UniLayer

**The Next Generation
Decentralized Trading Platform**

UNILAYER

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1.0

The UniLayer platform is a next-generation decentralized trading platform built on top of UniSwap

UniLayer is a second layer solution built on top of UniSwap that leverages UniSwap's liquidity pools.

UniSwap, at its core, is a fully decentralized protocol that allows for a fully automated liquidity provision system on Ethereum. More specifically it is a simple formalized equation, which drives unstoppable liquidity for thousands of users and many applications.

Uniswap runs on the Ethereum blockchain and allows for decentralized token swaps.

While other protocols use the traditional order book model, Uniswap pools token into smart contracts and users trade against these liquidity pools.

Liquidity pools are Uniswap's decentralized liquidity solution which allows anyone to take part in them and be rewarded for supplying the liquidity.

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Adding liquidity to an ERC20 also requires an equivalent value of ETH to be deposited.
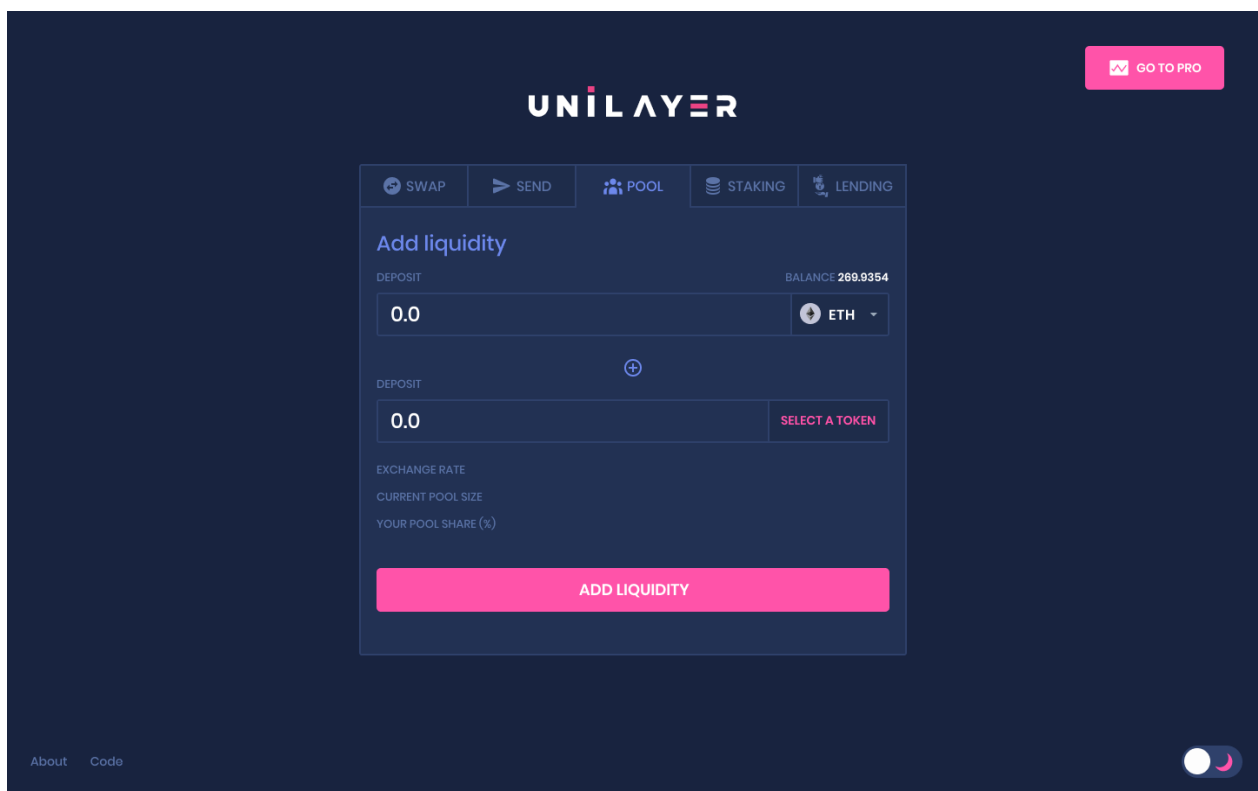
In other words, you need to deposit 50% of the value in ETH and 50% value ERC20.

Anyone has the ability to swap tokens, add tokens to a pool in order to earn fees, or list a token on Uniswap.

These traders can exchange Ethereum tokens on Uniswap without having to trust any person or institution with their funds. This platform introduces option for traders to lend their crypto to special reserves called liquidity pools.

By providing money to these pools, they earn fees.

Ethereum is the second-largest cryptocurrency platform by market capitalization which features a decentralized open-source blockchain that offers smart contract functionality.

UniSwap Third Party Support

UniSwap have streamlined the process for websites and mobile apps to connect and interact with the protocol with their JavaScript SDK that provides APIs for the major functions of trading and managing liquidity.

Thorough Audits: Reliable Base Code

UniSwap V2 smart contracts have been audited by Consensys Diligence, a subsidiary of ConsenSys, who are major contributors to Ethereum's ecosystem. As a result, risk of bugs and successful attacks aimed at UniSwap have been minimised. For this reason Unilayer will be very secure and reliable, and built upon verified code.

UniSwap Is Growing Fast

UniSwap have over $132.6 million of value locked in liquidity pools, with that figure growing on a weekly basis. Their Info Dashboard provides real-time stats on liquidity and volume, and all metrics are currently spiking.

Due to this, UniLayer offers specific features for high-level trading through the use of LAYER utility tokens, which focus on automating swaps and effective liquidity management and flash staking, charts, and analytics much more.

The LAYER token intends to facilitate transactions made on UniLayer, where all of the fees are transferred to a single token pool.

About 92% of fees are distributed to stakers of the platform in addition to liquidity providers to the ETH/LAYER liquidity pool, with the other 8% going to the foundation as a reserve fund.

In other words, Unilayer is an application that offers advanced trading features to Uniswap, which trading veterans have come to expect from traditional centralized exchanges.

2.0

How UniLayer Improves Trading over UniSwap

Uniswap offers two different types of contracts: the exchange contract and factory contract.

The exchange contract holds a pool of a specific token and ether that a user can swap against, while the factory contract allows the creation of new exchange contracts and the registration of an ERC20 token address.

There are no listing fees involved for adding a token to Uniswap/Unilayer.
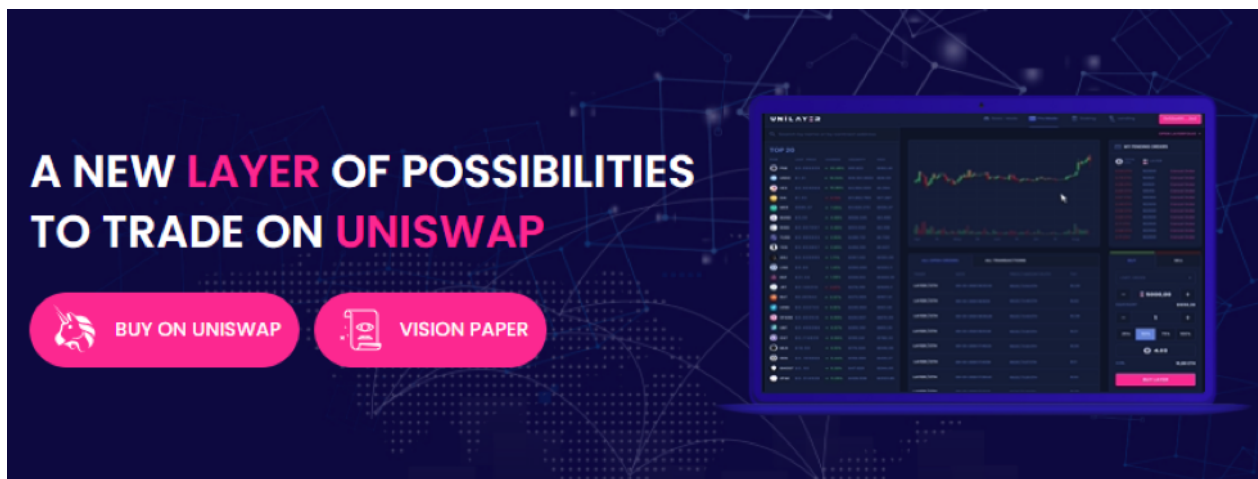
UniLayer builds upon Uniswap and offers streamlined token swaps and access to liquidity pools, which gives it a secure and reliable infrastructure.

