EtherFlip

EtherFlip is a provably-fair random number game that offers up Jackpots, Bonus Tokens, and a Unique ICO – Losing bets win FLIP Tokens. With a win rate of 49.21%, EtherFlip is immediately competitive.

"A Dice game with a Twist!"

Game Overview

EtherFlip is a unique dice game where the player can win Ether or multiple other Ethereum-based Tokens. In v1.5, we generate two random bytes which gives us an integer range of 0-65535. We then compare to our base integer, and if it is less than 32250, the player wins. This base translates to a win rate of 49.21% - an extremely competitive percentage on Ethereum.

For our ICO, winning bets will win ETH and losing bets will earn FLIP. In addition to simply winning ETH, there is also a chance to win:
1) House Jackpot
2) Sponsored Jackpot
3) House Bonus Tokens
4) Sponsored Bonus Tokens
5) Million Dollar Tokens

There is a transaction fee when using the Oraclize API, which is how we generate the random bytes. This transaction fee comes out of the initial bet, so when the user wins, they will win double the bet minus the total transaction fee (bet – totalFee) * 2. We have implemented a scaling house fee structure in order to support as many features as we do. The equation for the total fee, which includes the Oraclize fee:

Oraclize Fee + House Fee + (((Bet / 0.01) – 3) * Scaling Base)

EtherFlip also uses Oraclize directly so that there are fewer points of failure and less security risk. Competitors use a 3rd party to secure their random number, we keep it at 2 parties.

What Makes EtherFlip Provably-Fair?

As detailed in the Oraclize API documentation, their method of secure capture and transmit of a random number relies on a secure Ledger Nano S. A proof-verification is transmitted via the Oraclize callback after making a request for a random number, and EtherFlip then verifies that the proof-verification is valid. Once we determine its validity is true, we can then process the game. Otherwise, EtherFlip will automatically refund the player in the event of a validation error.

The following comes directly from Oraclize:

"The authenticity proof, attached with the result, can be easily verified not just off-chain but even by any Solidity contract receiving them.

The random datasource is leveraging the Ledger proof to prove that the origin of the generated randomness is really a secure Ledger device.

The CODEHASH, i.e. SHA256 of the application's binary, which is hardcoded in the smart contract as part of the verification process, can be used by anybody to ensure that the application code is really the one being executed to generate the randomness."

Market Position

We view Etheroll as our main competition in the dice game space on Ethereum. Future upcoming dice games, which we do not deem as direct competition, include those by Edgeless and EthBet. Our unique features and offerings give us a competitive edge in the dice gaming sector of Ethereum. Considering we already have a working product, we are an early mover.

Since we are able to secure our random number with less intensive calculations in our smart contract, we have room to build extra features. Other platforms may have difficulty doing so.

We move quickly and build products that work. Our previous track record in multiple engineering environments makes us well qualified to drive a top-tier, majority market share game platform on Ethereum. We plan to target the market with fun design, features that nobody else is building, and extra winnings with Jackpots and Bonuses. We will continue to bring this forward thinking edge to everything we build, and will continually expand on EtherFlip by adding new features.

The way we have structured our ICO also shows we are here to grow a product that people use. Ultimately, it is the platform with the users that is the platform that wins.
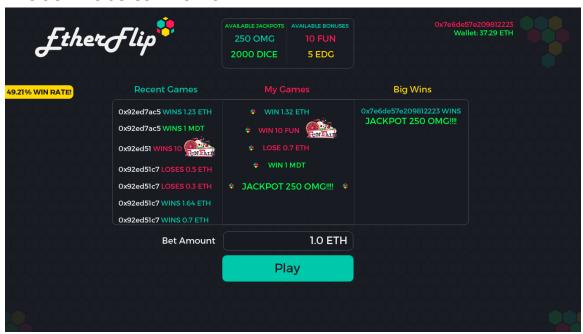
More About The Game

There are several other ways to win in EtherFlip. With the addition of Jackpots, Bonus Tokens, and MDT – a game can result in many different results. We have purposely built into our contract the ability to change out Bonus Tokens and Jackpots. When a Jackpot is hit, we can easily add new tokens and even change which token is the jackpot.

As we move towards v2.0 – the game will also get much more interesting with the inclusion of our advanced features controllable via MDT.

Web3 Website Preview

Quick Sheet – Updated 10/10/17

EtherFlip win rate: **49.21%**
Games Played During Soft-launch: **Almost 2000**

Total FLIP: **15,000,000**
FLIP to be distributed via ICO: **10,000,000**
Total MDT: **1,000**
Current Chance of winning MDT: **0.3%**

Current Max Bet: **1.0 ETH**
Current Min Bet: **0.1 ETH**
Current Oraclize Fee: **0.00516 + (0.00084 House Base)**
Current Scaling Fee: **0.000194212766 ETH**
Current FLIP Distributed per Loss: **5 FLIP per 0.01 ETH bet placed**

Current House Jackpot: **150 OMG – 1/65536 Chance**
Current Sponsored Jackpot: **150 DICE – 1/32768 Chance**
Current Bonus Token: **10 FUN (20% Chance of winning)**
Current Sponsored Bonus Token: **1 EDG (5% Chance of winning)**

How We Are Helping Ethereum

We view our business relationship with Oraclize as a net win for all projects using Oraclize. These projects include Etheroll, vDice, and several other smaller entities. We have helped the Oraclize team discover issues with their contract, which they have taken direct action on. These fixes will help every platform that uses Oraclize, including our competition.

