

Tool for Blockchain Developers

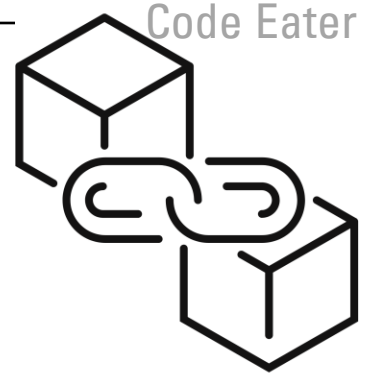
# **Truffle & Web3.js**

# Course Overview

Truffle

Web3.js

# Course Overview



What is Truffle?

Why Truffle?

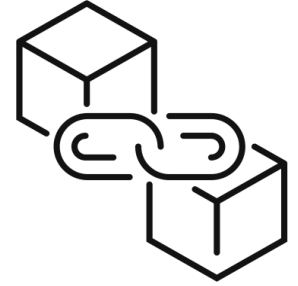
Truffle Operations

Ganache

Ethereum  
Blockchain

Deploy Dapp

# Prerequisite



Blockchain

Solidity

# What is Truffle ?

Truffle is a **tool** that helps you to easily **develop, compile, test, and deploy** your smart contract in your development environment.



**Develop**

**Compile**

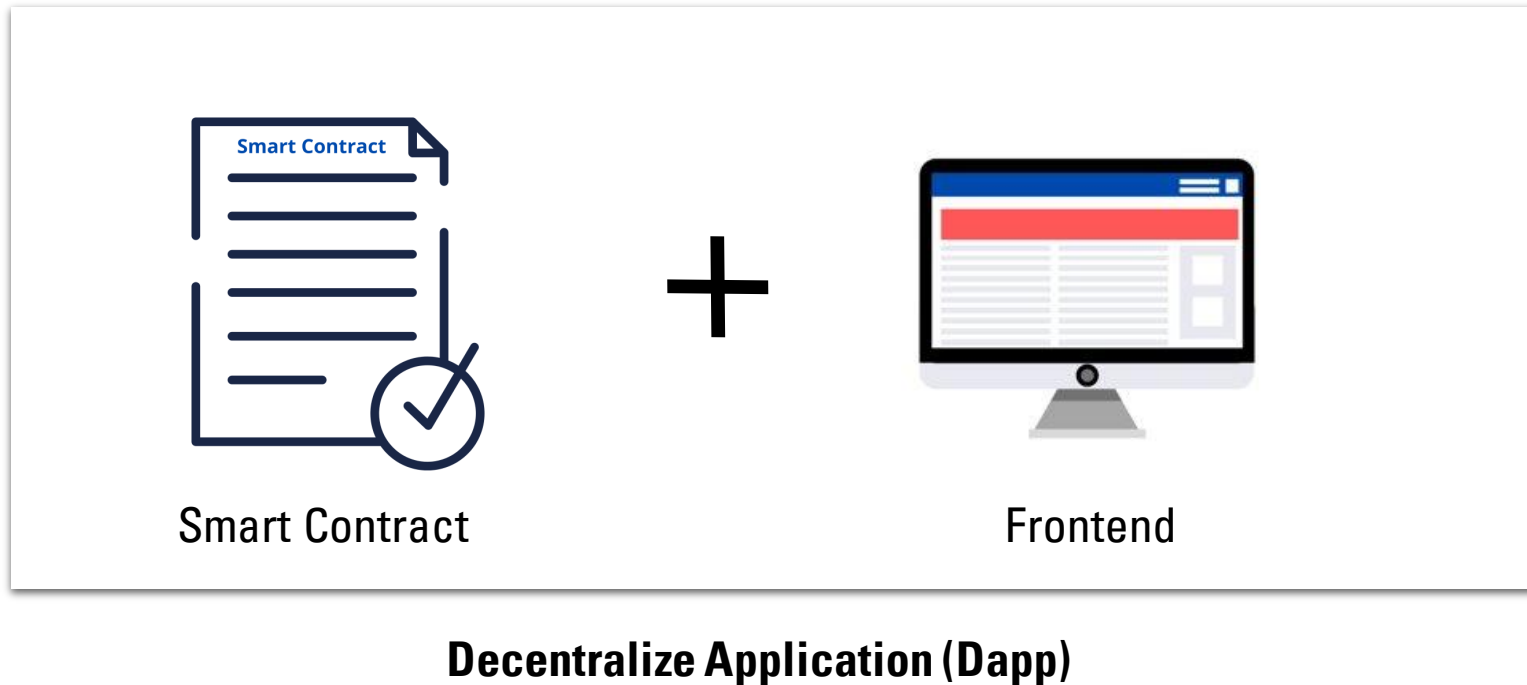
**Test**

**Deploy**

# Why to use Truffle ?

Two main reasons of using truffle -

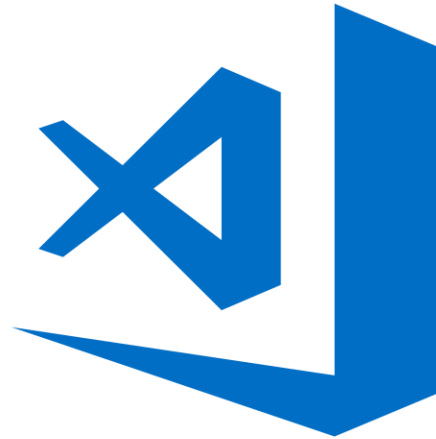
1) Easy frontend integration -



# Why to use Truffle ?

Two main reasons to use truffle -

2) Everything at one place -



**Vs Code**

# Installation

Prerequisite -

1) Node JS

2) Git

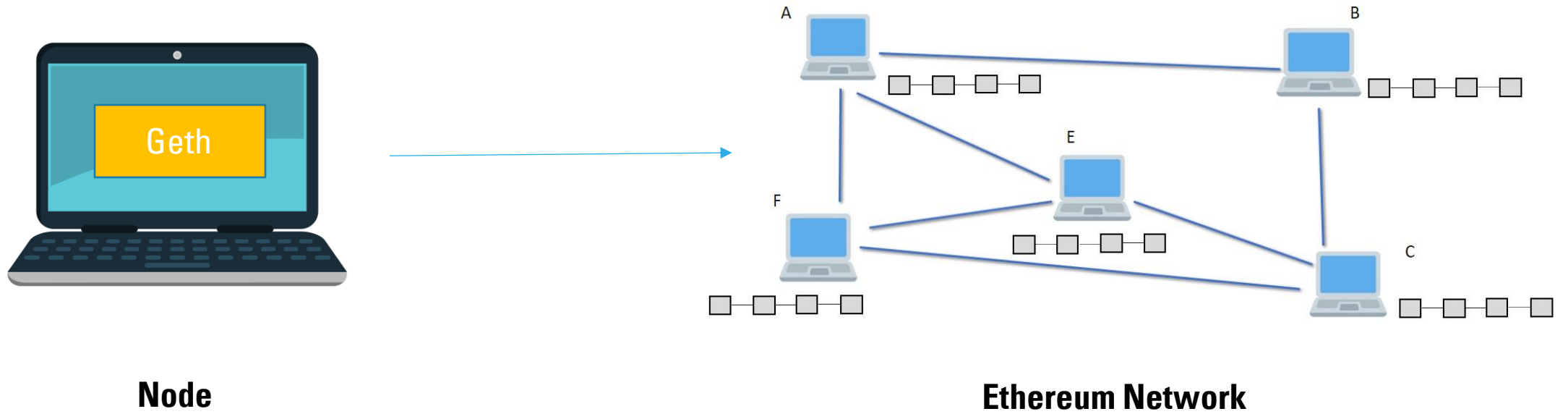
3) VS code



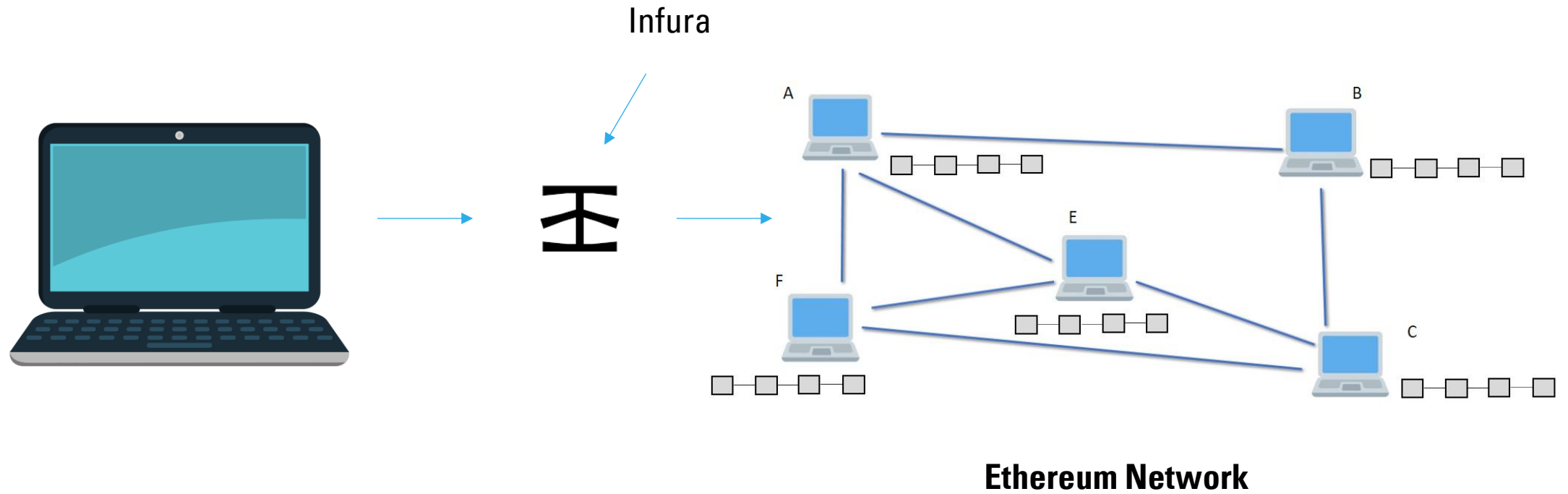