UniLayer improves on UniSwap's on-chain token swaps and decentralized liquidity pools by introducing trade automation tools and new token economics on top of the fundamental building blocks supporting UniSwap, while leveraging its on-chain infrastructure.
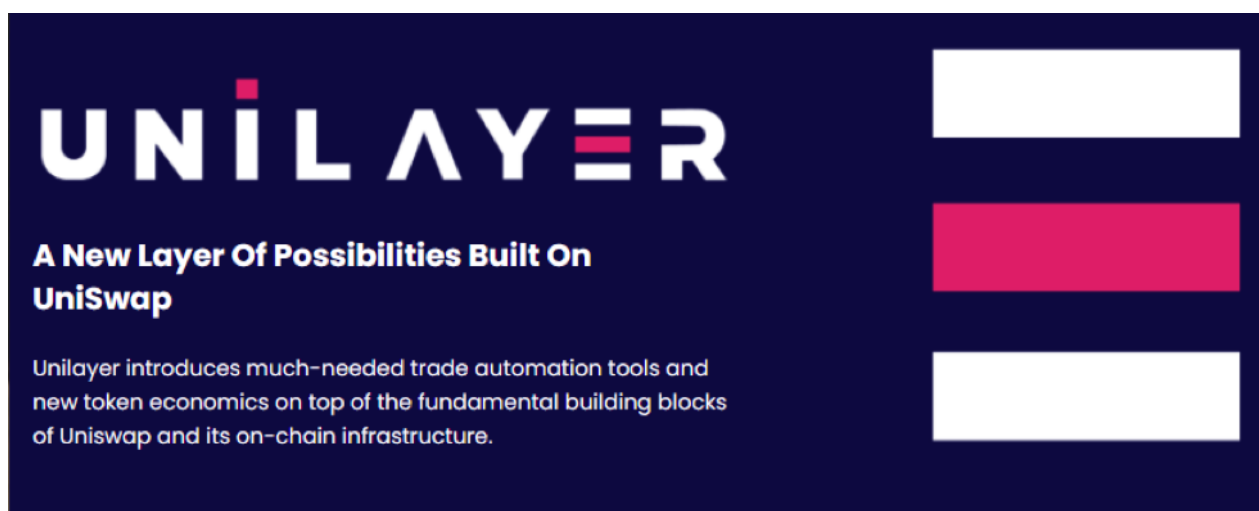
By taking advantage of UniSwap's foundation, UniLayer has tools that are already built-in and run alongside the advanced feature set that elevates it to an entirely new level.

In other words, UniLayer takes advantage of the Ethereum's UniSwap protocol to make on-chain token swaps and decentralized liquidity pools possible while also providing a comprehensive set of tools that are specifically tailored to the needs of traders who decide to use the technology on top of the DeFi ecosystem.

The UniLayer web application provides a simplistic interface that connects to UniSwap APIs and allows traders to trade and move assets securely and reliably.

You can send tokens to an external wallet in a single transaction after a swap is made, all from a user interface (UI) you will be instantly familiar with.

3.0

Level of Third Party Support for UniSwap
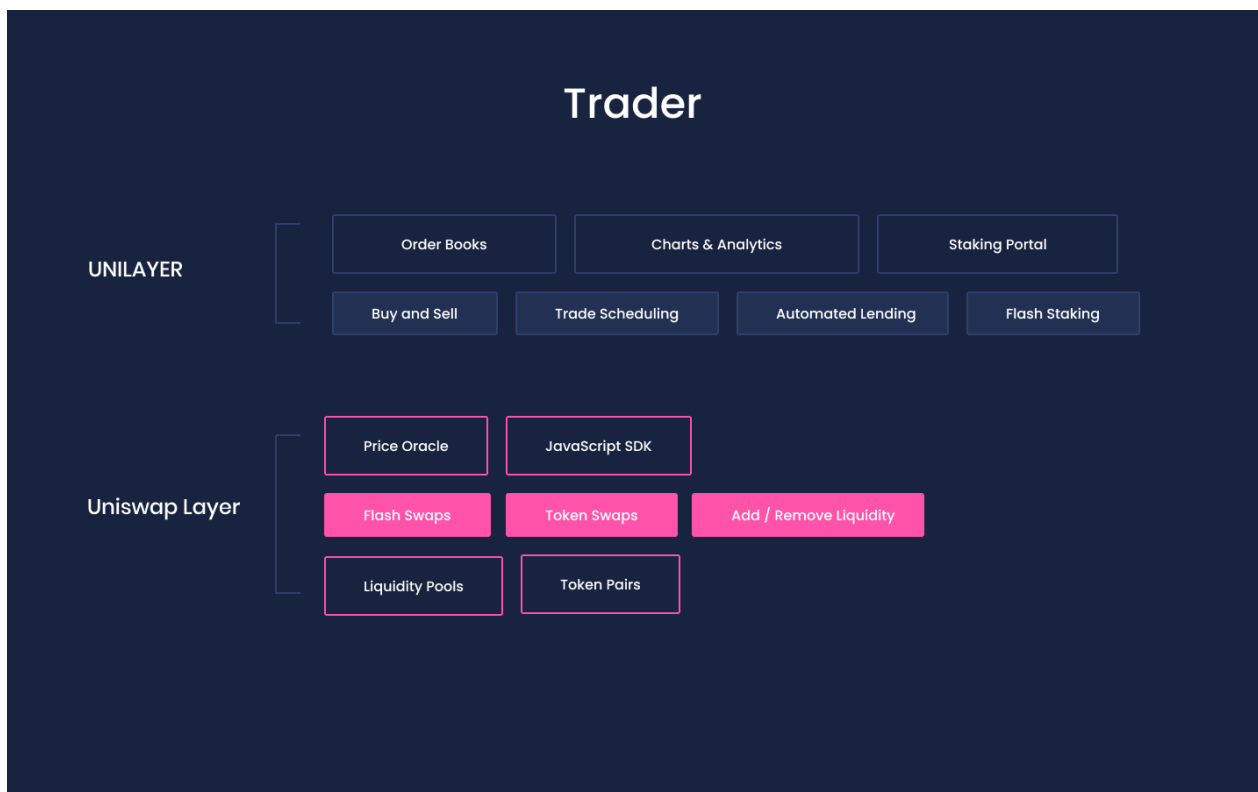
The way UniSwap works has enabled a lot of online websites and applications to adapt, connect and interact with the protocol quickly through the use of the JavaScript SDK, which provides APIs for the functions of trading and managing liquidity as a whole.

UniSwap uses many apps that are already pre-integrated into their own ecosystem, such as:

- **Switcheo Exchange**
- **Streamr Marketplace**
- **The Agent Wallet**

While there are many more, these are just a few examples of why it makes sense to build UniLayer on top of UniSwap.

The SDK is regularly maintained with source code that is fully transparent and easily accessible by just about anyone, through platforms such as GitHub.

How does this scenario translate into the real world?

In basic terms, developers have the freedom to publicly audit the code and increase their level of security by fixing potential backdoors or overall vulnerabilities.

At the other end of the spectrum, decentralized applications based on smart contracts can communicate with Uniswap directly. This means that the apps can use their smart contracts, which are on-chain, to communicate with one another.

This approach can cover both centralized and decentralized applications.

UNILAYER AS A DECENTRALIZED PLATFORM

What does "decentralized" mean exactly?

