Business SMS Management

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# Introduction

*Business SMS Management* is a system where user can send SMS to receivers individually, grouped or providing an Excel sheet. The system will automatically manage the history and transactions. Additionally, there will be features to add, view, update, delete contacts or groups.

# Requirements

1. Send SMS
   1. To individuals
   2. To groups
   3. Reading Excel Sheet
      1. User will provide an Excel sheet, SMS format and select the contact number column in Excel sheet. SMSs will be generated accordingly and be sent to associated clients.
2. Reporting
   1. According to campaign [*Campaign:* SMSs that are sent as a bunch]
   2. According to individual SMS
   3. Transactional Report including export as Excel Sheet.
   4. Each reporting system contains date range search and keyword search.
3. Contact
   1. Create, read, update, delete contacts including importing contacts from Excel.
   2. Create, read, update, delete groups including search facility.
4. Account Recharge
5. API Documentation
6. Change in Profile

# Modules

According to the requirements given, we can divide the system into following modules.

## Sending SMS

As the name suggests, *Sending SMS* modules sends SMSs. This module depends on *User* module for logged in user information and *Contact* module for contact and group information. On the basis of sending technique, this can be divided into three sub modules.

### Sending SMS to Individual

This sub module sends a static SMS to a number of contact numbers given in CSV form.

### Sending SMS to Group

This sub module sends a static SMS to a number of groups of contacts selected from existing group list.

### Sending SMS From Excel Sheet

This sub module sends a number of dynamic SMSs generated from a user given Excel sheet. Reading the Excel sheet, the system will offer user to select a specific sheet. Then he / she will be asked to select the column holding the numbers. The he / she has to provide an SMS format where a phrase inside double curly braces (e.g. {{Name}}) denote column name.

Provided the data, the system will send the SMSs accordingly.

## Reporting

The *Reporting* module basically keeps track of sent SMSs and related transaction history. It has three types of reporting namely — Individual, Group and Transaction. Each kind contains search with date range and keyword.

Behind the scene, reporting module does a compressing task on Excel SMSs. Only the SMS format is stored and dynamic SMSs are regenerated before searching. Additionally, if an SMS is too big, it may be broken into two or more SMSs while sending. These are concatenated before searching operation.

This module depends on *Sending SMS* module for SMS information.

## Contact

The *Contact* module manages contacts and groups. This includes create, read, update and delete of both contacts and groups. This also provides adequate search facility.

## User

Although has less functionalities, user module is the most important module in a sense that, all other modules depend on it for logged in user information. This module controls registration, logging in, password change and account recharge facility.

# Actors

The system has two actors — *User* and *Business SMS Provider*.

The user is the main actor who interacts with the system graphically. He / She sends SMSs, checks history, manages contacts, recharges and manages his / her own account.

The *Business SMS Provider* is not a human user but a third-party tool which receives an SMS and contact number as a request and sends SMS to the contact number providing confirmation response.

# Use Cases

As our one actor *Business SMS Provider* is a third-party tool, it does not require any sort of testing. All of our use cases will be performed by user.

## Send SMS to Individual

* User fills the SMS field
* User writes the contact numbers
* User sends the SMS.
* Confirmation message is shown
* Balance is reduced accordingly

## Send SMS to Group

* User fills the SMS field
* User selects the contact groups
* User sends the SMS.
* Confirmation message is shown
* Balance is reduced accordingly

## Send SMS from Excel

* User uploads an Excel sheet
* User selects the sheet number
* User selects contact number column
* User fills the SMS format field
* User Sends the SMS
* Confirmation message is shown
* Balance is reduced accordingly

## Search Campaigns

* User fill the date range
* User fill the search keyword field
* User search for the results
* User gets the campaign list

## Search SMSs

* User fill the date range
* User fill the search keyword field
* User optionally selects a campaign
* User search for the results
* User gets the SMS list

## Transaction Report

* User fill the date range
* User fill the search keyword field
* User search for the results
* User gets the transaction history

## Create A Group

* User fills the group name field
* User presses the create button
* A new group is created and appeared in the group list

## Search Group

* User fills the search field
* User press search button
* User gets the group list

## Edit A Group

* From the group list user presses an edit button
* A pop up is shown
* User edits the name
* User presses the update button
* Group name is updated

## Delete a group

* From the group list user presses a delete button
* A pop up is shown for confirmation
* User presses the delete button
* Group is deleted

## Update Personal Information

* User updates the necessary fields
* User presses save button
* User information are updated