

## 05 WhatsApp - Telegram- Viber Notifications

*Build a notification system that sends certificate/event expiry alerts and guidance to users via WhatsApp, Telegram, and Viber.*

Enhance MOSIP's notification system to alert users of upcoming certificate or event expirations via WhatsApp, Telegram, and Viber — including expiry dates and actionable next steps.

### **Complexity Level: Low**

#### **Overview:**

This project aims to extend the existing MOSIP notification framework, which currently supports Email and SMS, by integrating with WhatsApp, Telegram, and Viber APIs.

In the MOSIP ecosystem, digital certificates and events have critical expiry timelines. Manual tracking can result in expired credentials, access issues, or compliance failures. By enabling alerts via popular messaging platforms, we improve real-time communication, user engagement, and reduce the risk of missed notifications.

#### **Recommended Tech Stack:**

Tools and Technologies: Java, Spring Boot, WhatsApp Business API, Telegram Bot API, Viber REST API, MOSIP APIs, RESTful services

#### **Exact Task:**

Design and implement an enhancement to the current notification framework to send automated alerts (non-interactive) for certificate/event expiries via WhatsApp, Telegram, and Viber.

#### **Mandatory Tasks:**

- Extend the existing notification framework to support WhatsApp, Telegram, and Viber in addition to Email/SMS.
- Code should be added to <https://github.com/mosip/commons/tree/develop/kernel/kernel-notification-service> repository.

- The existing Notifications framework of MOSIP is built using Spring Boot Services. Your code should be within the same framework.
- WhatsApp, Viber and Telegram APIs should be integrated with the MOSIP services to achieve the above.

### **Good-to-have Tasks:**

Enable multilingual support using locale-based message formatting.

### **Deliverables:**

- Source code on GitHub/GitLab.
- A demo service (via Swagger API or UI) showcasing sample scenarios like “certificate expiry for a MOSIP partner.”
- A short demo video or PPT explaining the approach, implementation, and impact.
- Documentation covering:
  - Architecture and data flow
  - Integration and installation guidance
  - API specifications (if any)
  - Test cases/scripts and sample test data

### **Resources:**

- [Building REST API Using Spring Boot: A Comprehensive Guide | by Pratik T | Medium](#)
- [WhatsApp - Infobip API](#)
- [Telegram APIs](#)
- [Get Started - WhatsApp Cloud API](#)
- [Viber REST API | Viber Developers Hub](#)
- Notification Service :  
<https://github.com/mosip/commons/tree/master/kernel/kernel-notification-service>



- MOSIP Sandbox environment: <https://collab.mosip.net/>
- Collab user Guide link: <https://docs.mosip.io/1.2.0/collab-getting-started-guide>