It means that UniLayer is on-chain. In other words, all of the cryptocurrency transactions that occur on the blockchain and the records of the blockchain remain dependent on the state of the blockchain for their validity.
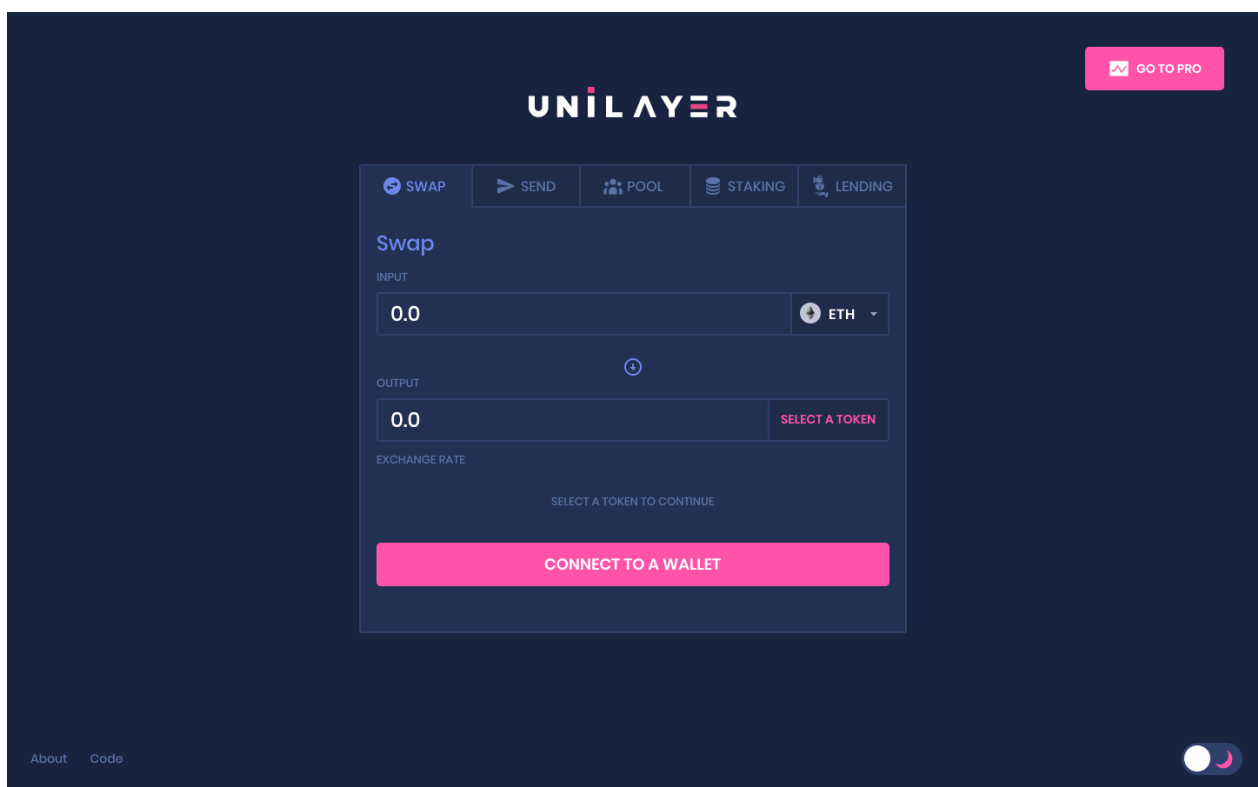
People that use cryptocurrencies always prefer the services to be trustless and not controlled by any person(s) or interest group.

So UniLayer is based on decentralized technology, which the Ethereum blockchain brings to the table.

4.0

Features of UniLayer

UniLayer has plenty of features that build upon the Uniswap system.

Each and every trade needs to be managed by a easy to use UI, and this is where UniLayer shines, as it monitors the on-chain state for liquidity as well as token values and exchange rates while initiating real-time feeds to the UniLayer APP where automated trading can be initiated.

Uniswap is a platform that does indeed offer a mechanism through which you can swap tokens. However it does not offer the ability for you to queue up orders based on specific token prices.

You can only manually execute trades while using Uniswap.

That being said, another feature that UniLayer brings to the table is the ability to execute trades when a token price reaches a specific value.

As a user, you can target specific price movements and initiate a trade which will be executed without your manual input.

What streamlines things even further is the scheduling feature which executes trades at specific times directly to the Uniswap platform.

You can easily use Unilayer through Metamask or any WEB3 supported wallet.

UniLayer trading platform referral program, you can have your own referral code and earn a % of the fees collected for each person you refer for LIFE.

5.0

Taking Lending Management to the Next Level Through Automation

Lending is the process of loaning digital assets through crypto exchanges with an interest rate.

Liquidity is the ease at which an asset can be exchanged without affecting the price of that asset. A trader needs to get transactions completed quickly and has to ensure that the process is cost-effective.

Building upon the foundations of lending liquidity, through UniLayer you can automate the process of adding or removing liquidity into a pool once a key metric is reached based on your specific preferences.

This particular feature of UniLayer gives you access to either time-based or value-based breakpoints which have the ability to trigger the pull of your tokens out of the pool.

The Liquidity commission's back-end is managed by Uniswap for which the current commission rate per trade is at 0.3%.

**This share is calculated based on the share of the token pool your tokens represent.**

6.0

Live Charts
and Analytics

UniLayer features price charts that are integrated directly into the dashboard depending on what traders want to see.

You can track an asset overall performance, volume, liquidity with our easy to use analytics tool built in the UniLayer platform.

Furthermore, they will be fed directly into the charts and the analytics that are designed to be quick and efficient.
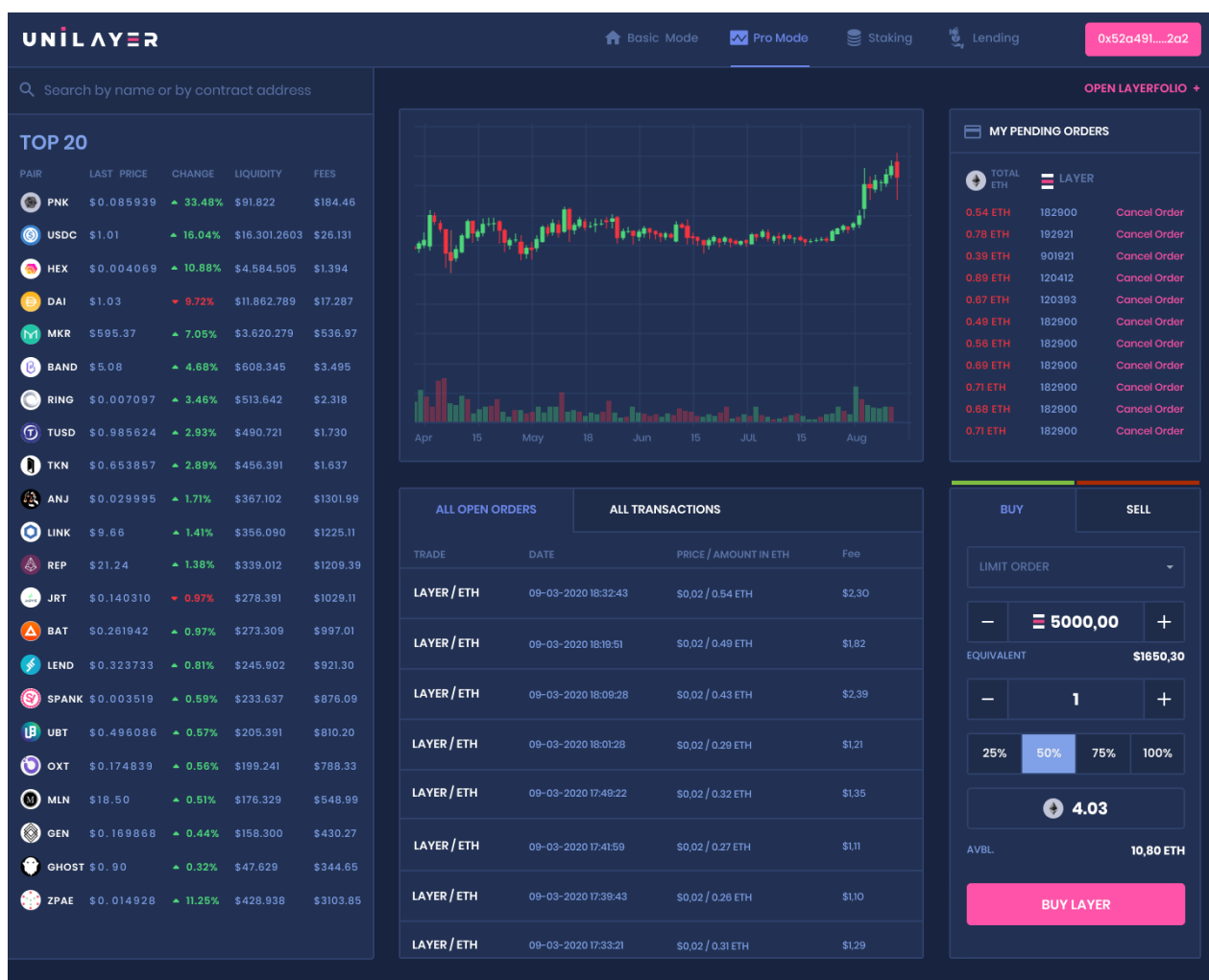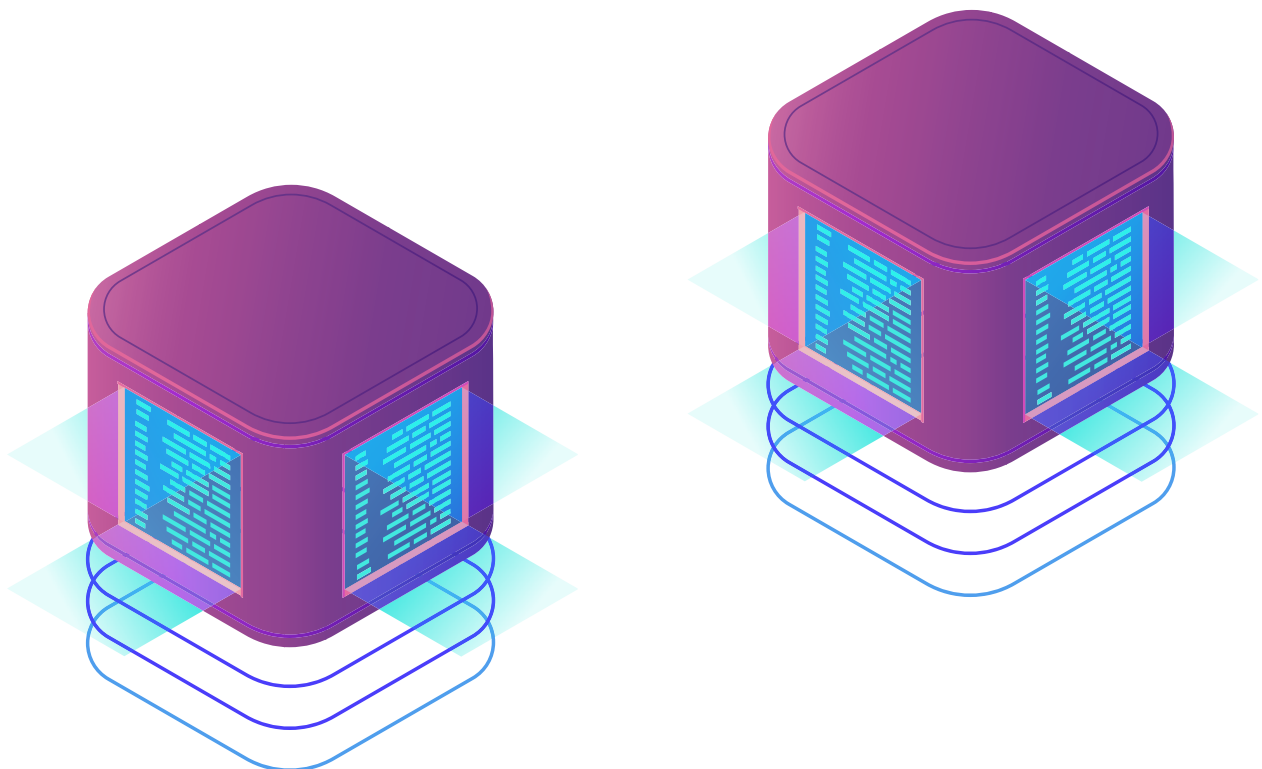
7.0

