

## **Title: SMS Reminders using Twilio**

### **Abstract**

Short messaging service (SMS) (a.k.a. text messaging) is a fast, low cost and popular mode of communication among young people, and these advantages can be used in a variety of ways in sending timely reminders to the users. Most businesses will want to send an SMS or email reminder to customers before their appointment starts. This greatly helps to reduce no-shows and it can actually earn you money because you're not losing revenue from missed appointments. Twilio is convenient, easy, and it lets you send emails and text messages to your clients to build better relationships.

### **Introduction**

Any notification related to booking activity or business meetings, event reminders etc. can be sent via SMS. With Twilio you can send SMS notifications to your Customers and team members anywhere in the world and be assured they will arrive instantly. Twilio use a reliable network that will always deliver and confirm receipt of your messages quickly, no matter the length or where the receiver is located.

SMS can serve as a great backup for email notifications. While email is great and available 24 hours-a-day, there are some drawbacks that SMS notifications can help circumvent. Emails are sometimes delayed due to slow Internet connections or other reasons. SMS notifications are several times more reliable and have a higher open and delivery rate than email. Many people use SMS notifications as their primary communication and prefer them for quick reminders.

Twilio network uses lines that ensure direct number-to-carrier connectivity, reducing the time it takes for your SMS to arrive. No messages are lost to network outages, Twilio use Adaptive Routing technology that chooses the best path for your SMS messages.

Benefits of using Twilio:

#### **1. Engage your customers-**

Deliver timely notifications about pending appointments, arrivals, and more to keep your customers engaged.

## 2. Enable interaction

You can enable a customer to confirm or reschedule an appointment or delivery from within the text message — via SMS or voice.

## 3. Reduce costs

Reduce missed appointments, delivery attempts, and support costs with automated notifications.

## 4. Improve the customer experience

Timely SMS-based engagements can provide an opportunity to create those “wow” moments that strengthen customer relationships.

## **Implementation Details**

The application is disaster management (terrorist attacks) web application wherein it provides various guidelines , emergency point of contacts , relief shelters and SOS features.The SMS feature we have integrated with this web application to provide SOS facility.

Twilio is very flexible as support is available for a wide range of programming languages we have decided to integrate with Node.js.Before we can generate SMS we need a SMS capable phone number which has to be purchased from Twilio (we are using trial version hence free).

Then we need to create a client with necessary credentials that are accountSid and authentication token.The client body will have the destination phone number and the source number with message text.

