Pixeled Puppies

Distribution

Abstract

The pixeled puppies project is based on the idea to create a hand-made but also algorithmically method to create 2500 21x21 (upscaled to 357x357) pixel art images. They will be minted as ERC-1155 tokens on the Ethereum blockchain.

Most pixeled puppies are casually cute looking dogs but some have more rare traits than other. Therefore we will introduce the trait distribution in this short paper.

1 Introduction

1.1 Overview

Pixeled puppies are created with a heap-like permutation algorithm using different hand-made pixel arts of bodies, faces, backgrounds and traits which are imported as 21x21 pixel '.png' files.

Background, faces and bodies theoretically would result in 2592 permutations (9 backgrounds, 12 bodies and 24 faces) but the last 92 are cut off from the algorithm used to created the puppies to ensure a supply of 2500 puppies. The specials get added with different probabilites.

All bodies and faces are colorized in three different base colors which gets algorithmically replaced with different color schemes featuring the base colors salomie, white, pharlap, hawaiian tan, roman coffee and fire bush. An analog approach is used to colorize the collars to black, red, yellow, orange and blue.

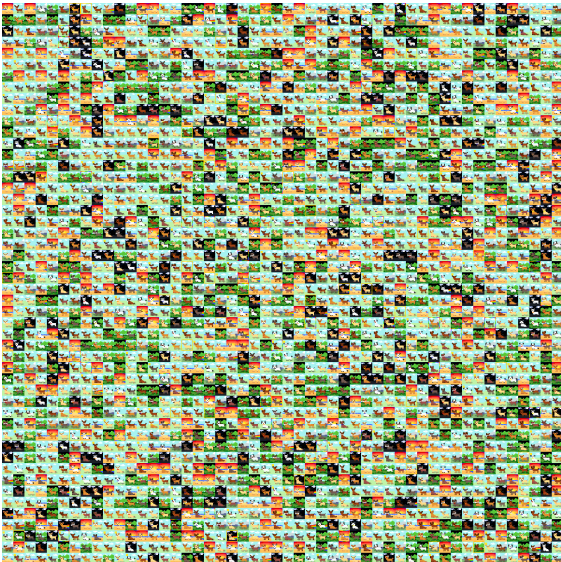All pixeled puppies will be minted as ERC1155 tokens on the Ethereum blockchain.

Figure 1: All 2500 pixeled puppies

1.2 Distribution

The following distribution will show (supply, relative percentage of total amount of 2500) pixeled puppies exist.

- **traits**: 3D glasses (106, 4,24%), sticks (416, 16,64%), bones (624, 24,69%), rainbow dogs (102, 4,08%), golden border (55, 2,2%), rainbow border (51,04%), rainbow border + rainbow dog (1, 0,04%), golden border + rainbow dog (5, 0,2%)
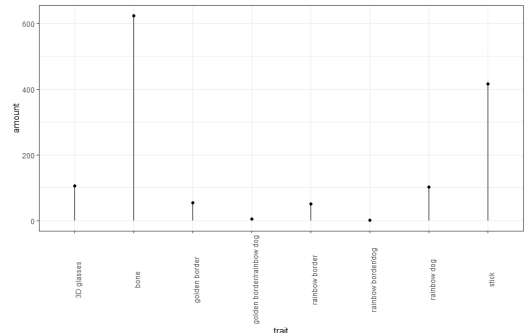

Figure 2: Trait distribution

- **colors**: salomie (556, 22,24%), white (278, 11,12%), pharlap (278, 11,12%), hawaiian tan (556, 22,24%), roman coffee (278, 11,12%), fire bush (554, 22,16%)
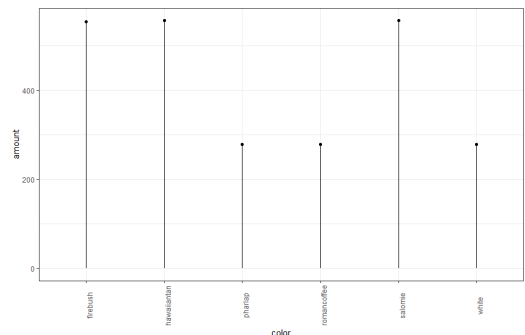

