TEAM ID	NM2023TMID043912
PROJECT TITTLE	BLOCKCHAIN POWERED LIBRARY MANAGEMENT

INTERACT WITH THE FRONTEND FOR ALL FUNCTIONALITIES

INTRODUCTION:

- **Virtually every web3 website, or dapp that you have ever used uses one of web3.js or ethers.js.**
- **Together, they are the two most popular Ethereum Javascript libraries that allow developers to interact with Ethereum or EVM-compatible blockchains using the JSON-RPC (Javascript Object Notation- Remote Procedure Call) protocol.**
- **In other words, these are JavaScript libraries that allow you to do things that fundamental to almost every dapp: deploy smart contracts, create wallets, sign transactions, query the blockchain, etc. without having to make raw API calls to the blockchain.**
- **One of the most common questions developers ask when starting out with web3 development is which library to use in their projects.**
- **In this guide, we will cover what ethers.js and web3.js libraries are, what they can do, and how they differ so you're able to make a choice depending on the requirements of your project.**

A Broader License:

- **Ethers is available under the MIT License which not only allows developers to use it for free, but also allows modifications to it.**
- **The latter is also allowed under the LGPL-3.0 license that web3 uses but it also forces you to release the source code containing the modifications.**

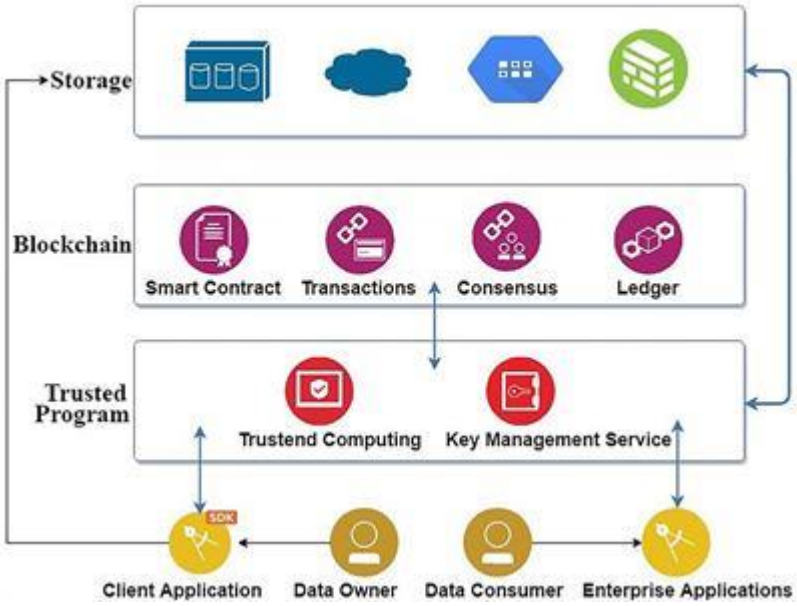
Smaller Size:

- **Ethers is an extremely lightweight library. It's only 77 KB compressed and 284 KB uncompressed.**

ENS Compatible:

