# Whitepaper Blackbullswap

Blackbullswap is a decentralized exchange which runs on Avalanche, uses the same automated market-making model as Uniswap, features a native governance token called BBULL that is distributed to community and is capable of trading all tokens issued on AVAX/OTHER Tokens and Avalanche. In a crowded marketplace with multiple contenders, Blackbullswap offers critically important benefits on the DeFi Ecosystem:

- Secure and cheap trades
- Community involvement
- fair token distribution

First, Blackbullswap can finalize trades quickly and cheaply. Blackbullswap is built on Avalanche, it enables users to swap assets while enjoying sub-second transaction finality and transaction fees as low as a few cents. Oftentimes, trades on Blackbullswap will feel as fast as trades on centralized exchanges.

Second, the native governance token, BBULL, enables the community to involve in the development of the product.

Third, Blackbullswap features a 100% community-focused token distribution model, meaning the main part of tokens are distributed directly to the community.

Users of existing AMMs, such as Uniswap and Pancakeswap, are already familiar with their mechanism of action. Therefore, the rest of this post does not discuss how Blackbullswap achieves its trading capabilities.

#### **Features AMM**

### **Swaps vs Transfers**

Blackbullswap have functions that return purchased tokens to the buyers address.

This functions allow buyers to make a trade and then immediately transfer purchased tokens to a recipient address.

## **Providing Liquidity**

## **Adding Liquidity**

Adding liquidity requires depositing an equivalent value of AVAX/OTHER TOKENS and ERC20 tokens into the ERC20 token's associated exchange contract.

The first liquidity provider to join a pool sets the initial exchange rate by depositing what they believe to be an equivalent value of AVAX/OTHER TOKENS and ERC20 tokens. If this ratio is off, arbitrage traders will bring the prices to equilibrium at the expense of the initial liquidity provider.

All future liquidity providers deposit AVAX/OTHER TOKENS and ERC20's using the exchange rate at the moment of their deposit. If the exchange rate is bad there is a profitable arbitrage opportunity that will correct the price.

#### **Liquidity Tokens**

Liquidity tokens are minted to track the relative proportion of total reserves that each liquidity provider has contributed. They are highly divisible and can be burned at any time to return a proporitonal share of the markets liquidity to the provider.

The number of liquidity tokens minted is determined by the amount of AVAX/OTHER TOKENS sent to the function.

Depositing AVAX/OTHER TOKENS into reserves requires depositing an equivalent value of ERC20 tokens as well.

### **Removing Liquidity**

Providers can burn their liquidity tokens at any time to withdraw their proportional share of AVAX/OTHER TOKENS and ERC20 tokens from the pools.

AVAX/OTHER TOKENS and ERC20 tokens are withdrawn at the current exchange rate (reserve ratio), not the ratio of their originial investment. This means some value can be lost from market fluctuations and arbitrage.

Fees taken during trades are added to total liquidity pools without minting new liquidity tokens. Because of this, tokens Withdrawn include a proportional share of all fees collected since the liquidity was first added.

### **Liquidity Tokens**

Blackbullswap liquidity tokens represent a liquidity providers contribution to an AVAX/OTHER TOKENS ERC20 pair. They are ERC20 tokens themselves and include a full implementation of EIP-20.

This allows liquidity providers to sell their liquidity tokens or transfer them between accounts without removing liquidity from the pools. Liquidity tokens are specific to a single AVAX/OTHER TOKEN ERC20 exchange. There is no single, unifying ERC20 token for this project.

#### **Fee Structure**

- AVAX/OTHER TOKENS to ERC20 trades
  - o 0.3% fee paid in AVAX/OTHER TOKENS
- ERC20 to AVAX/OTHER TOKENS trades
  - o 0.3% fee paid in ERC20 tokens
- ERC20 to ERC20 trades
  - 0.3% fee paid in ERC20 tokens for ERC20 to AVAX/OTHER TOKENS swap on input exchange
  - 0.3% fee paid in AVAX/OTHER TOKENS for AVAX/OTHER TOKENS to ERC20 swap on output exchange
- Effectively 0.5991% fee on input ERC20

There is a 0.3% fee for swapping between AVAX/OTHER TOKENS and ERC20 tokens. This fee is split by liquidity providers proportional to their contribution to liquidity reserves. Since ERC20 to ERC20 trades include both an ERC20 to AVAX/OTHER TOKENS swap and an AVAX/OTHER TOKENS to ERC20 swap, the fee is paid on both exchanges. There are no platform fees.

Swapping fees are immediately deposited into liquidity reserves. Since total reserves are increased without adding any additional share tokens, this increases that value of all share tokens equally. This functions as a payout to liquidity providers that can be collected by burning shares.