Flash Staking Through the Layer Token

What is Flash Staking?

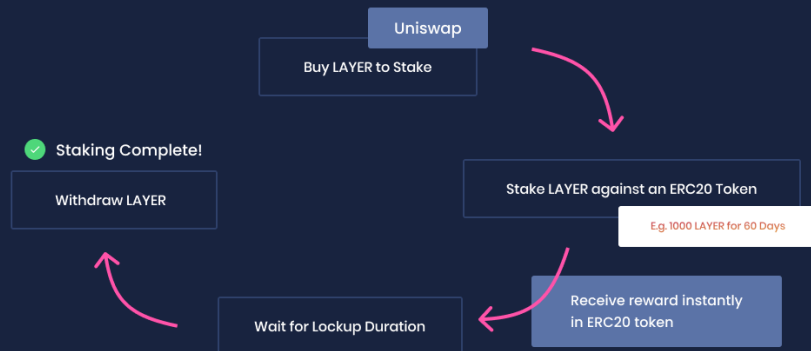Flash staking refers to the process of promoting the trading activity of a token by increasing the token value over time and rewarding stakers.

As a staker, you are rewarded the full amount instantly upon locking your stake for a certain period of time.

You have the ability to choose how much LAYER you would like to stake against an ERC20 token as well as to schedule the time period through which the LAYER will be locked.

Unilayer Flash Staking Model

Uniswap
Buy LAYER to Stake

✓ Staking Complete!
Withdraw LAYER

Stake LAYER against an ERC20 Token

E.g. 1000 LAYER for 60 Days

Receive reward instantly in ERC20 token

Wait for Lockup Duration

The process of instant-flash staking on Unilayer

The benefits of flash staking on the UniLayer platform are that you receive ERC20 tokens rewards instantly just by having your LAYER tokens locked in a smart contract for a set period of time usually 30 days or more, the longer you stake the more rewards that you can claim instantly.

The XIO Flash Staking Formula has been a welcomed inspiration for the UniLayer flash staking system through its unique, simple yet brilliant, streamlined staking model.
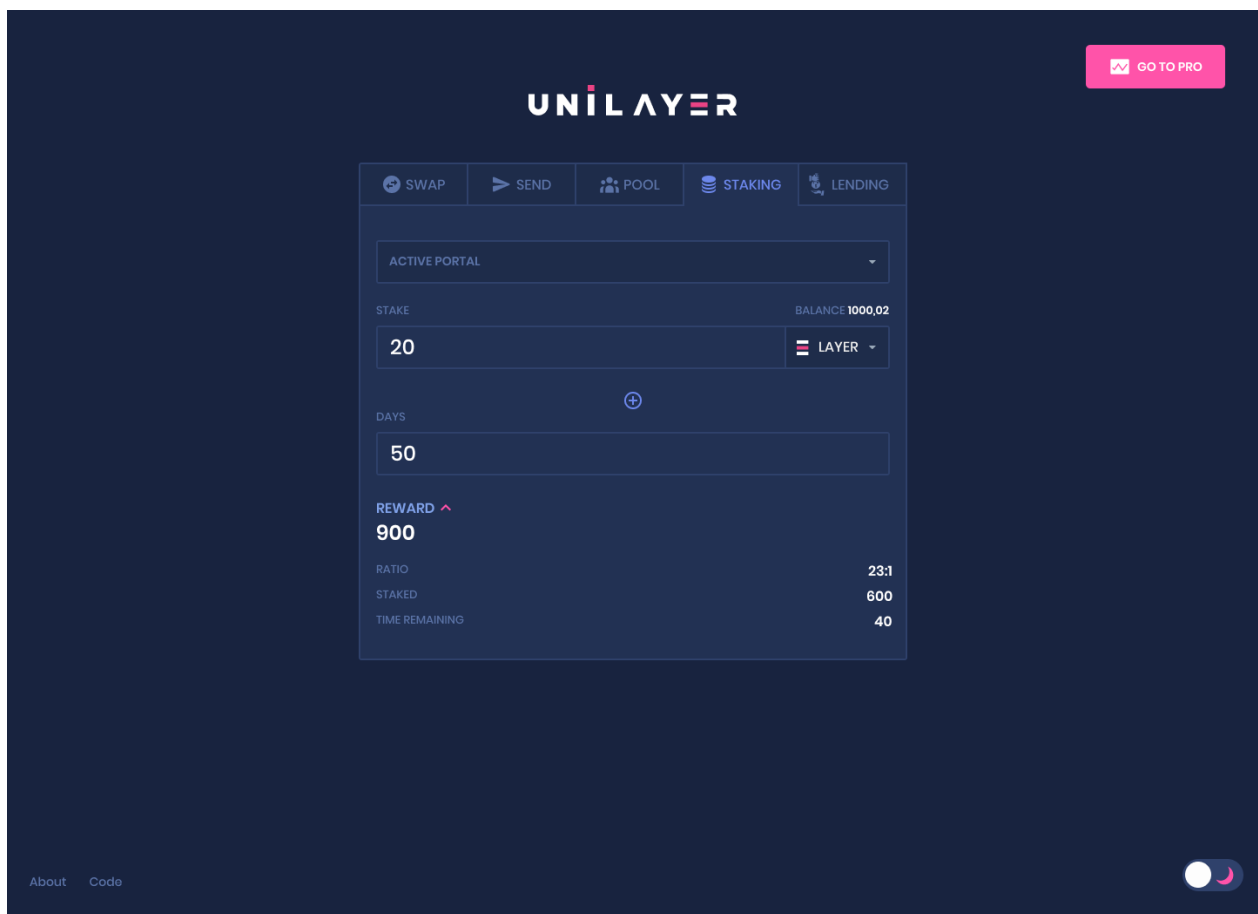
The Ability to Set up a Staking Portal for a Specific Token

Flash staking can give any token start-up value.

