

Ethergram Documentation

A very small documentation about Ethergram and its source code.

1. Telegram source code

Since the original Telegram messenger app source code is missing a proper documentation, I will report below what I was able to understand.

Note that is in no way a comprehensive documentation, this is just what was needed to start developing Ethergram.

- **LoginActivity**
Implemented for managing the user login, used only the first time the app is opened.
- **LaunchActivity**
The main activity (where your various chats are listed).
It opens after LoginActivity when you first run the app.
 - sideMenu: Used to add the option to open EthereumWalletActivity.

2. Ethergram abstract

Ethergram aims to integrate a fully functional Ethereum wallet client to the Telegram messenger android app.

Ethergram will not use APIs from centralized companies (like Infura) to access a node on the Ethereum network, as this goes against the decentralization principle of Ethereum.

Instead, Ethergram connects to a local node running with geth in light mode, so it doesn't download the entire blockchain.

3. Ethergram source code

Following, some documentation about the already written code.

- **EthereumWalletActivity**
This is the main activity of this project. In this activity the user will be able to create an account with a password or login in it. The account file is stored as a JSON file. Once logged in, the user will see his balance in ETH and his transactions (powered by Etherscan.io)
- **NodeHolder**
A class used to implement the singleton pattern: only one geth node can be running at a time. Here will also be stored the Credentials object (Web3j).

- **SendDialog**
A dialog that makes possible to send ETH or ERC20 tokens.

This documentation is far from comprehensive and will be updated in the future.
For testing purposes Ethergram will use Infura APIs in the develop branch.