Given Below is the flow of control / working of Twilio:-

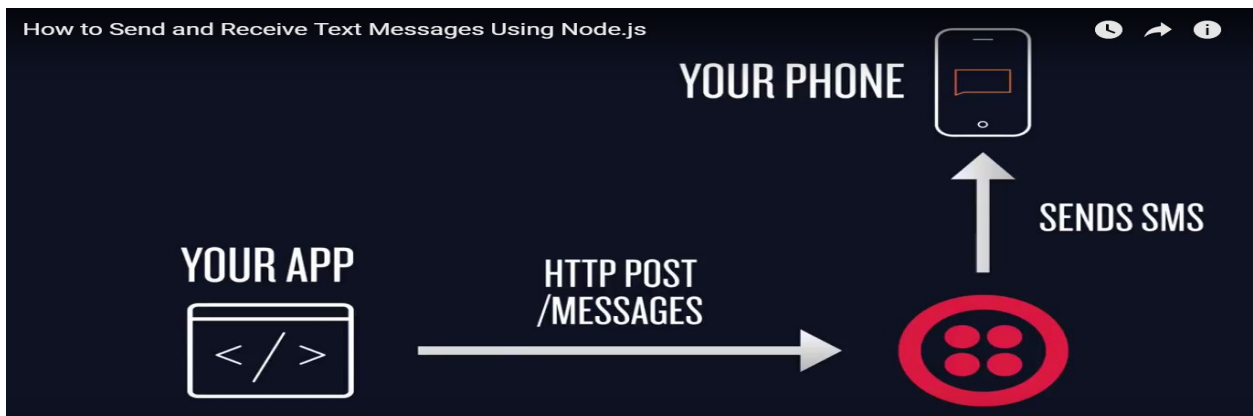
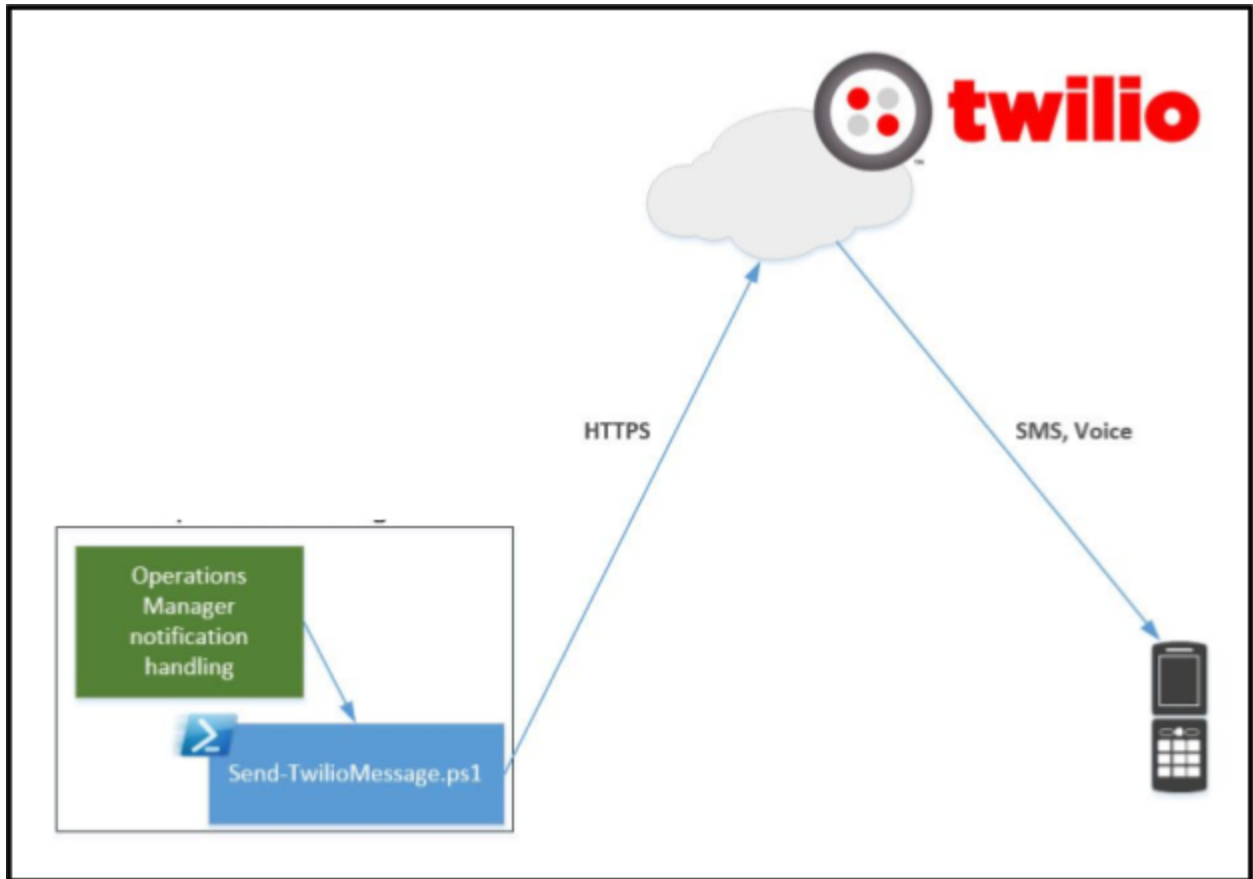


Fig. 1&2: Working of Twilio.