UniLayer allows any user to open a Staking Portal in which the user can set up specific staking terms such as the total amount of ERC20 tokens the user is willing to distribute as staking rewards and the minimum as well as the maximum number of LAYER which can be staked per single wallet address.
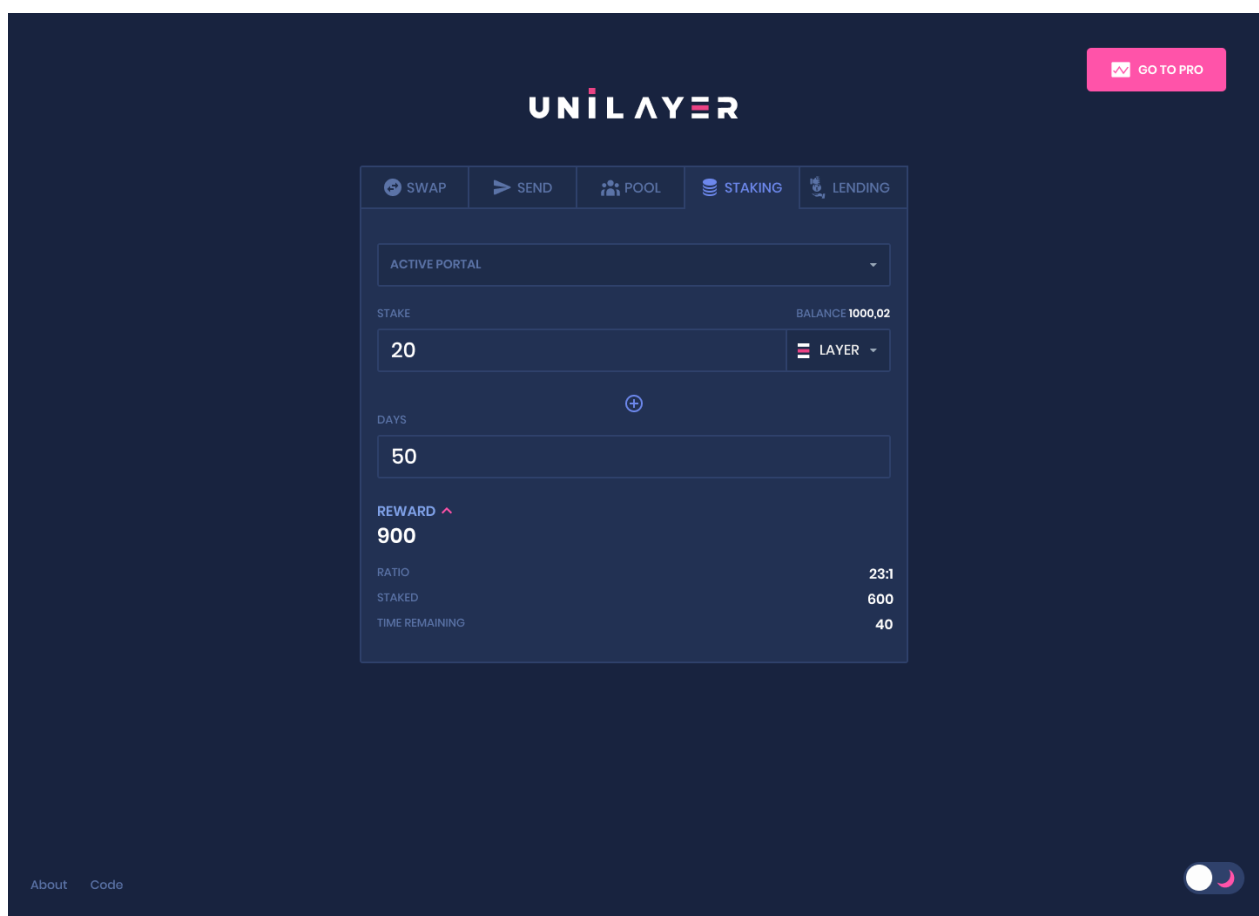
The Fees involved with a Staking Portal

If any user wants to open a Staking portal, there is a fee involved, and the user has two options on how to pay this initiation fee. It can be done either by paying with ETH or you can pay 50% less if you use LAYER as a payment method.

92% of all collected staking portal fees will go into a pool ETH/LAYER which will be airdropped to people who are staking LAYER.

What Are Some of the Risks?

Users should keep in mind that locking up tokens for a certain period of time has its downsides. A missed opportunity may occur when you want to sell your LAYER tokens in the event of an upswing in its price.

Users can also receive penalties for withdrawing a staked LAYER prematurely as the instant reward is based on the idea of you staking your LAYER for a full preset period of time. If a user happens to withdraw the token halfway through the duration of the process, they will end up losing 50% of their staking reward value from the staked LAYER.

8.0

The UniLayer Launchpad

The Launchpad is an automation tool for new crypto projects to gain the necessary funding they need in order to develop their project successfully and efficiently in the way they want to for their specific users.

The following are some ineffective ways that crypto projects are currently using to raise funds:

1)   Transferring funds directly to ETH addresses and waiting for the team to retrieve the tokens. While this method may seem effective, it has a lot of risks involved because in order for it to be successful, you need to trust the team behind the project and their ability to deliver the end result.

2)   Transferring ETH to a smart contract through smart contract mint tokens using their fallback function is a less risky approach. However, the ETH raised is not locked in and it is initially sent to a wallet directly controlled by the team itself.

3)   Buying directly from a pre-setup Uniswap pool is an approach highly influenced by bots, and users commonly get burned because of it.

4) Through the use of Initial Exchange offerings, teams have to set up several limit orders and users have the ability to buy the orders directly on the exchanges. This approach is highly dependent on centralized exchanges and uses ICO based smart contracts. ICO or an Initial Coin Offering is the cryptocurrency industry version of an Initial Public Offering or IPO. ICOs act as a way to raise funds and are used when a company is looking to raise money in order to create a new coin, application, or service.

UniLayer's Launchpad is bringing a mixed solution combining all of the methods mentioned above to offer OTC locked Liquidity on Mint.

ICO Smart Contracts are small, decentralized applications that facilitate transactions on a blockchain and are open and transparent to everyone. Because of this public transparency, they can provide assurance to investors that their money will not be stolen or misused, while facilitating direct transactions without a middleman.

To increase the level of confidence within the community, new projects usually lock team tokens and are using part of the funding to add liquidity to the Uniswap platform. Afterward, they lock it up to give investors peace of mind, knowing that the tokens are safe while also giving them an initial liquid market to trade their tokens in.

The result of this structure is an increased level of confidence in traders who can invest even via anonymous teams because the tokens are locked and the chance of exit scams is extremely low.

Even though this is the case, this system needs a trustless way to initialize all of the steps instead of relying on the teams.

UniLayer is bringing a mixed solution combining all of the methods mentioned above to offer OTC locked Liquidity on Mint.

The way the launchpad smart contract works is by allowing users to send ETH to a smart contract that will mint the ERC20 token but it will not send the tokens for a period of 24 hours, that way there is enough time to setup a timelock liquidity pool with the desired initial price.
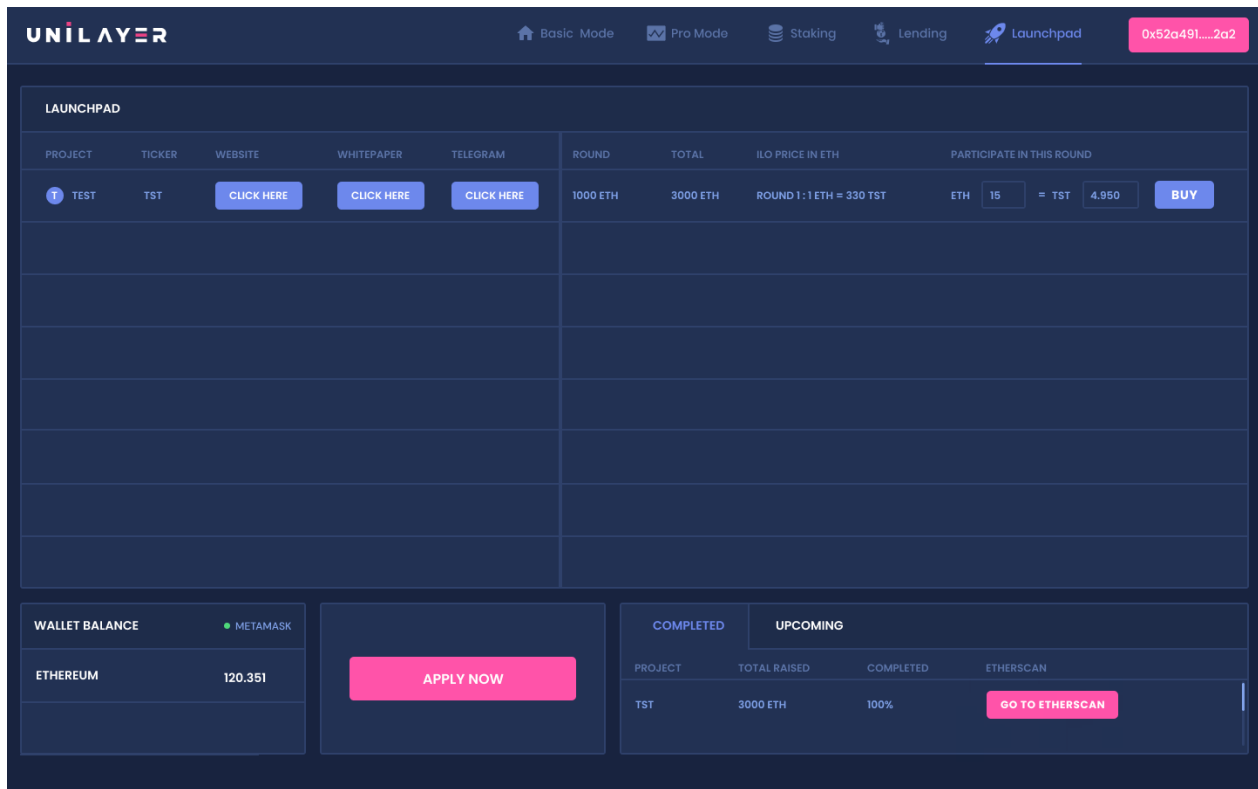
This all happens in a verified way and is done in a trustless environment.