Since fees are added to liquidity pools, the invariant increases at the end of every trade.

#### **Custom Pools**

### **ERC20** to Exchange

Our functions convert ERC20 tokens to AVAX/OTHER TOKENS and attempts an AVAX/OTHER TOKENSToTokenTransfer at a user input address. This allows ERC20 to ERC20 trades against custom Blackbullswap exchanges that do not come from the same factory, as long as they implement the proper interface. Custom exchanges can have different curves, managers, private liquidity pools, FOMO-based ponzi schemes, or anything else you can think of.

#### **BBULL Governance**

A big part of the value proposition of BBULL's governance is that it is highly community-driven. Blackbullswap governance will be live five months after launch and will enable several key actions, including:

### Modifications to the liquidity pools

Initially, the distribution of tokens will be entirely through the liquidity mining pools listed in the previous section. The liquidity mining period will remain active until the pools are altered or another community initiative is accepted as a formal governance proposal. Proposals may add and subtract liquidity mining pools or may allocate BBULL directly to a user or smart contract such as a community treasury.

#### Fee switch

The community will also have the ability to enable the Blackbullswap fee switch. This fee switch can divert .05% of all swap fees to a designated address. Swap fees will remain fixed at .30%, but liquidity providers will only receive at most .25% of these fees. This provides the community with the opportunity to acquire extra funds to support any significant community initiatives. The Blackbullswap fee switch is subject to a 90-day timelock delay and is disabled by default.

# In continuous development

Blackbullswap is developing Farms and Staking products to offer our community so that they have more resources to profit from their tokens. We are currently developing Farms and Staking for implementation and we are in the beta phase of products for Lending and Borrow tokens.

We are also developing products related to ERC721 NFT tokens. We are developing an NFT marketplace where we will publish our own "Mad Blackbulls" collection and where we will introduce financial products related to NFT tokens (collateral, lending and borrowing) and

we are already talking with NFT video game developers to start the development Play-to-Earn based on NFT video games.

We firmly believe that the merger of both tokens, ERC20 and ERC721, will allow our community to benefit from the profitability of their tokens.

In a first phase, we will begin with the development of our farms and staking pools to provide our community **the** profitability in the most immediate way.

In a second phase, we will begin in parallel with the completion of the beta status of our lending and borrowing products, moving to the production status, while we will **finish** the development of our NFT marketplace, currently under development.

In a third phase we will start the implementation of DeFi Gamification to incorporate fun and game-related ways to earn more tokens. In this phase, games such as Lotteries and Coin Predictions will be implemented so that our community has more fun and less technical ways to earn tokens and thus make their stay at Blackbullswap profitable.

In a fourth phase, we will begin the development of NFT video games to integrate them with our NFT marketplace. Part of the promotion of the NFT marketplace and to encourage artists, we plan to launch an AirDrop for authors of NFT collections, in this way we will financially support creative artists and expand the NFT space in Avalanche, which today is an Oasis compared with Ethereum, Polygon and Solana. We want Avalanche to also be a benchmark in the NFT world and for our community to be the first to benefit from it.

At the same time, our development team will integrate the main blockchain networks (Polygon, Binance and Ethereum) into our DeFi platform.

At the end of the fourth phase we would like to have these items:

- Farms and Staking in Production
- Lending and Borrowing, Marketplace NFT in Production
- DeFi Games in Production
- Marketplace NFT right position in Production
- Video Game NFT in Production

- Two Video Games NFT in Development
- Collateral, Lending and Borrow NFT in Development
- Integration with other Chains (Polygon, Binance and Ethereum)
  in Beta

#### **Avalanche C-Chain**

In the summer of 2020, we discovered the limits of the then-current network infrastructure amidst the skyrocketing use of decentralized finance (DeFi) apps, and the equally sharp falls as liquidity shocks rang throughout. The resulting network congestion introduced untenable, systemic risks and led to liquidations not from individuals without sufficient collateral, but from individuals who couldn't fit their collateral deposit into a block on AVAX/OTHER Tokens. As avid users and believers in DeFi, we feel there must be back-ups and resources that avoid centralizing the nearly \$24B locked in DeFi protocols onto one network that is undergoing a significant, multi-year upgrade. Furthermore, we believe that such applications require deep ownership from the community, and should be highly democratic and distributed.

Blackbullswap is a response to these two critical issues that other AMMs face: subpar performance and governance controls that benefit a few large holders. With Blackbullswap, users will be able to enjoy centralized-exchange-like speeds without having to compromise access to their existing portfolio of assets and without having to give control to large insiders.

Blackbullswap