## Flash Loan Guideline Document

- Flash loan is a project in which we are on a polygon network and take 100 pairs every pair with USDT from dex screener.
- To check the rate of each token three dexes are used i.e. quick swap, susuhi swap, and ape swap.
- After checking prices on all three dexes we compare their prices.
- We figure out minimum and maximum value of a token from three values got from three dexes
- We buy a token at a minimum price so that we can get more tokens and sell it where its price is maximum.
- Purpose of above all is to get profit. For example if we give 100 usd and after the above process we get 105 usd so we get 5 usd profit.

## Contract

- In contract there are three methods are mainly used amountPercentage,loanAmount,flashSwap
- **loanAmount** method is used to set the amount of flash loan we will borrow from the AVE protocol.
- **amountPercentage** is the method where we will set the profit percentage we are looking for from the trades. We suggest considering transaction cost and AVE protocol loan charges before setting the percentage.
- flashSwap is responsible for actually processing the trade which will take buyer dex, seller dex and token address as parameters. This will be called from script users who do not need to interact with it. Profit will be transferred to the set address.

## Script

Script is implemented in Node.js and will be deployed on the provided server. Process is as follows.

- We have addresses of top 100 trading pairs on polygon extracted from DEX screener.
- Each pair is then checked on a given dex to get the current price.
- Prices are then analyzed to find the opportunity as per the percentage set in contract.
- If opportunity is found as per the parameters set in contract trade call is sent to contract to process the trade. Rest of the process is handled by the contract.

We tried to give you an abstract of the technical process above. Kindly note that while setting the loan amount in contract USDT value should be given in 106