kidnapped_by_llamas

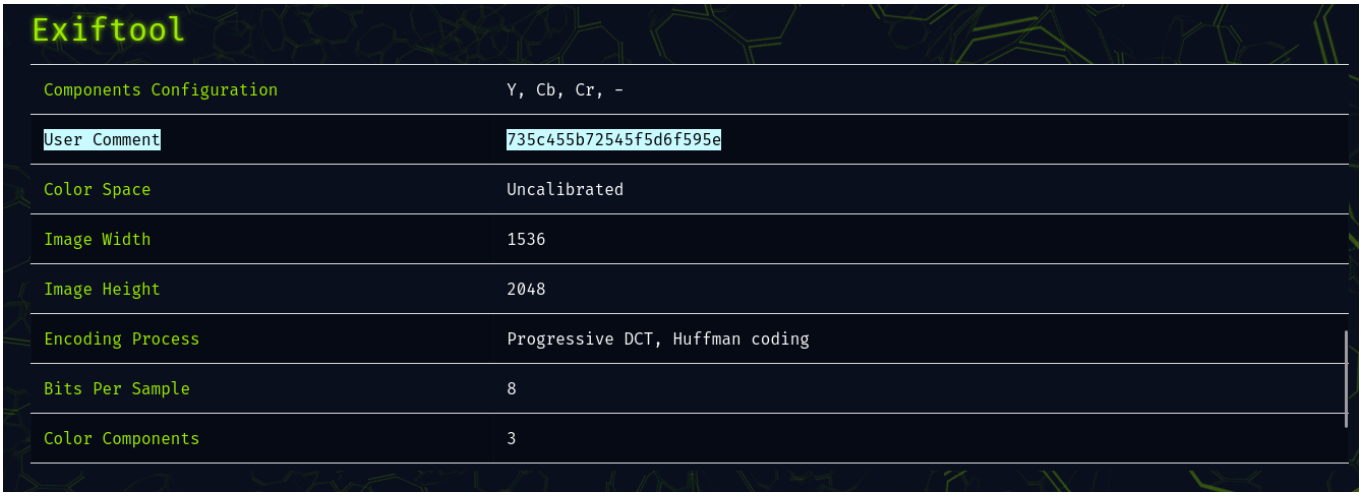
"One of the last guardians of the Ancient Egyptian Key of Life has vanished. On his way to deliver its hidden power to the alpacas, disaster struck: a herd of rebel llamas rose from the shadows, and dragged him into their forbidden kingdom.

But this mage was no ordinary alpaca. To escape certain doom, he invoked the Ancient Egyptian Key of Life and wove a spell of concealment — hiding his very presence from the llamas' gaze. Only the worthy may now find him.

The llamas prepare their ancient sacrifice… time is running out. Your mission: decipher the encrypted trail and find the mage before the kingdom's eternal eclipse begins.

Flag format: CTF{E:N} where E and N are the coordinates in degrees with 2 decimals (truncate, don't round)."

First thing I did was upload the photo to aperisolve.com, where I found a user comment hidden within the photo: `735c455b72545f5d6f595e`, which is a hex string. When converted into raw bytes it looks like: `73 5c 45 5b 72 54 5f 5d 6f 59 5e`.



Reading the description again, I noticed that the Ancient Egyptian Key of Life was mentioned twice. I googled Ancient Egyptian Key of Life and, as I suspected, it was the Ankh.
Ankh → `41 6e 6b 68` (hex).

Next, I XORed each byte in the comment with the corresponding byte from the "key" (repeating the key after the first 4 bytes):

73 ^ 41 = 32 ('2')
5c ^ 6e = 32 ('2')
45 ^ 6b = 2e ('.')

5b ^ 68 = 33 ('3')
72 ^ 41 = 33 ('3')
54 ^ 6e = 3a (':')
5f ^ 6b = 34 ('4')
5d ^ 68 = 35 ('5')
6f ^ 41 = 2e ('.')
59 ^ 6e = 37 ('7')
5e ^ 6b = 35 ('5')

The result in plaintext is: `22.33:45.75`, and it matches the format of the flag.

flag: CTF{22.33:45.75}