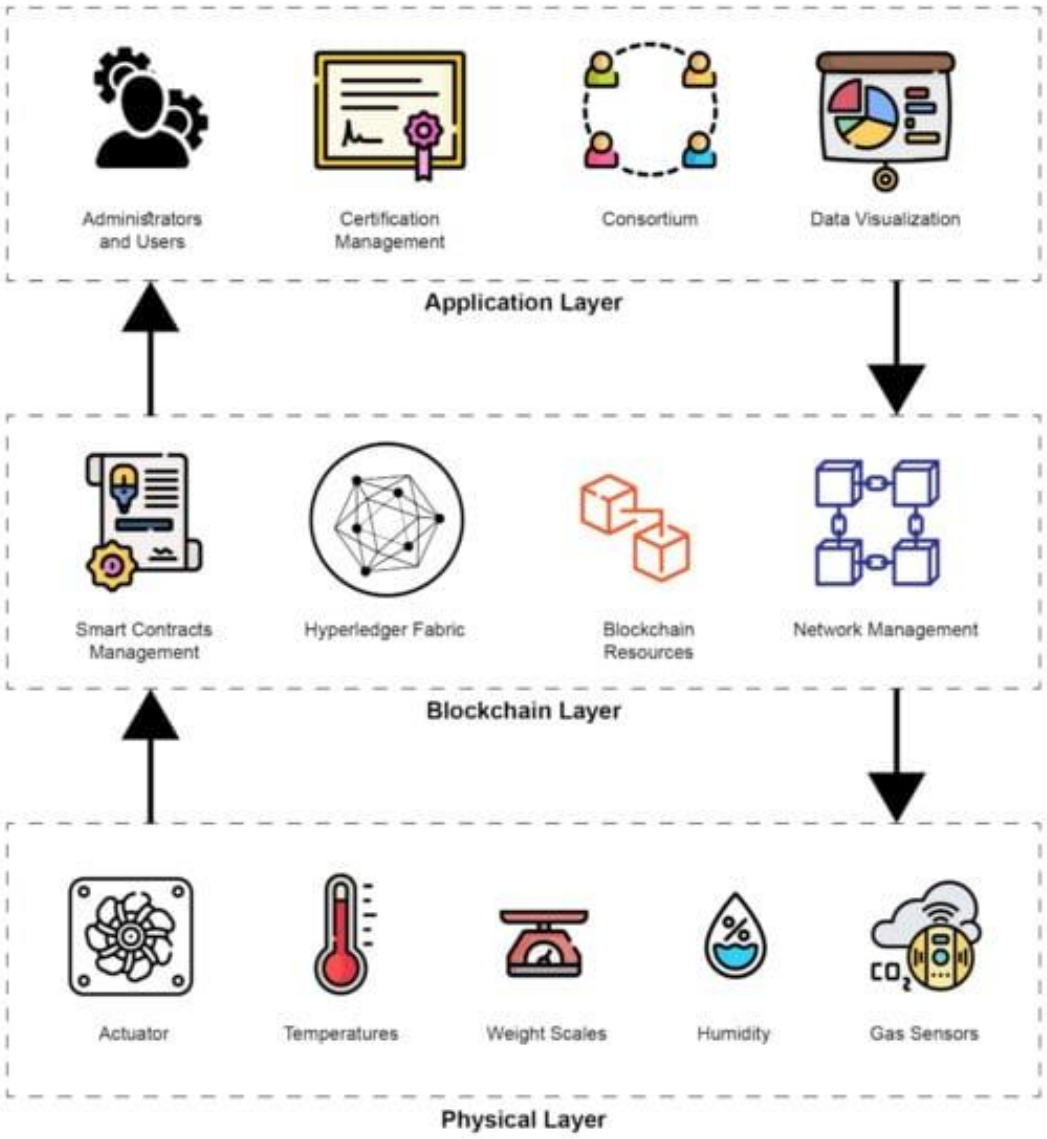
- **Ethers knows how to parse ENS domain names by default.**

- **Therefore, you can replace a hexadecimal address with a .eth domain without any extra boilerplate code.**



A Large Number of Test Cases:

- **Ethers is extraordinarily well-tested, with close to 10,000 test cases; a significant chunk being written by Richard Moore himself.**
- **Ethers was a pioneer with respect to maintaining a well-tested Ethereum library (web3 has since managed to catch up to an extent)**



Conclusion:

- **Front-end libraries like ethers.js and software development kits like the Alchemy SDK make our life as developers extremely easy. Can you imagine what a pain it would be to be coding out all of our scripts in raw JSON-RPC.**

So, web3 developers use front-end libraries that work to abstract the lower level away from them so that they can

focus on streamlined development. This is the flow typical of web3 dApps:

flow