

# Message Scheduling in Default Messenger using Android Application

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**ABSTRACT:** SMS stands for Short Message Service, it is a text messaging service component of mobile device systems. SMS services enable mobile devices to exchange short text messages utilizing standardized communication protocols. SMS is a popular medium for sending event notifications to users regarding scheduled events that are to take effect after a specific time interval. Mobile text messages act as an excellent aid for communicating information over long distances even in absence of a well-established communication system or infrastructure.

There are situations where the user needs to send a particular message at a particular time. In such a situation, a user would wish to have an option to schedule the message. Most default messaging services available on mobile devices, do not natively have a scheduling facility. The system supports the scheduling of messages in the default SMS application of the device.

**KEYWORDS:**SMS, Scheduling, Android

## I. INTRODUCTION

SMS stands for Short Message Service, it is a text messaging service component of mobile device systems. SMS services enable mobile devices to exchange short text messages utilizing standardized communication protocols.

The technology is a stable and widely used mobile communication method after phone calls. Most people carry mobile phones which is capable of receiving short messages as a means of event notification. In principle, the text message can be used either as a one-way communication to provide the user information such as reminders, alerts, etc, or as a two-way communication that enables the user to send or receive information. SMS is a popular medium for sending event notifications to users regarding scheduled events that are to take effect after a specific time interval.

Mobile text messages act as an excellent aid for communicating information over long distances even in absence of a well-established communication system or infrastructure.

There are situations where the user needs to send a particular message at a particular time. In such a situation, a user would wish to have an option to schedule the message, which is an absent feature in many of the default messengers available. It would be convenient to simply write a message and schedule it to be sent to the receiver at a specific time, automatically. Most default messaging services available on mobile devices, do not natively have a scheduling facility. The system supports the scheduling of messages in the default SMS application of the device.

## II. METHODOLOGY

SMS Scheduler is a tool that automates the process of sending text messages, after a specific interval of time. The application reads the message, contact details of the receiver, time, and date from the user. The user can also select the contact name from the contact list provided in the application, then set the date and time at which the message is to be sent to the receiver.

This application requires to SEND SMS permission of the device. This is done so that the application can access the SMS present in the default messenger of the device. Once, the user successfully schedules a message, the user will receive a notification after the successful delivery of the message to the receiver.

Java programming language is used for programming this SMS scheduling module of the application. The permissions requested by the application are to access SMS and read the Contacts of the user's device. These permissions will be requested by the application only during the initial run of the SMS scheduling module.

This includes the following fields,

1. Contact Name:

The Contact Name for the contact of the recipient to whom the message is to be scheduled is fetched. The exact name of the recipient, as saved in the contact list of the sender's device should be entered in the contact field.

2. Contact Number:

In this field, the contact number of the recipient is to be entered. The 'SELECT CONTACT' button, beside the field, gives direct access to the contact list of the device of the user. This feature will only work if the user has permitted the application to access the contact list. When the user picks a contact from the contact list, the Contact Name and Contact Number fields are automatically filled.

3. Date Picker:

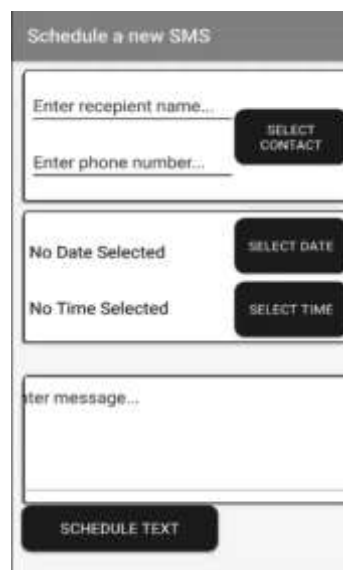
In this field, the user can enter the date for which the message is to be scheduled. The selected date can either be the current date or a date after it. Default DatePicker provided by Android Studio IDE is used as the interface for reading in the input for the date field.

4. Time Picker:

In this field, the user can enter the time for which the message is to be scheduled. The selected time can only be a time after the current time. Default TimePicker provided by Android Studio IDE is used as the interface for reading in the input for the time field.

5. Message to be Sent:

In this field, the actual message that is to be sent to the recipient is to be entered. This field can only contain text-based messages, as images or multimedia contents are not supported in this field.



SMS Scheduling- Fields

### III. CONCLUSION

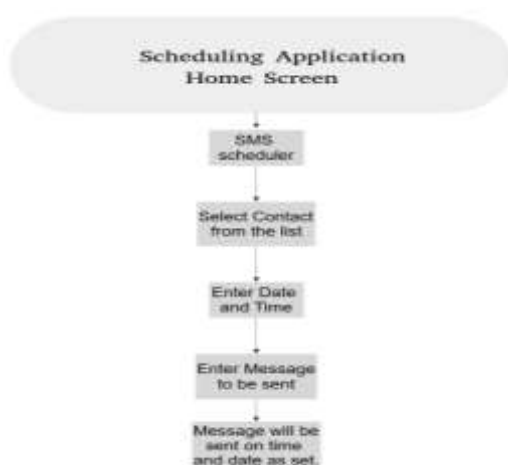
This application can be applied to schedule SMS in the default messenger of the device. The application help users to set their message at the required time and date provided by them and automatically the notification for the message will be received by the entered contact. It helps the users in sending important messages in a timely manner.

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