responsible for accomplishment connection

and correct communication with short message service (SMSC). It implements SMPP protocol regarding the standard. Some of base implemented possibility:

- Sending message to SMSC;
- Query status of message on SMSC;
- Cancel message on SMSC;
- Replace message on SMSC;
- Sending message in definite hour;
- Set message priority;
- Set message data coding scheme;
- Set message validity.

Library, which implements SMPP protocol is possible to be used separate from application, giving opportunity third part software developers to create application for communication with short message service center. System is designed to work on Windows OS. Almost all free applications with such kind of functionality work on Linux/Unix OS. For implementation are used .Net technology and programming language C#. They offer flexible and reliable environment for development of the project. GUI and web interface make easier work with application and its configuration. The purpose of system is to satisfy permanent growing necessities for information services of mobile operators users. Potential users of applications are mobile operators and value-added service providers. They will give opportunity for quick and easy access to different information and at the same time will grow up their revenues.

Contents:

1. Introduction – Include short description for project purposes.

2. Short message service review – short message service description, development, SMSC position in GSM network.

3. SMPP protocol – describes short message peer to peer protocol, history, application, implementation and functionality.

4. Technology used for implementation - include description of used technologies for project development.

5. Implementation – include description of design and implementation of the project.

6. User guide – describes the application startup configuration and usage.

7. Summary and potentialities for future development