In this way, all new crypto projects that decide to use the Unilayer Launchpad have a pre-generated smart contract that sets up liquidity pools on Uniswap automatically before sending the ERC20 tokens out. The initial price is decided by the team.

The fees for using the Unilayer launchpad are the following:

- **4% of the ETH raised will be taken as a fee to use the launchpad platform**

- **1% of the ETH raised will be distributed to all the users staking LAYER on the platform**

9.0

Token Allocation

- **OTC Pre Sale – The token amount that was sold during the private sale, commonly at 37.5%.**

- **Liquidity and Development – A percentage of the tokens will be added to Uniswap's LAYER and ETH pool, commonly at 37.5%.**

- **Team – Locked and vested on a monthly basis contract for a period that can last for 12 months, commonly at 12.5%.**

- **Audits, Marketing and Development – Soft locked to be used for marketing promotions and security audits, commonly at 12.5%.**
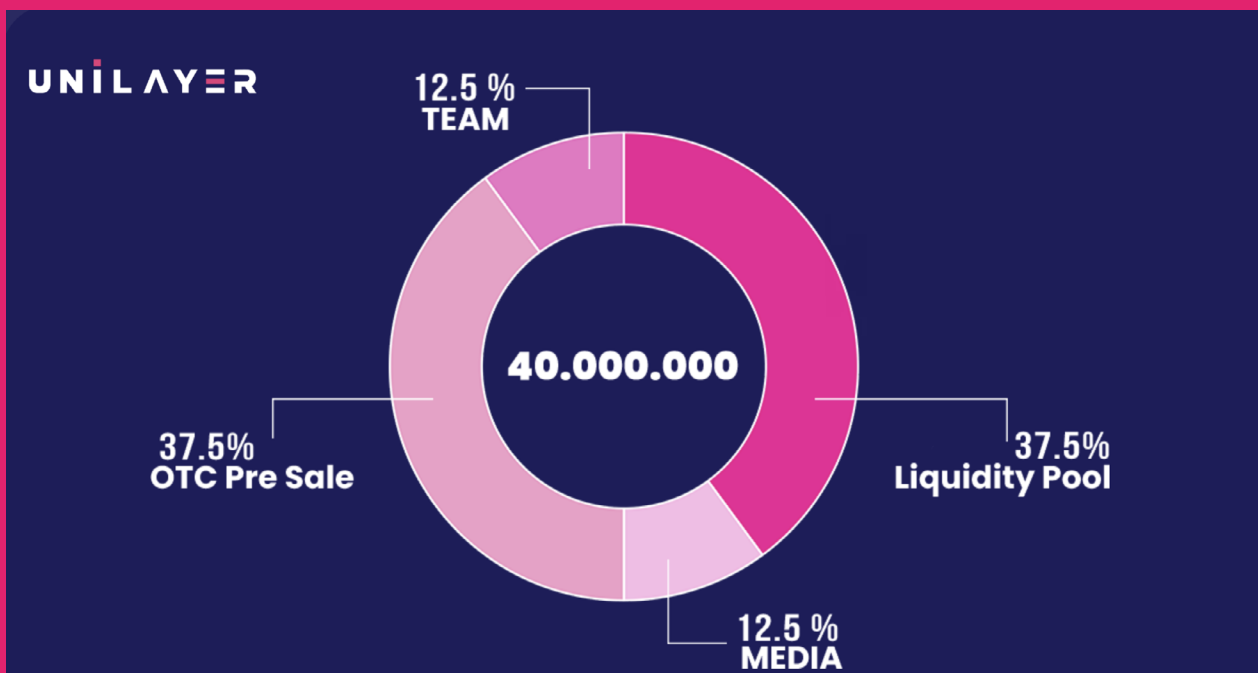
How All of This Works

UniLayer brings a new layer of possibilities to trade on Uniswap, with features that appeal to just about any enthusiast in the market.

As a decentralized trading platform based on Uniswap, it enables key features for professional-level trading with its LAYER utility token and focuses on automated swaps and liquidity management, as well as flash staking, charts, analytics, live order books and a lot more.

This platform will truly revolutionize the way people trade and is a welcome addition for anyone who is serious about leveraging on-chain infrastructure.

The UniLayer Roadmap

When it comes to the roadmap, in early August of 2020, the UniLayer frontend and UI prototype was released along with a website launch.

After that, in the middle of August of 2020, the Vision paper release occurred and LAYER token distribution happened shortly after the OTC sale and Uniswap exchange listing.

On the 20th of August in 2020, the frontend development for the UniLayer platform began.

On the 28th of August, the Technical Whitepaper was released.

In late September of 2020, the UniLayer beta launch happens, while later in September the UniLayer App Security audit from all well-known 3rd parties will be implemented.

In October of 2020, the full launch of UniLayer occurs.

UniLayer frontend UI prototype release & website launch

Frontend development for UniLayer platform begins

UniLayer beta launch

UniLayer full launch

Early Aug 2020

Mid Aug 2020

20th Aug 2020

28th Aug 2020

Late Sept 2020

Sep 2020

Oct 2020

Vision paper release. LAYER token distribution shortly after OTC sale & Uniswap exchange listing

Technical whitepaper

UniLayer App security audit from a well know 3rd party

10.0

Architecture

Ethereum in Brief: Ethereum[1] is a global, open-source platform for decentralized applications. It enables value transfers between users in a trustless way via the ETH[2] cryptocurrency. Ethereum is a blockchain[3], providing trustless operations and byzantine fault tolerance. Ethereum provides programmable smart contracts[4] which can execute arbitrary, immutable code when the conditions of the contract are met.

UniSwap s in Brief: UniSwap[5] is a set of smart contracts and by extension a DeFi[6] application, which sits on top of the Ethereum blockchain (as infrastructure). It enables users to exchange one ERC20[7] token (a cryptographic token created on the Ethereum blockchain, following a certain standard) for another such token or ETH, using an algorithmically determined exchange ratio. This transaction is accomplished via the UniSwap liquidity pools[8], where users can provide liquidity to those trading pairs in exchange for a small fee on each trade.

