

Lab: DApp Information

1. What is the name of your DApp? What is your motivation behind this Idea?

The name of my DApp is Flash Alfred. The first part of the name came from the core technologies of the project, Flash Loan and Flash Swap, the second one from the necessity to make the arbitrage BOT name more friendly than I decided to honour my father, Alfredo Barros.

The motivation behind this idea is to earn a relevant passive income securely and consistently without investing any money.

For that, I developed a NodeJS code that constantly monitors market inefficiency in some decentralized exchanges like UniSwap and SushiSwap, looking for price differences in various crypto pairs. When I find it, I'll call my deployed Ethereum blockchain smart contract methods through WebJS library to firstly loan the amount I need at AAVE and then make an arbitrage trade to make a profit and finally.

This way, instead of trying to prevent the future price of assets and taking risks, I'll be making transactions only when again is a guarantee. Besides, using borrowed money without any collateral and with the security that everything will be done in a single and atomic transaction that certifies the operation's success is the best deal for big investors to make investments.

2. Which blockchain are you using to build this DApp? Why? (2)

For this DApp, I'm using Ethereum Blockchain since it is the most popular and robust one for the Defi universe. The first Flash Loan was done on Ethereum by AAVE, and the leading coin pairs to look for arbitrage opportunities are on UniSwap and its clones. There's no such thing as flash loans outside the blockchain space.

3. What is the business model (or how you will make money from DApp) of your DApp?

The original idea is to use my DApp for me. Take profit with the solution I designed based on the more modern resources in the finance world at this moment. But, to share these opportunities and to motivate, I thought of creating my own borrowing pool. Another option would be using a SaaS solution where the BOT would be rent for a small percentage.

4. Share a challenging task while developing this DApp. What approach you took to solve this challenge?

A lot about this solution is related to the financial world, so I learned some concepts like Slippage, Spread, Collaterals, Interest, order books, etc. Also, there are a lot of new ideas in the Blockchain world like Flash Loans and Flash Swaps, and I had to go deeper in the comprehension of the ways Decentralized Exchanges works, the protocol they use, the fees they charge, the limitations, the proper implementation also how the whole Defi system works, landing system as Compound. I studied hard utilizing our class material, YouTube video tutorials, GitHub repositories and mainly online official documentation from companies that developed the solutions, APIs and whitepapers.