# What is Ganache ?

Ganache is a **local blockchain simulator** with the help of which you can run a **local blockchain on your system.**

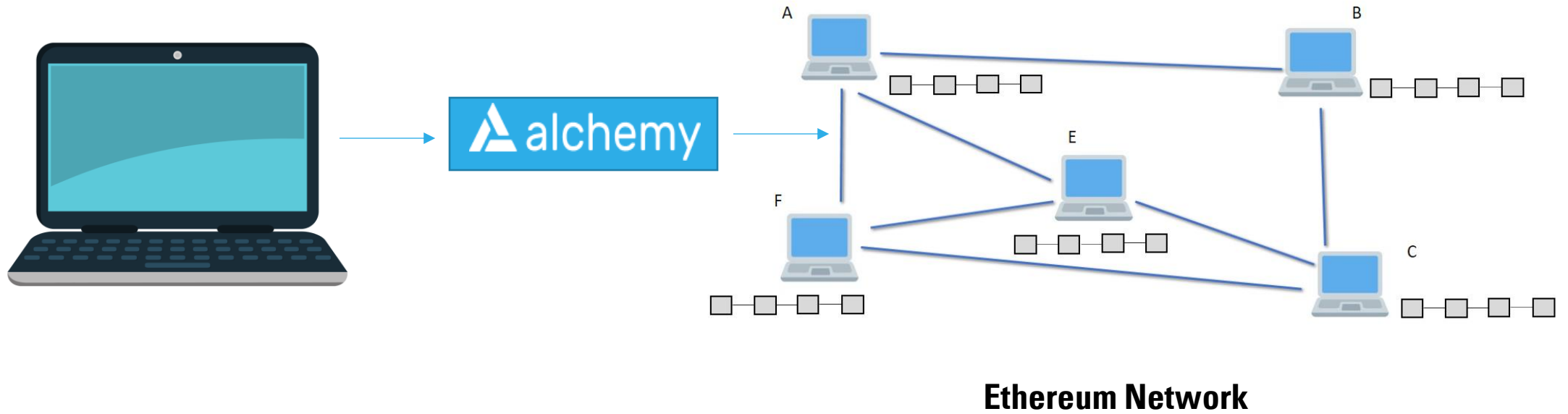
# Blockchain Deployment



# Blockchain Deployment



# Testnet Deployment



# Ganache Vs Testnet

Ganache	Testnet
Centralized system.	Decentralized System.
Migration time is less.	Migration time is more like mainnet.
Not reliable for final testing of Dapp.	Reliable for final testing.



