Vesting Contract

Vesting contract works like a staking contract. In a staking contract, when a user stakes its tokens. He/She gets rewarded for some time. Same happens in the vesting contract.

In Vesting Contract, the owner locks his/her tokens in it for some time. And take it back little by little. This has to do to maintain the price of tokens.

There are some functions in the Vesting Contract. These are as follows:

createVestingSchedule()

release()

revoke()

transferOwnership()

withdraw()

Let's have a deep dive into these functions.

The very first thing the owner has to do is to transfer the amount of tokens into this vesting contract, so that the vesting can be done.

1) createVestingSchedule():

In this function, the owner will set some parameters, so the vesting can be started. So the parameters are:

Beneficiary (address)

Start (time)

Cliff (when to start)

Duration (for how long)

slicePeriodSeconds (after how long it will release)

revocable(want to dismiss the vesting)

Amount (how much want to vest)

Let's talk about these parameters.

Beneficiary:

This is the address, after releasing the amount will transfer to this address. This address holder can be anyone. Either owner or initial buyer.

Start:

This represents the start time, which means when to start the vesting.

Cliff:

Cliff is also a time. After start time, how much time it will start calculating the vesting amount.

Duration:

This is the time, which represents, for how long the vesting will be continued.

slicePeriodSeconds:

This time represents, after how much time it will calculate the amount just like reward in staking contract.

Revocable:

This parameter gets the bool as an input. If you enter the "true" as an input. Owner will be able to revoke the amount from vesting. But if you enter the "false" as an input, the owner will not be able to revoke the amount from this contract.

Amount:

This is the amount given by the owner that he wants to lock/vest.

2) Release():

This function is used to release the amount that has been vested. This function

takes two parameters. These are as follows:

vestingScheduleId

Amount

VestingScheduleId:

This parameter takes the current schedule Id that has been created when the owner started vesting.

Amount:

This is the amount the owner wants to release during vesting.

3) Revoke():

This function is used to revoke the tokens from the vesting contract.

This function takes one parameter as an input.

vestingScheduleId

As I have already explained in a previous function. This Id is generated after the createVesting function call.

4) transferOwnership():

This function is used to change the ownership of the vesting contract.

5) Withdraw():

This function is used to withdraw the amount that has been stored in the contract.

There are some other functions also:

1) computeReleaseableAmount():

This function will get the schedule Id and return the releasable amount.

2) getLastVestingSchedule():

This function will get the holder address and return the vesting schedule.

3) getWithdrawableAmount():

This function will return the withdrawable amount.