Lottery Game Functionality

1. We will create a decentralized application (dApp) where a user can login through his BNB supported wallet i.e., Trust Wallet, TokenPocket, Metamask or any other.
2. After login user will go to his add wallet page and add desired fund to his wallet through BUSD
3. User will go and choose his desired lottery from “Lucky Me” section.

How lottery will be calculated:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.No. | Lottery Name | Multiple Entry | Total Entry | Winners | Total Time |
| 1. | 10x | 10 | 1000 | 50 |  |
| 2. | 20x | 10 | 1000 | 25 |  |
| 3. | 50x | 10 | 1000 | 10 |  |
| 4. | 100x | 20 | 2000 | 10 |  |
| 5. | 250x | 50 | 5000 | 10 |  |
| 6. | 500x | 50 | 5000 | 5 |  |
| 7. | 1000x | 80 | 8000 | 4 |  |
| 8. | 2500x | 100 | 10000 | 2 |  |
| 9. | 5000x | 200 | 20000 | 2 |  |
| 10. | 10000x | 400 | 40000 | 2 |  |

1. Entry Amount: 1 BUSD
2. Lottery will end in any of the scenario:
   1. Total entries are filled
   2. If time is ended.
3. After the lottery ended. Winners will get decided by the contract randomly and funds will be distributed to the winners in their respective wallet. Which they can withdraw accordingly.
4. Winner will be decided by three methods.
   1. Total Entry: If total entries are filled then number of winners will be according to the above given slab
   2. Total Time: If “total entries” are not filled and lottery time is over. Then in this can, number of winners will be decided by “Winner’s Ration” method. Which will be   
       Winner’s Ration = (Received Entry / Total Entry) x 100  
       Number of New Winners = Total number of winners \* Winner’s Ratio  
        
      Ex. We are taking 1000x Lottery and we got 5000 entries instead of 8000 entries and time is over. Then in this case number of winners will be decided as follows:  
        
      Received entries = 5000  
      Total expected entries = 8000  
        
      Winner’s Ratio = (Received Entry / Total Entry) x 100  
       = (5000 / 8000) x 100  
       = 62.50 %  
      Number of New Winners = Total number of winners \* Winner’s Ratio   
      Number of New Winners = 4\*62.50%  
       = 2.50= 1 (Round Off)
   3. If Number of new winners is Less than 1, then Winner’s Ration will be multiplied by winning amount and result will be distributed between the number of winners given in the above listed table.  
        
      Ex. We are taking 1000x Lottery and we got 800 entries instead of 8000 entries and time is over. Then in this case number of winners will be decided as follows:  
        
      Received entries = 800  
      Total expected entries = 8000  
        
      Winner’s Ratio = (Received Entry / Total Entry) x 100  
       = (800 / 8000) x 100  
       = 10%  
        
      Number of New Winners = Total number of winners \* Winner’s Ratio   
      Number of New Winners = 4\*10%  
       = 0.4 > 1  
        
      now as the New Winners are less than 1, then   
        
      = 0.4 x winning amount  
      = 0.4 x 1000  
      = 400  
        
      Now $400 will be distributed in 4 winners, which is $100 to each winner.