The first major fix to affect our game contract was the adjustment of Oraclize to handle invalid proof verifications in the callback. When EtherFlip sees an invalid proof verification, EtherFlip automatically refunds the player. This refund is an automatic process.

Ultimately we view this as a positive thing for Ethereum, and anything positive for Ethereum is positive for us all.

FLIP Tokens

FLIP Tokens are the main token of EtherFlip. Dividends are dictated by ownership of FLIP, and we have decided to take a unique way of distributing FLIP during our ICO. This unique distribution serves two major purposes – helping us build the bankroll, and helping us build a user base.

We view users as the most important piece to a successful venture. By creating a fun and unique game from the onset, we will have an edge in user growth via our ICO.

The total supply of FLIP is **15,000,000.** We will be distributing **10,000,000** FLIP during our ICO, and FLIP will only be winnable by playing EtherFlip or by participating in Bounty programs.

Million Dollar Tokens (MDT)

MDT spending is our most exciting feature, as this paves the way for building new things that have never been built before. By using the power of Ethereum, we will build features into our future contracts that can be controllable by sending MDT to the contract. A list of features that we have been experimenting with include:

- The player that sends MDT will capture all earnings of the contract for a set amount of time.
- The player that sends MDT will be able to manipulate win rates for a set period of time.
- MDT functioning as a multiple of ETH bet (i.e. 1 MDT possibly equaling a 10 ETH bet).
- The player that sends MDT can auto win part or all of a jackpot
- The player spending MDT will gain an enhanced edge vs the house for a set period of time.

We view MDT as the shining point of future development, and will actively work towards implementing these features once we complete our ICO. With EtherFlip v2.0 – MDT will start to form into an exciting bonus on top of our already unique contract.

Jackpots

EtherFlip v1.5 has two Jackpots. The House Jackpot, and the Sponsored Jackpot.

The House Jackpot is sponsored by EtherFlip. There is a 1 in 65536 chance of winning the House Jackpot and it will be a token of our choosing. We have built the ability in the smart contract to change the token when needed. Once a player wins a Jackpot, we will add another new token (i.e. OMG, GNT, ANT, etc) to be placed as the new Jackpot.

We will continually increase the House Jackpot as time goes on – thus enticing users to come back and play EtherFlip some more.

The Sponsored Jackpot will be sponsored by a third party. This jackpot will have configurable parameters to change the win percentage, and this will also give EtherFlip another form of revenue.

Bonus Tokens

EtherFlip v1.5 has two Bonus Token offerings. House Bonus Tokens, and the Sponsored Bonus Tokens. The initial House Bonus Token will be FUN (FunFair).

House Bonus Tokens are sponsored by EtherFlip. The Bonus Token is meant to have a higher win percentage, in the range of 5-30% per play. We will continually update the Bonus Token, and will include popular and trending tokens regularly. We have also built into our smart contract the ability to change the win percentage and the amount of Bonus Tokens that will be sent to players when they play EtherFlip.

Sponsored Bonus Tokens are sponsored by a third party. Similar again to the Sponsored Jackpot, this will be another form of revenue for EtherFlip. The parameters are again configurable for this token, meaning the win percentage and amount of tokens sent per win can be changed.

Profit Model / Dividends

We will distribute 100% of contract earnings to FLIP Token holders in the future.

Dividends will need to be distributed via a special smart contract. Our ultimate goal here is a fully automated dividend distribution contract, and we plan on being one of the first platforms to implement this.

Our secondary form of revenue will come from sponsorships. These will go towards development costs, paying for jackpots and bonus tokens, and maintenance costs.

Roadmap

Q3 2017 – Establish strong working relationship with Oraclize
Q3 2017 – Launch EtherFlip v1.0
Q3-Q4 2017 – Complete ICO
Q4 2017 – Launch EtherFlip v1.5
Q4 2017 – Start work on EtherFlip v2.0
Q4 2017 – Ship EtherFlip web3 updated website for easy play using Meta Mask and Mist
Q4 2017 – List FLIP on Multiple Exchanges

Q1 2018 – Launch EtherFlip v2.0
Q1 2018 – Complete dividend distribution contract & distribute first dividend
Q1 2018 – Begin Status integration

Q2 2018 – Launch Status EtherFlip app
Q2 2018 – Start work on EtherFlip v3.0 – Integrate new games

Q3 2018 – Launch EtherFlip v3.0

Disclaimer

FLIP Tokens are not considered investments as there is no guarantee that there will be profits and/or there will be appreciation of FLIP Tokens.

MDT Tokens are not considered investments as there is no guarantee there will be appreciation of MDT Tokens.

EtherFlip is not responsible for lost FLIP and/or MDT Tokens should the user not be able to access their account.

Even though we have analyzed several simulations, there is a chance that EtherFlip can go bankrupt due to uncanny luck. This could negatively affect FLIP and/or MDT.

There are still issues with both Ethereum and Oraclize, and we will refund bets should an on-chain issue occur with the transaction. We will make every effort to address these issues within 24 hours, but in some instances it may take longer.

There is a risk that unfavorable legislation may limit access to certain countries in the future. We will make every effort to push forward under these circumstances even though it may impact development.

There may be other risks that we are not aware of that could negatively impact FLIP and/or MDT. We will make every effort to deal with any issue that may occur in a quick timely manner.