**METAMASK**



*Signature*

# METAMASK

# What is web3.js ?

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- web3.js is a collection of libraries which allow us to interact with a local or remote Ethereum node.

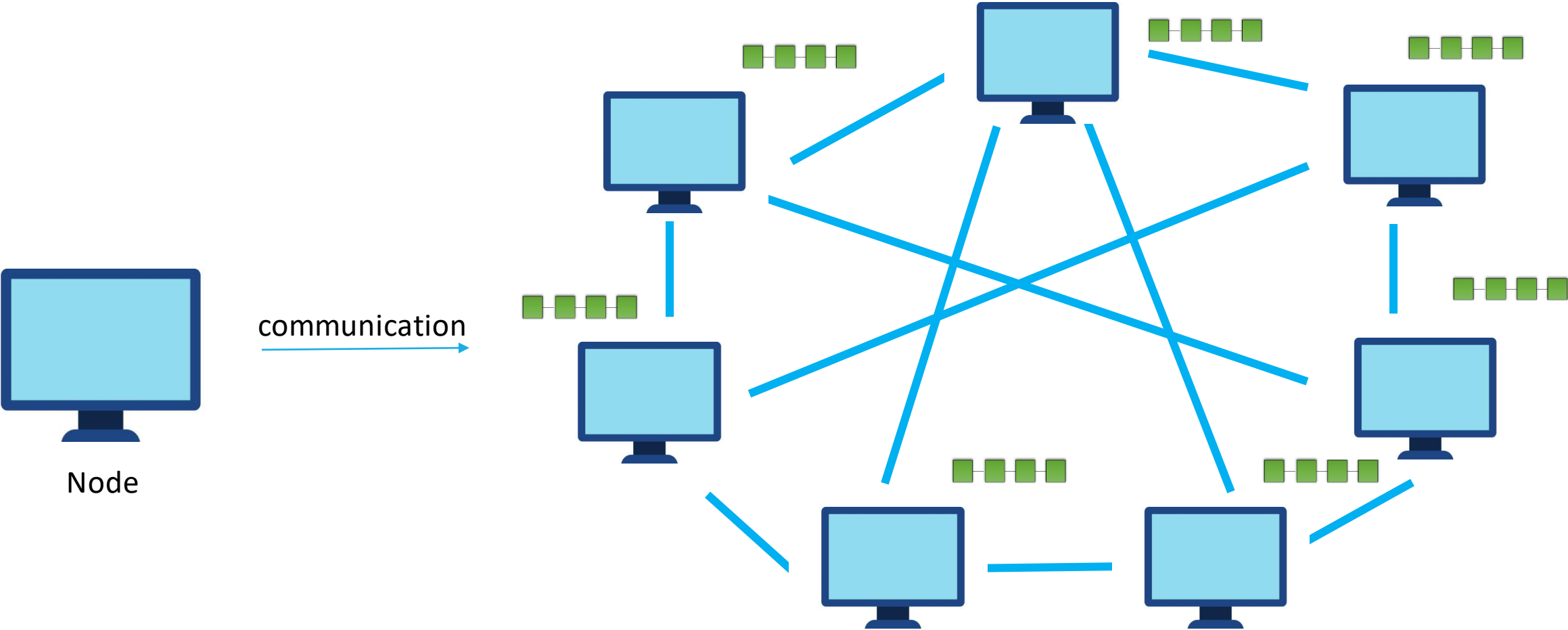


# Prerequisite

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JavaScript

Solidity



Ethereum Blockchain Network

## Real World



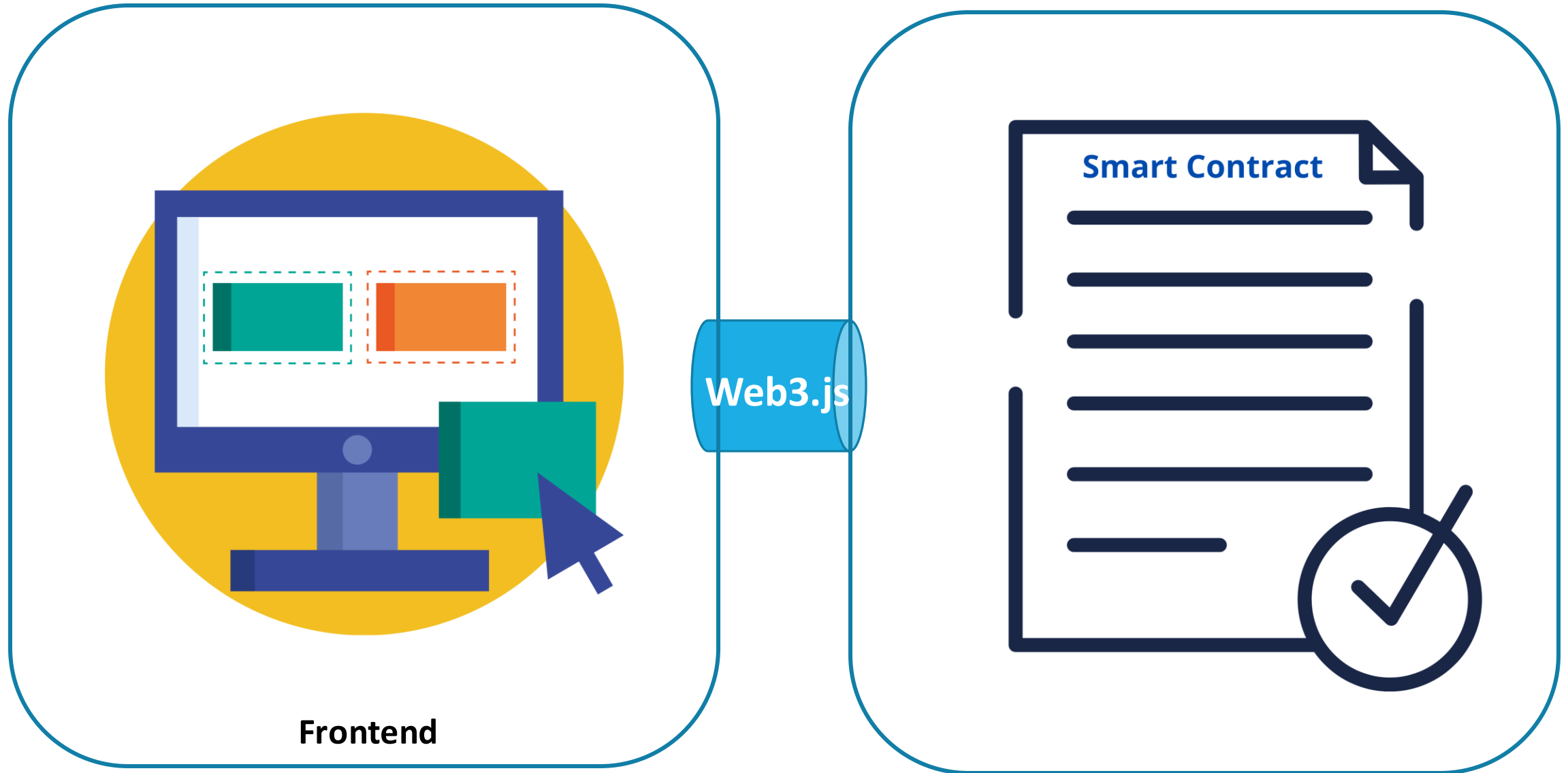
Frontend

## Blockchain World



## Real World

## Blockchain World



# Web3.js Overview

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What is web3.js ?

Connect to  
Blockchain

Type of modules

Interact with  
Smart Contract

# What is web3.js ?

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- web3.js is a collection of libraries.
- It allow us to interact with a local or remote Ethereum node.
- In order to interact with Ethereum node it uses HTTP, IPC or WebSocket.

# web3.js

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The web3.js library is a collection of modules that contain functionality for the ethereum ecosystem.

- **web3-eth** is for the ethereum blockchain and smart contracts.
- **web3-utils** contains useful helper functions for Dapp developers.
- **web3-shh** is for the whisper protocol, to communicate p2p and broadcast.
- **web3-bzz** is for the swarm protocol, the decentralized file storage.