Figure 3: Color distribution

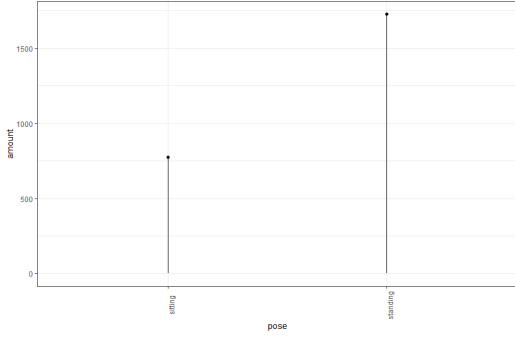- **poses**: standing dog (1726, 69,04%), sitting dog (774, 30,96%)

Figure 4: Pose distribution

- **backgrounds**: plain day clouds (289, 11,56%), street night (289, 11,56%), mountain day (289, 11,56%), beach day (289, 11,56%), beach sunset (289, 11,56%), plain day clouds 2 (268, 10,72%), plain day sun (264, 10,56%), forest day (264, 10,56%), forest night (259, 10,36%)
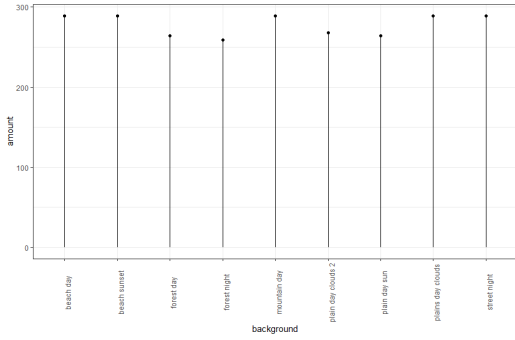

Figure 5: Background distribution

- **collar**: black (302, 12,08%), red (302, 12,08%), yellow (307, 12,28%), orange (302, 12,08%), blue (301, 12,04%)
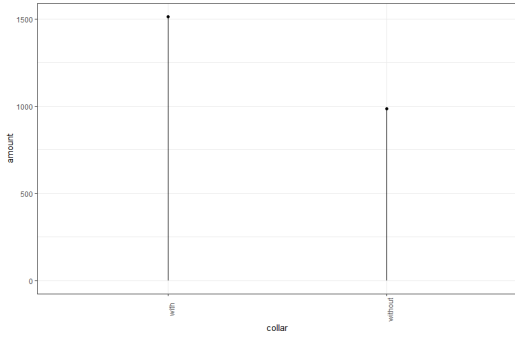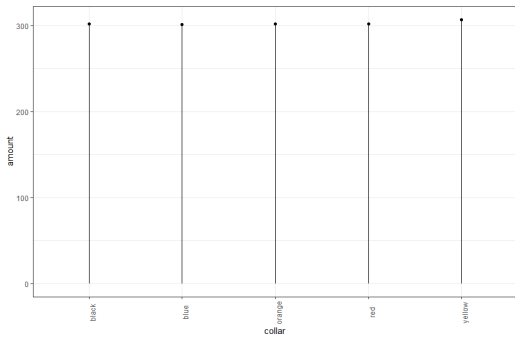

Figure 6: Collar distribution

Figure 7: Collar color distribution

2 Gallery

This section features examples of pixeled puppies with different traits, colors, backgrounds and collars
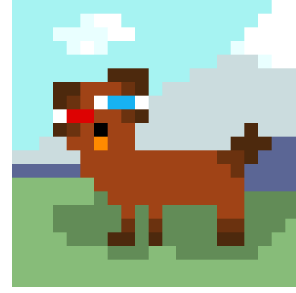

Figure 8: Pixeled puppy with 3D glasses

Figure 9: Pixeled puppy with stick

Figure 10: Pixeled puppy with bone

Figure 11: Pixeled puppy with rainbow

Figure 12: One of the rarest pixeled puppy trait combination (rainbow border, rainbow dog, 3D glasses)