U-META NFT (TEN CARDS GAME)

(Documentation Of Smart Contract)

ARCHIEMETA NFT (ARCHIEAVA COLLECTION)

This contract dealt with 5000 NFTs.

Level wise Distribution of NFTs

There are total 10 levels in the game and level wise distribution of the NFTs is as follows:

Level	No. of NFTS	pct % of winning to Player	pct % of winning to owner of NFT
Level1	1000 NFTs	50%	5%
Level2	900 NFTs	60%	5%
Level3	800 NFTs	70%	5%
Level4	700 NFTs	75%	5%
Level5	550 NFTs	80%	5%
Level6	550 NFTs	90%	5%
Level7	400 NFTs	100%	5%
Level8	300 NFTs	200%	5%
Level9	200 NFTs	500%	5%
Level10	50 NFTs	1000%	5%

Note:

1. There are two pay out:
    a. To the player
    b. To the owner of the NFT
2. User can minimum bet 100 Archie tokens and maximum 25000 Archie Tokens.
3. If a user wins an NFT which is not minted yet, in this case smart contract will record this NFT ID and rewarded amount to the owner of NFT. After that the person who will own this NFT will receive that rewarded amount.

FUNCTION WISE EXPLANATION OF THE SMART CONTRACT

Non-constant Functions (Function of Write)

➢ bet_Amount()

- If all levels are completed, then this function will throw an error.
- This function will take mentioned amount of Archie Tokens as parameter from the caller transfer them to the contract address.
- Randomly select card No. i.e. Level No. and Withdraw an NFT from that level cumulatively. i.e. NFT will not be withdrawn randomly but it will be withdrawn one by one after another. And when all the NFTs of one level will be completed that level will be mentioned as completed and after that time not NFT will be withdrawn from that level.
- After withdrawal of NFT and card, reward will be calculated according to the criteria mentioned in the above table and if owner of NFT exists his share will be transferred to him and share of caller will be stored for later withdrawal.
- Once NFT withdrawn will never be withdrawn again. And this function also check this scenario.

➢ withdraw():

- This function will take an array of indexes of selected NFTs for the sake of collection of their reward.
- It will calculate all the reward for given NFTs and transfer back from the contract address to the caller address.
- It will also remove the selected NFTs from the history of the caller, so that the caller couldn't be able to withdraw reward again for the same.

Constant Functions (Function of Read)

➢ UserInfo():

- This function will take and address and return back all the history of that address in the form of three array which are as follows:
    - **NFTs URIs[]:** URIs of the all the rewarded NFTs.
    - **Card No[]:** Card Nos of all the rewarded NFTs.
    - **Reward Amount[]:** Rewarded amounts of all the rewarded NFTs.

➢ `areAllLevelsCompleted():`

- This function will return that all levels are completed or not in the form of a Boolean value.

➢ `completedLevels():`

- This function will return an array of completed levels.

➢ `completionStatusOfLevel():`

- This function will take a number and return back the completion status of that number level in the form of Boolean value.

➢ `getNonMintedNFTs():`

- This function will return the record of NFTs which are withdrawn by the game but not owned by any person as mentioned in Note No.3.