



SMS Gateway Application Development

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Overview

This document details the plan of action for the development of the SMS Gateway. It involves creating an intuitive, robust, and secure platform for businesses and organizations to send and receive text messages. The web application will serve as the interface for managing SMS campaigns, configuring settings, monitoring performance, managing billing and ensuring efficient delivery of messages. The system will interact with SMS service providers or telecom operators, providing users with control over message routing, scheduling, and reporting.

Goals

1. Create a modern and informative website that will serve as the landing page for visitors.
2. Create an intuitive onboarding journey for new clients to join the platform.
3. Create a user dashboard to manage the operations of the platform.
4. Create a robust Software Development Kit to enable 3rd parties to interact with the system.
5. Create a detailed developer guide to provide information about the platform.

Specifications

The platform details are documented below.

Website

The landing and visitors pages will be built on wordpress with a custom theme to manage the data displayed. This will include the home page, about us, pricing and all other necessary pages.

Onboarding

Users will be required to provide their name, email and password to create an account. An email is sent to the user to verify their email. Additionally, the user may activate 2 factor authentication, either via email or SMS (provided the user has a confirmed phone number).

Users may recover their account using their email or phone number.

Dashboard

The platform is application based, all actions are based on the selected application. These include bulk SMS, premium SMS, USSD services, alphanumerics, short codes, billing and analytics.

To create an application, the name and details are required. Other users may be added to the application with access to manage their integration, billing and other roles as defined by the owner.

All new applications are created with a default sender ID that belongs to the platform. The user may request another sender ID to customize their experience. The user may also request for a custom short code to send and receive premium SMSs and specify callback actions for delivery and/or reception of messages.

Analytics will be provided for all services and show trends in the sending/reception of messages.

An application key and secret is generated for each application to enable SDK integration.

The SDK will be built for all popular scripting languages such as bash, php, nodejs, python etc. These will be supported by the developers guide to provide testing and use case scenarios.

Development Stack

The website will be built on wordpress for easy management.

The APIs will be built on Laravel 11

The web platform will be built on Vue.js 3

Milestones

I. Website creation

Create and host the website including all external links to supporting pages

II. User Onboarding

Create the full user journey, including: registration, login, account recovery and 2 factor authentication.

III. Send bulk SMS

Enable the user to send messages through the platform using the default sender ID or request a custom sender ID.

IV. SDK Integration

Enable the user to send SMS by use of the SDK and their App key and App Secret.

V. Analytics

Show the user all analytics for their application such as messages sent and graphical trends.

VI. Developer Guide

Create the full documentation for the SDK.

VII. Billing

Enable users to track, manage and top up their accounts using mpesa.

Conclusion

The development process is on a week to week basis, to be completed when all the milestones have been met.