SEN PROJECT 4: API DOCUMENTATION

Table of Contents

[Why we used the twillio api 1](#_Toc180771933)

[Reasons why we decided on a restful api: 1](#_Toc180771934)

[What does the API do 2](#_Toc180771935)

[How is the API integrated 2](#_Toc180771936)

# Why we used the Twilio API

We decided to use the Twilio external API.

The Twilio API is a restful API.

## Reasons why we decided on a restful API:

* Generally, RESTful APIs are easier to understand and uses standard HTTP methods.
* Since RESTful API’s are know to be stateless, each request is independent from other interactions of the previous state.
* The RESTful API is easier in terms of data format. While the most common format is JSON, the API can handle multiple different formats, such as HTML and plain text.
* REST API’s have lower overhead and are thus generally faster.
* Since REST API’s use standard HTTP methods and status codes, this makes it a lot easier to integrate with the system.
* REST API’s support standard HTTP-based security features, such at OAuth for authentication.
* REST API’s indicates the success or failure of a request with HTTP status codes.
* REST is stateless, thus it enhances reliability since the system does not need to recover between each transaction.

# What does the API do

On the website <https://www.twilio.com/docs/usage/tutorials/how-to-use-your-free-trial-account-namer> information can be found on how to use this API, in a short:

* Twilio provides you with a free unique Twilio number that you can use for your messages.
* On this website you will have a dashboard you can use to send messages and view your authentication token as well as your SID
* Using the authentication token and SID the website provides you with an example snippet of the code that you can use(Seen bellow)

A computer screen shot of text

Description automatically generated

A screen shot of a computer code

Description automatically generated

* Since we are building in java, we extracted the java snippet and integrated it into our code.

# How is the API integrated

The API uses a callback function that checks the job table to see if any jobs have a job status of unassigned. If it sees a job with no assignment, the API is initiated and all the unassigned technicians are sent a text message(Due to Twilio verification restrictions, and a lack of time to apply, the API only sends text to a virtual number hosted by Twilio)