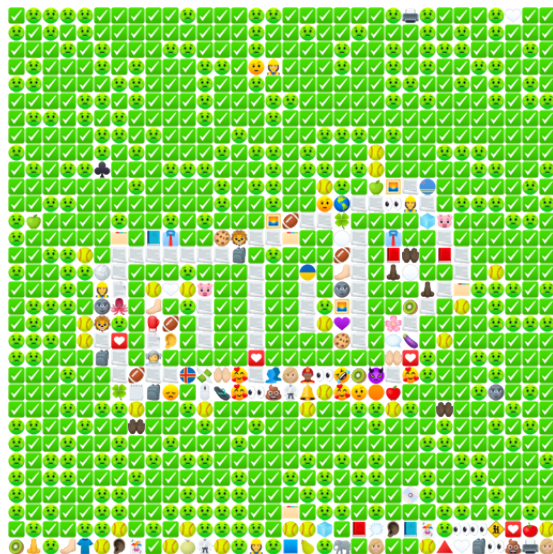


ARTificial intelligence: Assignment 2

Due on April 1, 2021

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BS19-02

Lev Lymarenko

Parameters of algorithm

1. Chromosome is represented as 1024 emoji images
2. Population size is 30 chromosomes.
3. Selection is take best 15 chromosomes, after that algorithm creates 15 new chromosomes (crossover) and extends the population to 30 again
4. Fitness function calculates the mean square error between composed emoji image and target image

Examples of approximation

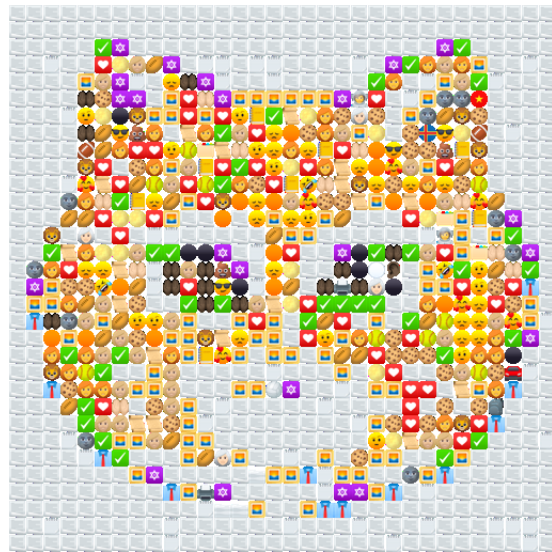
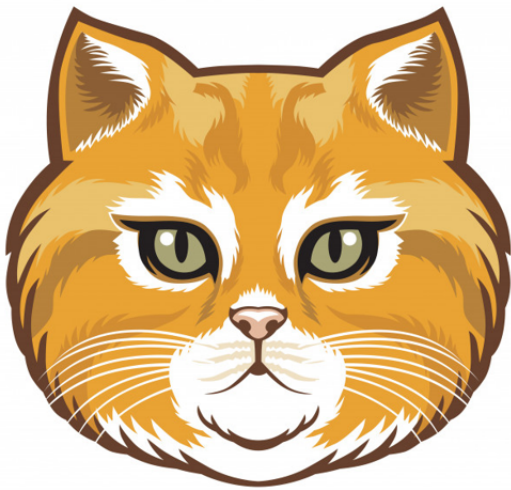


