# Requirements and Analysis Document for the KudoMessage Project (RAD)

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This version overrides all previous versions.

**1 Introduction**

The following content will give a brief overview of the project, why the outcome of it is of any use and how we shall organize our work structure during the process.

**1.1 Purpose of application**

Our application, KudoMessage, aims to help common people in their everyday life by giving them the opportunity to send text messages from multiple devices. Our opinion is that one shouldn't be bound to send text messages (SMS) from your smart phone when you have a computer or tablet close at hand, which we argue is easier to use for texting. The messages that you send to others when using this application will be stored under a specific label in your Gmail inbox, that way you will always have a back up storage for your text conversations with your beloved ones.

**1.2 General characteristics of application**

KudoMessage will first of all be developed as a web application, that way it will be available at all devices with an internet connection. It will also be developed as a desktop application for the platforms Windows/Mac/Linux.

Both the web and desktop application will have a similar GUI, even though it may differ a bit depending on the choice of device. To use the KudoMessage service, the user will first have to download an application to his/her smart phone that will be run as a background application. This app will make sure that the text messages are sent from the user's phone, this by telling the app what google account it should belong and listen to. The user can then, by using the either the desktop or the web application, register the same google account, and thus send text messages from his/her smart phone through a different device.

**1.3 Scope of application**

The application will only work as an aid to send text messages. If the user tries to send a message to a telephone number that doesn't exist it will not be taken care of by our application. The main objective is to develop a web application that will be runnable through all devices with an Internet connection. We aim to release native applications for several devices later on (this will be done with the most appropriate programming language for the specific device), there wont probably be any time for this during this study period though.

**1.4 Objectives and success criteria of the project**

1. It should be possible to send text messages to other cell phones with your regular phone number, but instead of texting from your own phone you should be able to do it using:
2. any device, using the webpage http://www.kudomessage.se/
3. your computer by downloading the desktop application

These two sub goals are arranged in a priority order, where nr. 1 has the highest priority.

1. When a user receives an SMS they should be informed about this by the application.
2. It should be possible to seek through old text messages and see conversations with your contacts. The user should also be able so search for specific text messages among the conversations.

**1.5 Definitions, acronyms and abbreviations**

* GUI, graphical user interface
* Java EE, platform independent programming language (EE stands for Enterprise Edition)
* Glassfish, a web server to host java files
* JSF, (Java Server Faces) The HTML pages with connection to java classes.
* Hustler, the push server
* OAuth 2.0, gives us the possibility to access server resources on behalf of the resource owner
* GCM (Google Cloud Messaging), a service that helps developers to send data from servers to their Android applications on Android devices.

**2 Requirements**

**2.1 Functional requirements**

The user(s) should be able to:

1. Install the background application on his/her smart phone and choose the Google account that should be used as a storage container for the messages.
2. Select a language for the GUI to the web/android/desktop application.
3. Log in to your account.
4. Send a message from:
5. a computer by using the desktop application.
6. a tablet, smart phone or computer using the web application.
7. Log out and exit the application.

**2.2 Non-functional requirements**

**2.2.1 Usability**

Although we believe that usability is important for the application, this isn’t where we put our main focus. The functionality of the application is relatively simple, seen from a user perspective, and we therefore believe that we won’t have to dedicate any greater amount of time for this.

We will, nevertheless, put time aside to make a user guide for the program. It will include the whole process, from installing the background server to your smart phone, to using the web application.

**2.2.2 Reliability**

NA

**2.2.3 Performance**

It is hard to guarantee a perfect performance for this application due to the dependency on how well your own telecommunication operator works. The application is the intermediary between the user and the operator and are therefore not to blame for poor network connection. We can’t guarantee that there wont be any delay due to the communication with GCM.

The user should, however, get a notification that clarifies if the SMS was delivered successfully or not.

**2.2.4 Supportability**

The web application will suit all platforms, as it is accessible through a regular web browser. There are plans to develop native applications that are tailored to suit a specific operating system later on, as mentioned earlier. This shouldn’t be hard to implement when it Iphone server app.

**2.2.5 Implementation**

The reason we’re developing the app as a web application is so that it can be used from all devices without having to be installed first. It will be quick and easy to use.

**2.2.6 Packaging and installation**

To be able to use the service you will have to:

1. Download the android server to your smart phone.

**2.2.7 Legal**

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**2.3 Application models**

**2.3.1 Use case model**

See APPENDIX for UML diagram (and textual descriptions? )

**2.3.2 Use case priority**

1.

2.

3.

4.

5.

**2.3.3 Analysis model**

**2.3.4 User interface**

**2.4 References**