**Readme File\***

**General Description**: An Ecological Blockchain System for Event Ticketing (EBSET) designs a community to sell the event tickets. EBSET targets to attract ticket buyers and sellers to the community to solve the problem of ticket-scalpers’ monopoly. It also offers ticket providers a direct platform to sell event tickets, so that customers will benefit from affordable and reasonable prices.

The system meets the following **requirements using Solidity, Metamask Wallet, Rinkeby Testnet (more information is in the PPT Tutorial for EBSET):**

1. Each community member has an electronic wallet.
2. All transactions are traded with tokens.
3. Token rewarding system: (1) Register.

Joining the community gets reward tokens (up to 500 tokens)

(2) For each trade

**Seller:**

Any ticket sell whose selling price is higher than the original one will consume the seller’s tokens. On the other hand, any seller whose selling price is lower than the original one will be rewarded with tokens. For example, to sell a ticket whose original price is 1000 dollars, if selling price is 1200, the seller has to pay 100 tokens to complete the transaction; but if the selling price is 800, the seller will be rewarded 100 tokens.

**Buyer:**

Any purchase with the price higher than the original one will be rewarded with certain amount of tokens, and vice versa.

(3) Reward system in details

For a very popular event, such as a singing celebrity concert, the tickets can be initially set so that **a)** the number of tickets to purchase for each wallet will be restricted, **b)** the number of reward/find tokens can be reset.

(4) Reward/fine system

**The Number of rewarding tokens for purchase** is based on how long the wallet has joined the community, how frequent it purchases tickets, how many tickets it has traded, and how many tokens it has consumed.

**The Number of rewarding tokens for selling** is based on its selling records (how many tickets it has sold) and the seller’s ratings.

1. Tokens refilled: tokens can be traded among wallets, or able to be refilled.

**\*Note**: For the execution and running with use cases, we have uploaded a PPT Tutorial with video animation to show steps of EBSET. The filename is README\_EBSET\_Tutorial.PPT