



## Project components:

- **LemonJet** - game contract which contains main `play()` method (overloaded).
- **Vault** - ERC4626 implementation with exit fee of 0.6% where 0.5% is distributed among all members and 0.1% minted corresponding number of shares to **Reserve Fund**.
- **Referral** - which allows store and create a relation between the referee and referrer.
- **Reserve Fund** - EOA of the project team which acts as stability fund specifically for underlying smart contract risk.

## LemonJet game play

Player places the bet amount  $b$  and coefficient  $coef$  where  $1.01 \leq coef \leq 5000.00$  units. The amount of winnings should not exceed  $\frac{1}{t}$  where  $t$  represents the total assets available in the vault at the start of the game.

$b$  divided in the following ratio

- $d$  - referrer dividend
- $m$  - reserve fund fee

$$R = \begin{cases} 1 & \text{if referrer exists} \\ 0 & \text{otherwise} \end{cases}$$

$$d = b * \frac{3}{1000} * R$$

$$m = b * \frac{2}{1000}$$

These fees are deducted from the  $b$ , any remaining amount of  $b$  stays in the vault as liquidity