

PBL II Project

Privv : Truly Private Messaging App

Privacy Issues with other Messaging Apps:

- Users have to submit sensitive data, like name, date of birth, and phone number.
- Apps like WhatsApp are often misused to spread fake news and misinformation.
- Many messaging applications store the data on the cloud, which is not encrypted, exposing it to vulnerabilities.
- Several apps use personal information for unethical purposes. Facebook allegedly shared the data acquired from WhatsApp and Facebook Messenger with advertisers.

Cases of **privacy and data leaks** have already happened with our favourite apps like WhatsApp and Facebook Messenger.

The biggest wave happened earlier this year when WhatsApp rolled out its new must-accept privacy notification. However, at the time, plausible solutions like Signal and Telegram surfaced. But it also utilizes cloud-based framework architecture, allowing non-encrypted messages to non-users.

A plausible solution to such issues lies in **blockchain technology**.

Privv will offer ultimate privacy by means of Blockchain and decentralization.

→ It means that there is no single managing body of the application. The data is not routed through data-centers, but through nodes. There can be an arbitrary number of nodes in the network.

→ The messages get encrypted first and then route securely through a number of nodes before finally arriving at the final destination. The traditional centralized messaging systems,

Send the message to data centers,

Analyze it for data mining,

Then send it to the receiving body.



→ A completely **secure and anonymous sign-up**, only needing a crypto wallet address. No need for names, IDs, or phone numbers. Total user privacy, without compromise.

- No cloud storage, no user moderation, and **complete end-to-end encryption** for all messages between users – completely eliminating the risk of hacks or data leaks.

- All **messaging history and files are on anonymous**, independent, and non-connected nodes, on the Ethereum network. This eliminates all points of failure and, as it grows and expands its nodes, becomes increasingly secure.