

Doggochain — A doggo game blockchain

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1 Idea

The Doggochain project is a game in which players may own and pet monsters, which will have their own *stats* (values that characterize monsters with respect to their strength or vitality, for example), and interact with wild and other players' monsters, including collect, pet, feed, train and even trade.

2 Motivation

The idea comes from CryptoKitties, a game where players can breed cat-like creatures and sell them in exchange for Ethereum. The problem is that the game doesn't explore more common games' features apart from some creatures being rare.

3 Justification

Since our group was looking for some ludic, non-currency related blockchain-based smart contract system, we decided then to create a more featureful monster game focusing in being an actual game with richer features.

The use of Blockchain and Smart Contracts, aside being previously required for this project, are technologies currently being explored, but most usages aims for currency and just a few aims for games, leaving room for this work to explore and later report its results.

4 Requirements

4.1 Functional

The system must:

1. Allow users to register themselves as players;
2. Allow players to find, catch and own a ~~Pokémon~~ monster;

3. Allow players to trade monsters between themselves if they agree so;
4. Allow players to train and evolve their monsters;
5. Allow players to challenge each other with their monsters;
6. Allow players to bet on which monster will win in a challenge.
7. Allow players to set their monsters to ~~kill~~ friendly defeat wild monsters for experience points;
8. Allow players to breed their monsters in order to *mine* for new (and hopefully better) monsters;
9. Allow users to know a monster's stats;

4.2 Non-functional

1. Monsters will evolve (increase their stats) once they reach a certain value of experience points (which will also increase upon evolving);
2. Challenges' results must sound fair (according to later decided criteria from this project's authors);
3. Trading must be done offering monster (and/or money) for monster (and/or money).