EMAIL CLIENT FOR THE TELEGRAM INSTANT MESSAGING SYSTEM

Salabai M. O.
Student of the first (bachelor's) level
specialty 121 – Software Engineering
International Humanitarian University
*Scientific supervisor: **Rusu O. P.***
Candidate of Technical Sciences,
Associate Professor at the Department of Computer Science
International Humanitarian University
Odesa, Ukraine

Quick access to information is a necessary part of modern life, so online instant messaging systems are gaining popularity every year. However, despite its high popularity, instant messaging is not the only way to transfer information. At the same time, people continue using traditional offline services, the most famous example of which is e-mail. This leads to the fact that a modern person has to use several systems to exchange information at the same time, which makes life more complicated and can take more time to read important messages coming into offline systems.

A possible solution to this problem may be to use specialized email clients that generate their own notifications when certain events are detected in offline systems, for example, when emails are received. However, such a solution only increases the information load on a person, since in this case he or she actually has to work in several online systems at the same time.

Another, more practical way is to integrate offline resources with an online system. In this case, information from several offline systems is transferred to the information space of a single online system, which both reduces the information load on a person and speeds up the pace of his or her work.

The article describes the features of the «Telemail» email client that integrates into the «Telegram» instant messaging system in the form of a chatbot. The main target of the developed mail client is the integration of mailboxes into the Telegram system, which allows to broadcast information from them into the unified information space of the system. Currently, the email client supports the following feature:

– *Instant Notification Feature*

Enables users to receive immediate notifications upon the arrival of new emails in their inbox.

– *Direct View Capability*

Allows users to seamlessly read the content of emails directly within the Telegram interface, eliminating the need to switch between applications

– *Efficient Multiple Account Management*

Simplifies the process of effectively managing multiple email accounts from a single point.

– *User-Friendly Setup and Operation*

Provides a straightforward setup process and user-friendly interface, ensuring quick activation of email notifications in just a few steps

– *Top-tier Security Prioritization*

Implements the highest level of email data protection to safeguard private messages and ensure user information remains secure.

– *Compatibility with Multiple Mailboxes*

Supports integration with various email service providers, allowing users to utilize Telemail seamlessly with any email account.

You can view the features of the email client by following the link [1] or by using the QR code (Fig. 1).
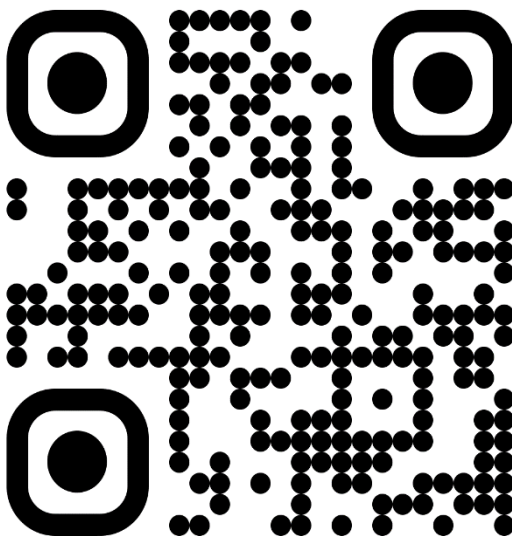

Fig. 1. QR code of the «Telemail» email client website

The Telemail email client consists of two main parts:

1. User Request Processing and Messaging Module:

Engineered with the Aiogram library [2], this module operates asynchronously, connecting with the Telegram system through its API interface [3]. Aiogram stands out for its modular structure, offering comprehensive access to Telegram API functionalities, and it's noteworthy for supporting the Ukrainian language. This module is designed to handle user requests with precision, ensuring a smooth flow of messages within the Telegram environment.

2. Web Server for Email Display:

The web display segment is developed using the Flask framework [4], leveraging the capabilities of the Python programming language. Flask is chosen for its efficiency in rapidly developing web applications. Operating on WSGI principles, Flask provides a flexible and efficient foundation for Telemail's web-based email display. This component significantly contributes to the overall user experience by creating a responsive and intuitive interface for the efficient management and viewing of emails.

The key advantage of the created email client is platform independence, ease of use, and an intuitive interface. You can start using the latest version of the email client by following the link [5].

Bibliography:
1. Telemail site. URL: https://telemail.ovh/
2. Aiogram Documentaion. URL: https://docs.aiogram.dev/en/latest/
3. Telegram APIs. URL: https://core.telegram.org/api
4. Flask User's Guide. URL: https://flask.palletsprojects.com/en/
5. Telemail bot. URL: https://t.me/mail_service_bot