

Phone Number Authentication: Part 2

- Sending an SMS using Twilio

By Ali M. Bdeir

Documentation V1.0

29/March/2017

**To report an issue or for help, email me at
ali@bdeir.org**



Revision History

Date of Change	Description of change	Changed/Noted by
March 29, 2017	Initial Documentation	Ali Bdeir
March 3, 2017	Changed error in url “/twilioSMS” “/twilioSend”	Jad Kechichian

Using this tutorial, I am considering that you already completed part 1.

Information you'll need from your Twilio account:

1. Your account SID
2. Your account auth token.
3. The phone number you got.

There is a Twilio free trial and you can get all these information via it.

For any help on getting these, you can contact me via email.

In your Heroku server:

You'll need to do a get call just like you did for the Firebase custom auth system. You can use the same server.

Have these variables available:

```
private final static String ACCOUNT_SID = "yourSID";  
private final static String AUTH_TOKEN = "YOURAUTHTOKEN";  
private final static String TWILIO_NUMBER= "yourNum";
```

Just under your Firebase's get listener. We want to listen for any calls after /sendsms. And we need to request parameters. The parameters are obviously two: The phone number, and the message.

```
get("/twilio/send/:phoneNumber/:body", (request, response) -> {
    return "";
});
```

We don't need to return anything, since the user isn't really retrieving anything. Unlike the firebase custom authentication system, where we're retrieving the generated custom token. Even if you return "Trump" nothing will change.

Ok, but now we want to actually send the message.

Go to your build.gradle. Add this dependency (**not under buildscript**).

```
compile "com.twilio.sdk:twilio:+"
```

Now, go to View>Tool Windows>Gradle. Click the refresh button



Wait until it compiles again.

Now, go back to the get we just made. Let's retrieve the parameters first. Then follow my comments (*//Comment*) so I can explain what every line does.

```
get("/twilio/send/:phoneNumber/:body", (request, response) -> {
    String number = request.params("phoneNumber"); //This gets the given phone number and
    stores it as a string
    String body = request.params("body"); //Gets the given body and stores it as a string
    Twilio.init(ACCOUNT_SID, AUTH_TOKEN); //Initialize Twilio
```

```

    MessageCreator messageCreator = Message.creator(ACCOUNT_SID, new PhoneNumber(number), new
    PhoneNumber(TWILIO_NUMBER), body); //This creates the message, but doesn't send it. Just puts
    in the information
    messageCreator.create(); //this sends it
    return "";
});

```

But wait!

Don't forget:

```

$ git add .
$ git commit -m "Added twilio authentication"
$ git push heroku master

```

Now on your client, you can call on this method:

```

String callOnNetwork(String url) throws IOException {
    Request request = new Request.Builder()
        .url(url)
        .build();
    Response response = client.newCall(request).execute();
    return response.body().string();
}

```

(You should already have this if you completed part 1)

But, don't forget, on a different thread.

You can do it on the same thread you created for signing up with Firebase.

Considering you're not on the main thread and you're on a different thread like the one we created in part 1:

```

String twilioURL = "https://yourappname.herokuapp.com/twiliosend/" +phoneNumber + "/" + body;
//TODO Replace yourappname with your app name, and body with the text you want to send along
with the sms.
try{
    callOnNetwork(twilioURL);
}
catch(IOException e){
    e.printStackTrace();
    callOnNetwork(twilioURL);
}

```

You're done! Once you do that, it should send an sms with the given number.