UniLayer is a Decentralized Finance (DeFi) solution, a set of smart contracts, sitting on top of the Ethereum Blockchain (as infrastructure) and operating on UniSwap (as code logic) by providing users with an extensive toolset for automating their trading and liquidity operations on UniSwap. UniLayer will leverage the UniSwap Software Development Kit (SDK)[9] for its implementation.
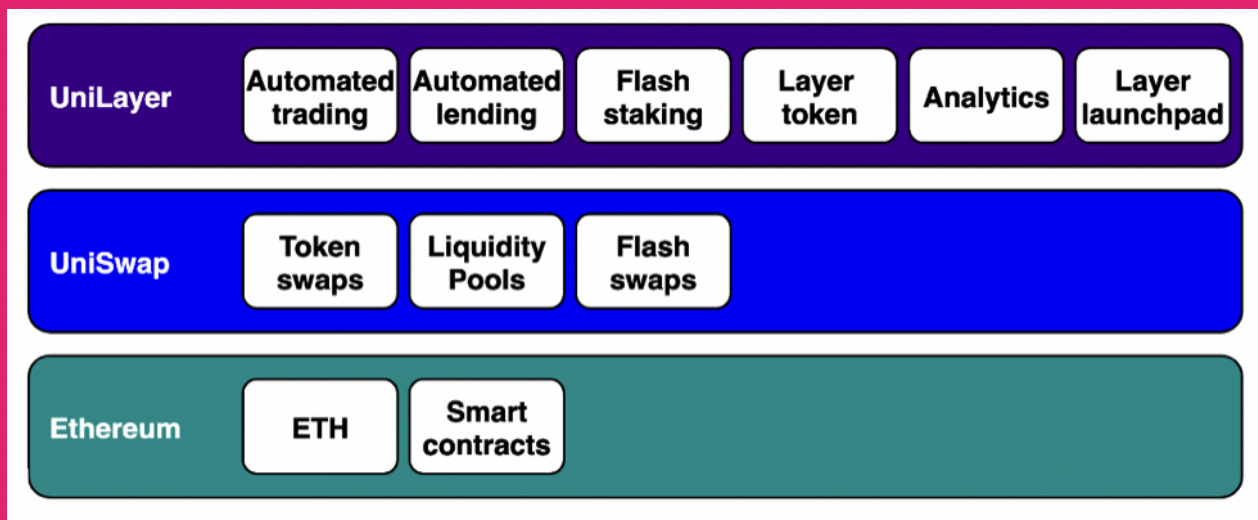
The entire technological stack of the solution is a fully decentralised, trustless, infrastructure managed by smart contracts on top of which additional applications can be built.

11.0

UniLayer
Key features

Layer token: The layer token (LAYER) is an ERC20 utility token[10] which ties all the components of the UniLayer contract together. LAYER is used for governance[1] and payment of fees and integrates with several system features such as staking[1].

Platform users will benefit from a 50% discount on all fees paid in LAYER.

Automated trading: UniLayer's automated trading is a solution build on top of UniSwap's Token swaps. It allows users to execute trades on UniSwap protocol when a set of pre-defined criteria are met. Those criterias can include:

- Price triggers
- Time triggers

Automated lending: By introducing time and price triggers, UniLayer essentially enables a Live Order Book (something not present on UniSwap) which taps into UniSwap's liquidy. At the same time, UniLayer provides liquidity to UniSwap via the automated lending feature.

- Price triggers
- Time triggers
- Liquidity amount triggers
- Liquidity ratio triggers

Lending is performed via UniLayer's own liquidity pool, where users share among themselves the profit from UniSwap's commission (0.3% per trade currently), based on the amount of liquidity which they have provided to the pool. As an example, say user X has 20% of the liquidity within UniLayer's liquidity pool, he would be eligible for 20% of all proceeds that the UniLayer protocol earns by its liquidity operations. Given that the UniSwap fee reward is currently 0.3%, this means that user X would receive 0.06% of all trade volume that was executed using UniLayer liquidity.

Flash staking: Flash staking enables LAYER token users to stake their LAYER tokens for a prede-fined amount of time and receive rewards back in the form of a percentage of all fees collected on the platform. Overall, 92% of all fees collected will be distributed back to the community in the form of rewards for stakers and liquidity providers on the LAYER/ETH[2] UniSwap liquidity pool. The remaining 8% goes into the UniLayer Foundation reserve.

The proportion of the reward that each user receives will be determined by coin age[3] [12]. Coin age is calculated by multiplying the number of days the coins have been held as stake by the number of coins that are staked.

Stakers are rewarded the full reward amount instantly upon staking — a stark contrast to conventional staking models that reward users only overtime to secure a blockchain network.

Flash staking serves as a double-incentive appreciation mechanism for LAYER. It enables platform users to receive regular cash-flows from other users on the platform, while simultaneously reducing the total amount of LAYER in circulation.

Layer launchpad: [4] The launchpad provides an alternative to the traditional ICO/STO/IEO[13] fundraising, by adding an additional smart contract layer, on top of any ERC20 token which wishes to have a token sale. The function of this smart contract is:

The functions of this smart contract are:

- Team tokens are locked with a vesting period as insurance against exist scams

- ETH deposited to the token sale smart contract will automatically mint the ERC20 tokens and get sent to the sender address.

- Released ETH will be divided between a UniSwap liquidity pool for the project token, the team and UniLayer fees. All of this is executed by a smart contract, without the need to trust a third party. The project team will not be able to unlock all of the funds, because between 20% and 30% of the liquidity will be automatically locked (depending on estimated project risk) ??? of them will be dedicated to liquidity in UniSwap, further reducing the risk for investors.

- Investors can vote to dissolve the project (with votes proportional to their investment amount) and get partially the invested funds back partially if the majority decides that the team is not accomplishing its goals.

- LAYER token holders that are either staking or holding in the Launchpad platform will get first priority on all Launchpad sales.

- There is a 5% fee for using this Launchpad platform. 4% of the ETH raised will be taken as a fee to use the launchpad platform. 1% of the ETH raised will be distributed to all the users staking LAYER on the platform This fee will get deducted automatically by the smart contract and sent to an external address.
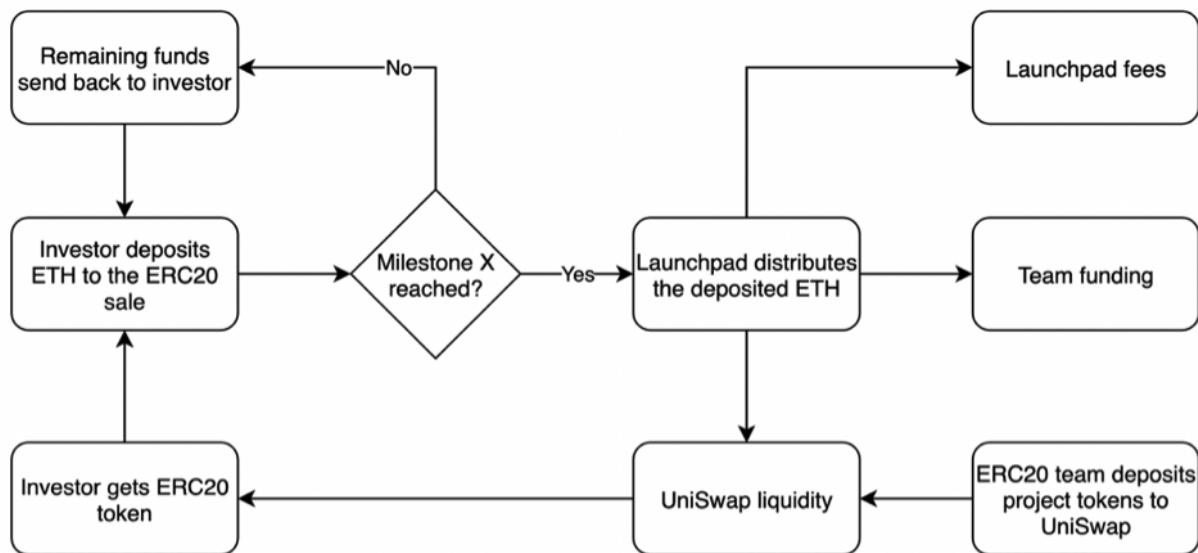
UniLayer analytics: All of the functionalities described above will be accessible to the end-user via a state-of-the-art dashboard and intuitive user interface on the **https://www.unilayer.app/** website.
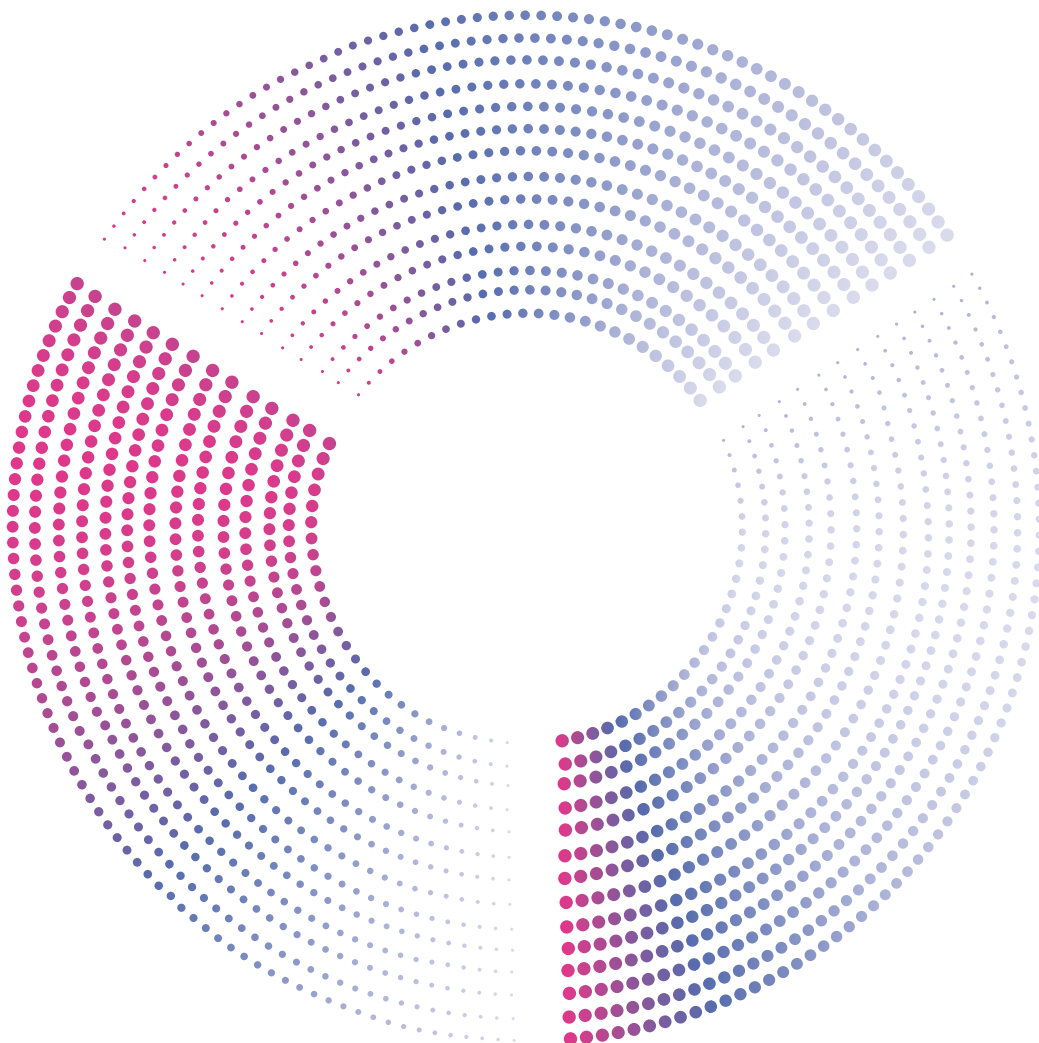
Development Approach

