Email is the most common and necessary requirement for the majority of applications. Java Mail API is a platform and protocol independent framework for developing mail and messaging applications. The JavaMail reference implementation is licensed under the GNU General Public License (GPL) v2 with Classpath Exception and the Common Development and Distribution License (CDDL) v1.1.

For the purpose of alert generation, an automated email mechanism is incorporated for sending email as soon as an intruder is detected by the surveillance system. The email mechanism is available through an API. The HTTP post method sends an API request to email server with request body containing intended receiver email and content.

The java API is created using Spring Boot. Spring Boot is a Java framework, built on top of the Spring, used for developing web applications. It allows you to create REST APIs with minimal configurations. The API when invoked calls java’s built in simpleMailMessage function and sets parameters like sender, receiver, title and body text and then sends on the mail using the mailSender function. The email server uses SMTP (Simple Mail Transfer protocol) for sending email. Here **smtp.gmail.com** is used as host with port **587** configured. By default, Gmail always tries to use a secure TLS connection when sending email. However, a secure TLS connection requires that both the sender and recipient use TLS. If the receiving server doesn't use TLS, Gmail still delivers messages, but the connection isn't secure. Transport Layer Security (TLS) is a security protocol that encrypts email for privacy. TLS prevents unauthorized access of your email when it's in transit over internet connections. For secure connections **Secure transport (TLS) compliance**setting to always use TLS for email sent to and from domains and addresses specified.