

StakBank

READ METHOD

1. function `checkDetailStakingRequest(address user, uint idStake)`
`public view`
`returns (uint timestamp, uint stakedAmount, uint ethReward, uint usdtReward, bool isUnstaked)`

return detail of staking request of each staker.

Params

- user: address of staker
- idStake: id of staking request (count from 1)

Reverted conditions

None

2. function `countdownToNextDistribution()` `public view returns (uint)`
return number of seconds to trigger reward distribution.

Params

None

Reverted conditions

None

3. `decimal()` returns (uint)
return number of decimal

4. function `estimateNextDistribution()` `public view returns (uint)`
return estimate timestamp of next distribution

Params

None

Reverted conditions

None

5. function `feeCalculator(uint amount)` `public view returns (uint)`
return platform fee with corresponding JST
formula: $\text{feePlatform} = \text{amount} * \text{feePerDecimal} / (10 ** \text{decimal})$

Params

- amount: staking JST

Reverted conditions

None

6. `feePerDecimal()` returns (uint)
return feePerDecimal

7. `lasDis()` returns (uint)
return timestamp of last distribution

8. `minAmountToStake` returns (uint)
return minimum amount of JST to stake

9. `function numEthToReward() public view returns (uint)`
return number of Eth to reward

Params

None

Reverted conditions

None

10. `function numUsdtToReward() public view returns (uint)`
return number of USDT to reward

Params

None

Reverted conditions

None

11. `numberDistribution()` returns (uint)
return number of reward distribution

12. `function numberOfStakeHolder() public view returns (uint)`
return number of staker in pool

Params

None

Reverted conditions

None

13. `owner()` returns (address)
return admin's address of StakBank

14. `paused()` returns (bool)
return true if StakBank is paused

15. `periodTime()` returns (uint)
return period to trigger distribution

16. `function stakingOf(address user) public view returns (uint)`
return amount of JST a staker staked

17. `token()` returns (address)
return address of Jig Stack's contract

19. usdt() returns (address)
return address of Tether's contract

WRITE METHOD

1. **function** closeStakBank(uint number) **public** onlyOwner whenNotPaused
send reward and USDT back to number staker (too large "number" may cause gas over)
if number of staker is 0, then send all money from pool to admin

Reverted conditions

when number > numberOfStakeHolder of number 0

2. **function** pause() onlyOwner whenNotPaused **public**
make StakBank paused

3. **function** rewardDistribution() **public** onlyOwner whenNotPaused
admin trigger distribution

Reverted conditions

- number of JST in pool is 0
- countdownToNextDistribution() > 0

4. **function** setDecimal(uint _decimal) **external** onlyOwner whenNotPaused
(formula is above)

5. **function** setFeePerDecimal(uint _feePerDecimal) **external** onlyOwner whenNotPaused
(formular is above)

6. **function** setMinAmountToStake(uint _minAmountToStake) **external** onlyOwner whenNotPaused

7. **function** setPeriodTime(uint _periodTime) **external** onlyOwner whenNotPaused
Reverted conditions

- _preriodTime > 0

8. **function** stake(uint stakedAmount) **public payable** whenNotPaused
user stake

Reverted conditions

- Admin cannot stake
- stakedAmount >= minAmountToStake()
- Limit of pool: 10 billions JST
- eth send to pool >= feeCalulator(stakedAmount)

9. **function** transferOwnership(address _newOwner) **public** onlyOwner
change owner

10. `function unpause()` onlyOwner whenPaused `public`
unpause StakBank

11. `function unstakeAll()` `public` whenNotPaused
user unstakeAll
pool sends reward to user
pool sends JST back to user

Reverted conditions

(if user has too many staking request, this may cause over gas => FE use `unstakeWithId`)
- Not a staker

12. `function unstakeWithId(uint idStake)` `public` whenNotPaused
user unstake certain request

Reverted conditions

- that idStake unstaked
- not a staker

13. `function withdrawReward()` `public` whenNotPaused
users claim reward. Send eth and usdt to their address.

Reverted conditions

- not a staker