The UniLayer technical approach follows a standard 3-layer architecture for its applications, with a smart contract layer for the core logic, backend abstraction for some of the more complicated calculations and a frontend UI.
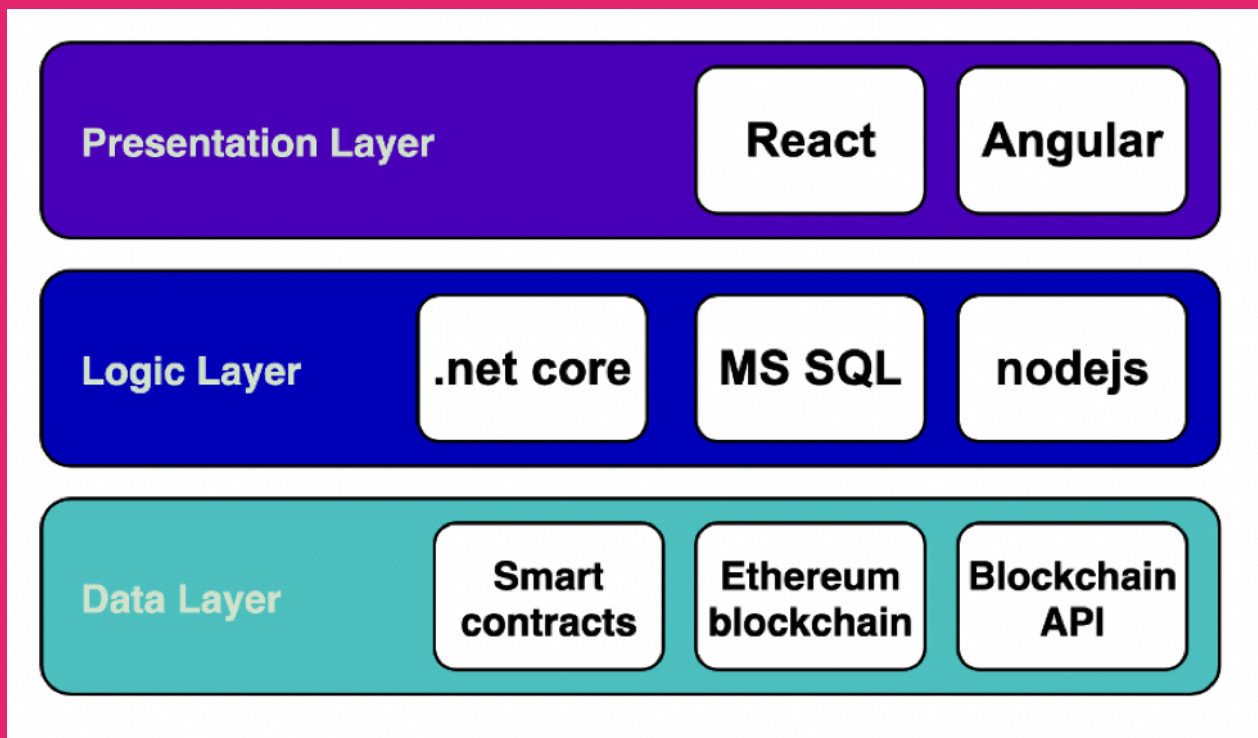
Smart contract development: The smart contracts on the system will follow the ERC20 standard (for the LAYER token) and leverage the UniSwap's SDK for the exchange and lending applications. While the ERC20 contract will be immutable, the others will be deployed as upgradeable contracts with logic updates as needed.

All smart contracts will be deployed and tested initially on the Ropsten Ethereum test network.

Backend: Backend will be developed in .net core, ms-sql, nodejs and will leverage an Ethereum blockchain API such as Infura. The main functionalities will include:

- **User management**

- **Admin functionality management**

- **Development for UniSwap management**

- **Listing of assets and tokens**

- **Payments management**

Frontend and UI: It will provide users with access to live order books, real-time price charts and analytics. Furthermore, it will enable users to monitor the transactions of the underlying smart contracts, execute trades and manage their wallets. Other functionalities include the adding of new assets, a comment section and historical transaction browsing.

12.0

Short Overview of ERC20 Token

An ERC20 token is a blockchain-based asset with similar functionality similar to bitcoin, ether, and bitcoin cash: it can hold value and be sent and received. The major difference between ERC20 tokens and other cryptocurrencies is that ERC20 tokens are created and hosted on the Ethereum blockchain, whereas bitcoin and bitcoin cash are the native currencies of their respective blockchains. ERC20 tokens are stored and sent using Ethereum addresses and transactions and use gas[14] to cover transaction fees[15].

Technically speaking ERC-20 is a technical standard or standard interface used in Ethereum blockchain to create tokens using smart contracts.

Each ERC20 Smart contract consists of five mandatory functions and two mandatory events, which define the standard. Through them, all contract execution is managed. The contracts can also inclue additional functions and events specific to the use case of the contract.

5 Functions:

- **function approve()**
- **function allowance()**
- **function totalSupply()**
- **function transfer()**
- **function transferFrom()**

2 Events:

- **event Transfer**
- **event Approval**

A more detailed explanation and history of the ERC20 standard can be found here - https://eips.ethereum.org/EIPS/eip-20

[1] https://ethereum.org/en/
[2] https://coinmarketcap.com/currencies/ethereum/
[3] https://www.investopedia.com/terms/b/blockchain.asp
[4] https://www.investopedia.com/terms/s/smart-contracts.asp
[5] https://uniswap.info/home
[6] https://consensys.net/blockchain-use-cases/decentralized-finance/
[7] https://eips.ethereum.org/EIPS/eip-20
[8] https://medium.com/@finematics/how-do-liquidity-pools-work-defi-explained-6d3418ea71fa
[9] https://github.com/Uniswap/uniswap-sdk
[10] https://en.bitcoinwiki.org/wiki/Utility_token
[11] https://www.blockchain-council.org/blockchain/staking-in-blockchain-here-is-what-you-need-to-know/
[12] https://en.wikipedia.org/wiki/Proof_of_stake#Coin_age-based_selection
[13] https://www.pwccn.com/en/financial-services/publications/introduction-to-token-sales-ico-best-practices.pdf
[14] https://support.blockchain.com/hc/en-us/articles/360027772571

[15] https://support.blockchain.com/hc/en-us/articles/360027491872-What-is-an-ERC20-token-

UNILAYER