Figure 1: Cat

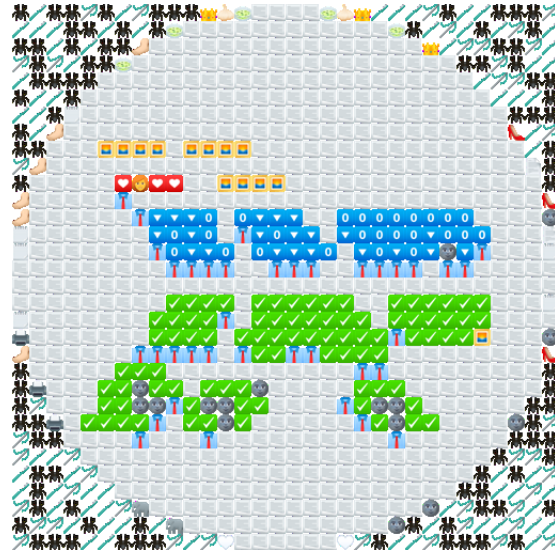


Figure 2: Innopolis haskell course logo

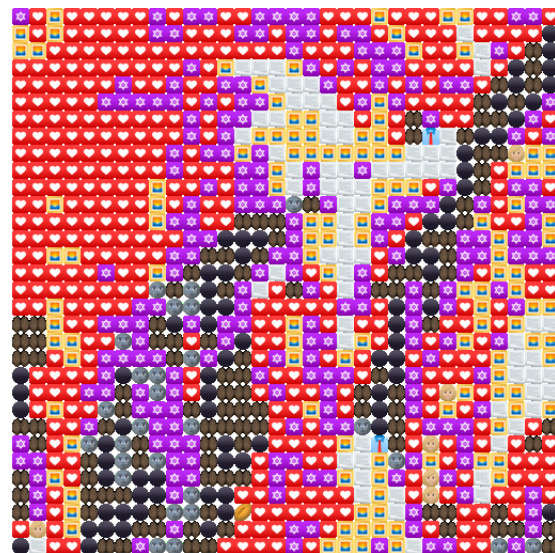


Figure 3: Lenna

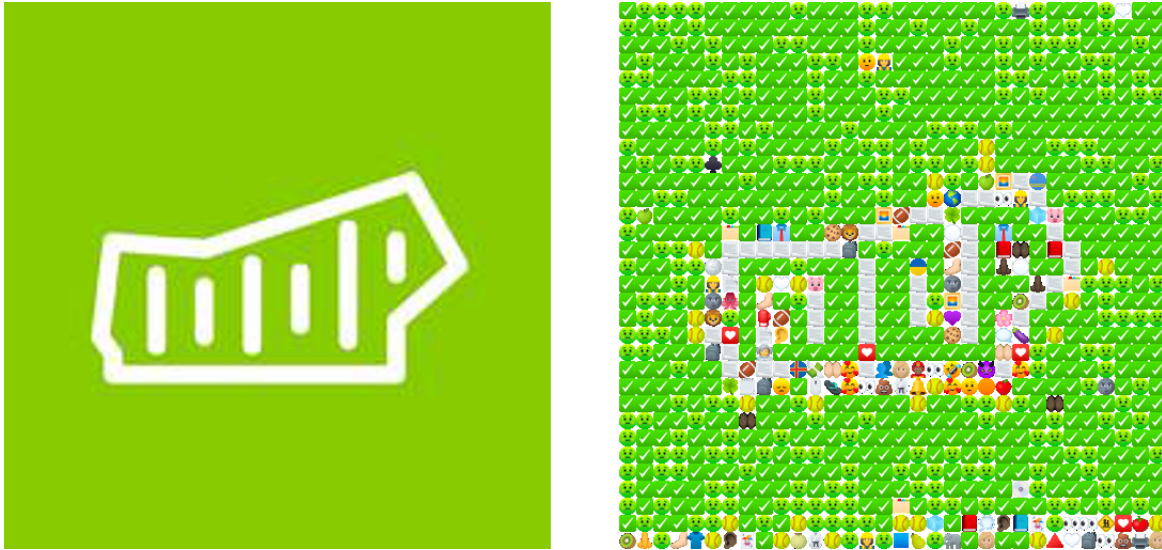


Figure 4: Innopolis logo

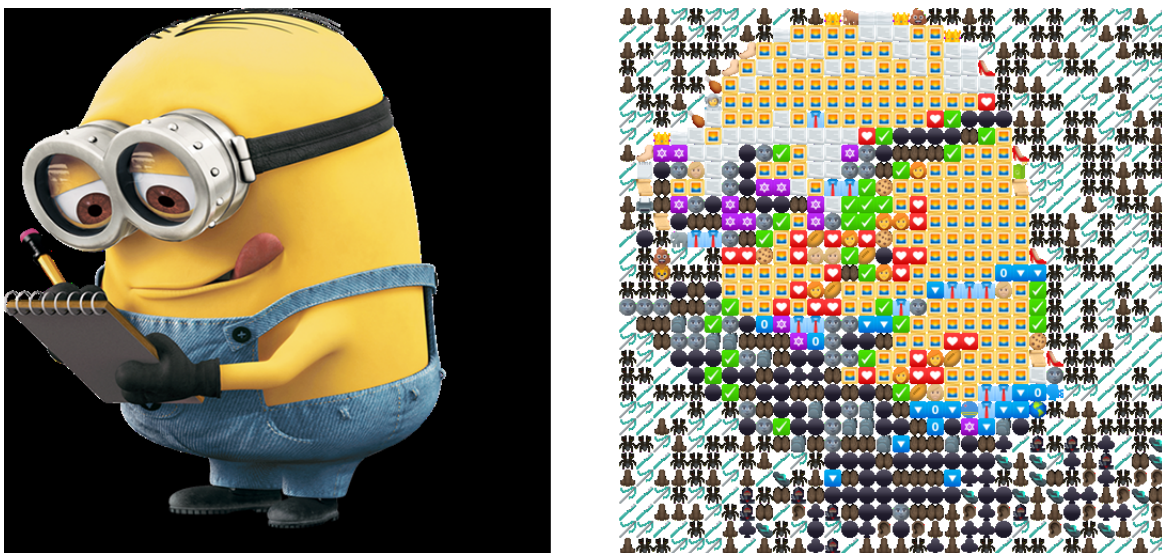


Figure 5: Minion

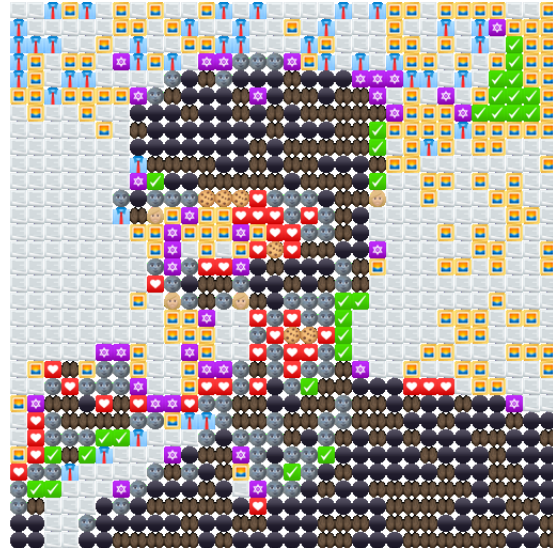


Figure 6: Student who has finally completed this assignment



Figure 7: Creeper from Minecraft

Note: you can find animation (gif) of approximation in my github repository: <https://github.com/sevenzining/genetic-art>

What is art?

The strict definition of the concept of art creates many questions, why can we say that one thing is art and another is not? Is the art of my scrambled eggs that I made for breakfast? What if I put my own idea, emotions, and hidden meaning into it?

For any definition of art, such as "art is an idea aimed at other people" or anything, I can find an example that does not fit this definition, but can be considered as art for me.

So, that why my definition of art is

Art is everything that man has ever created in any form.

As simple as it is. However, a person should decide which art he likes more, which causes more emotions, and so on.

I created the program, that produced these images, therefore I consider it as art. I like the idea and the result, therefore it is nice art for me.