



What's the Difference Between a Front End and a DeFi Protocol?

In software development, the front end refers to the website or mobile application that users interact with. The front end makes “calls” to the back end, which is the code behind the website or app.

In the case of DeFi, that backend is a protocol’s smart contracts. A website or mobile app that a user can connect their wallet to is not actually the protocol: it is simply a user-friendly interface that writes transaction messages which the user can optionally send to the network in order to execute a transaction. Front ends are not required for a user to interact with a DeFi protocol, but they make interacting with protocols more convenient.

The distinction between the back end and the front end is a critical one for regulators to grasp. Since DeFi protocols are autonomous, once a DeFi protocol has been built it will continue to operate for as long as the blockchain it was built on continues to validate transactions.

Anyone is then able to build a front end that users can use to write transaction messages for the associated “back end” smart contracts. The operator of the front end does not need to ask anyone’s permission to interact with the network; they just need to know how to build a website that can write transaction messages with the protocol.

This means that even if the developers of a DeFi protocol write the code, launch the application, and never interact with it again, users could still interact with and transact on that protocol—with or without the help of a front end. While many protocol developers do host front end applications that interact with the protocols they developed, this is not always the case.