## Result & Snapshot

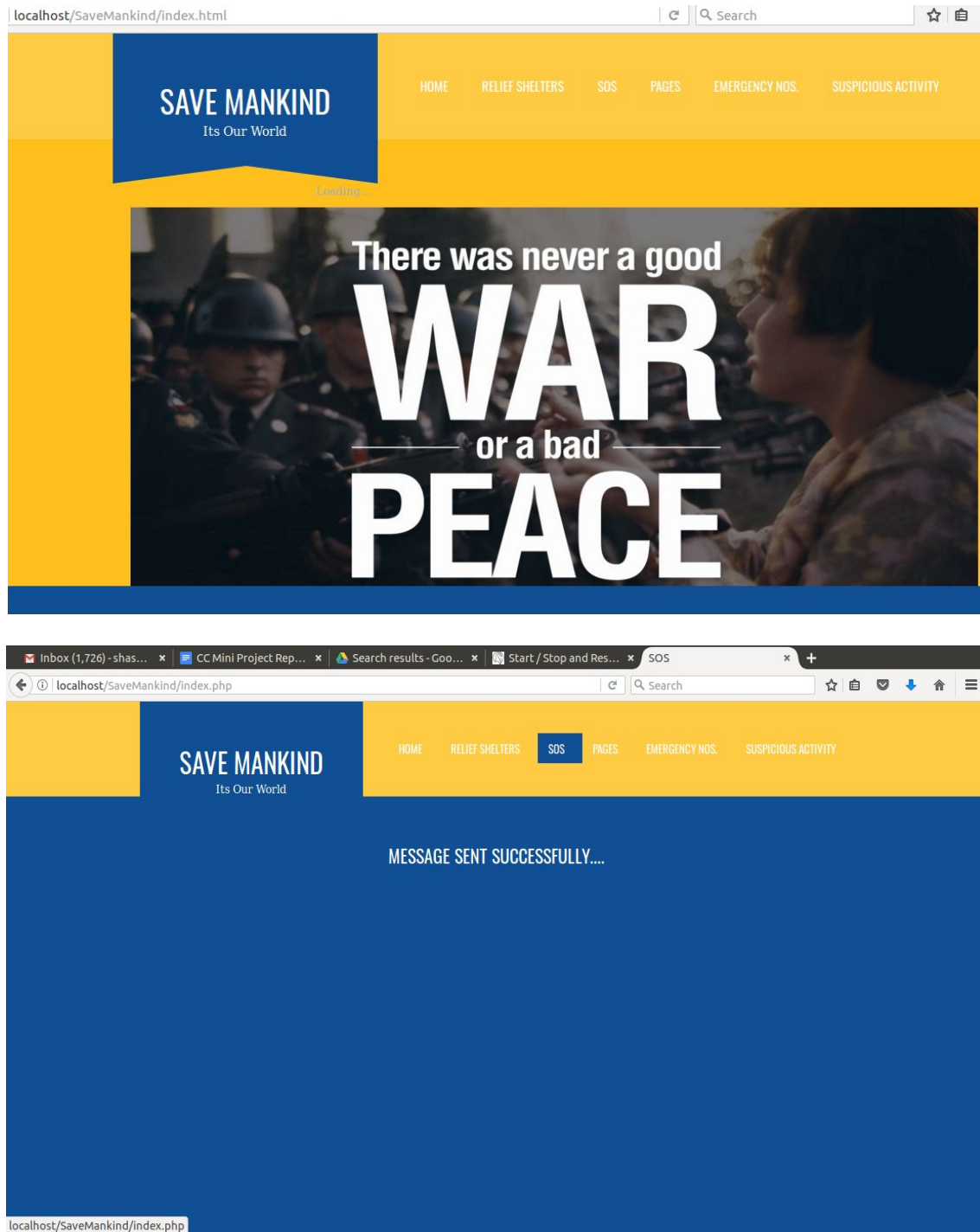


Fig 3&4 : Webapp displaying emergency message successfully to device

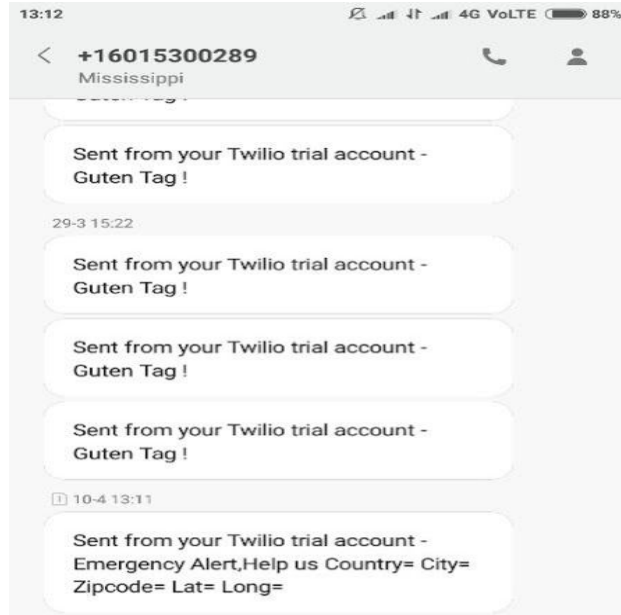


Fig 5: Message received on the device

## Conclusion

In the webapp for Disaster Management, we have used Twilio api for messaging service for an emergency situation. We used Twilio with php language in a webapp, as Twilio is convenient, flexible and easy.

## References

<https://www.twilio.com/docs/>