

Hello, my name is Vlad, I'm from 212-2 group and my task was to create an old but gold game – snake but the game was featured with obstacles or as an owner of a specification wrote “improved version”. I’ve tried my best.

C++ was used during creation snake game, different classes, constructors of classes, for a particular object placed in the game there were created functions for the (for example, a head of a snake has its own class).

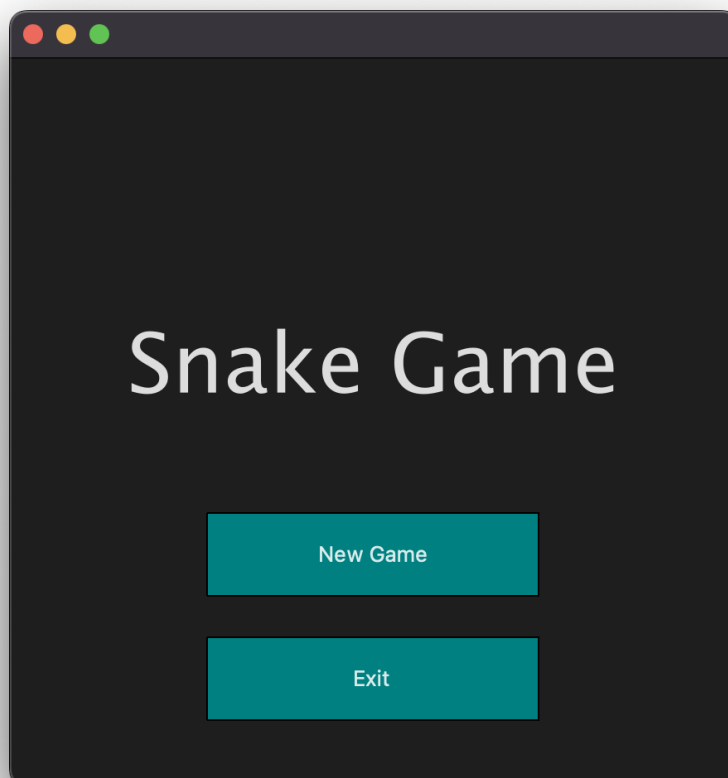
The rules of the game is very simple – if a snake hits obstacle or itself then the game is over, if the snake covers a full field then it is a victory and the game will be restarted. You can play this game by only 4 buttons - WASD

Overall, game was created, task achievement was completed (only God Mode wasn't understandable for me, so I couldn't make it), everything works well except that snake's first appearance is in a fixed place. Talking about bugs – there is a possibility that game can lag in one moment or the apple (points for score) can be placed in a weird place.

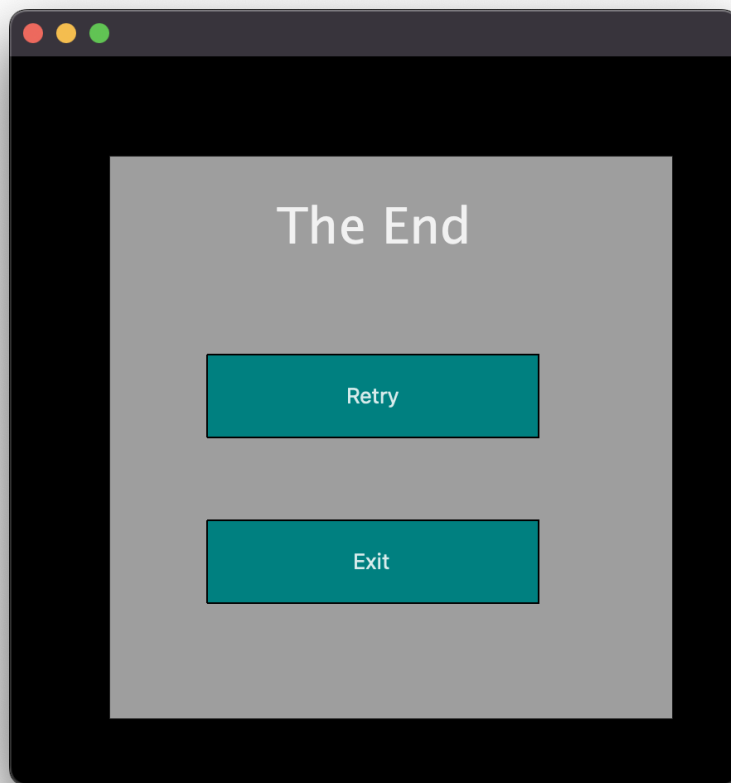
Besides constructing such a tremendous game, I understood that this game can be upgraded by creating different geometric objects, also we can add graphics on objects, on snake and a map.

Link for the dataset: <https://www.kaggle.com/datasets/samdgafuck/snake-game-coordinates-dsba>

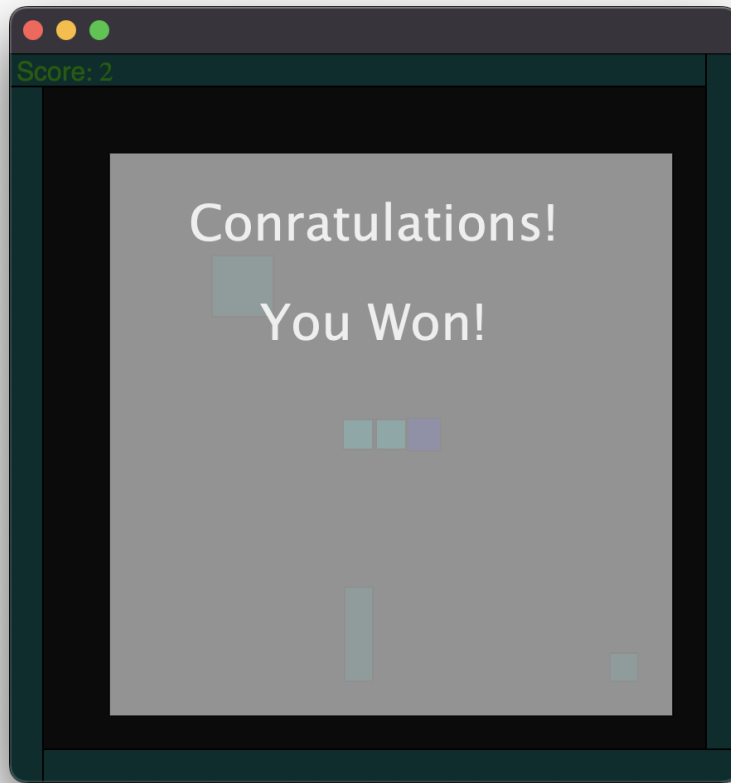
How the start of the game looks like:



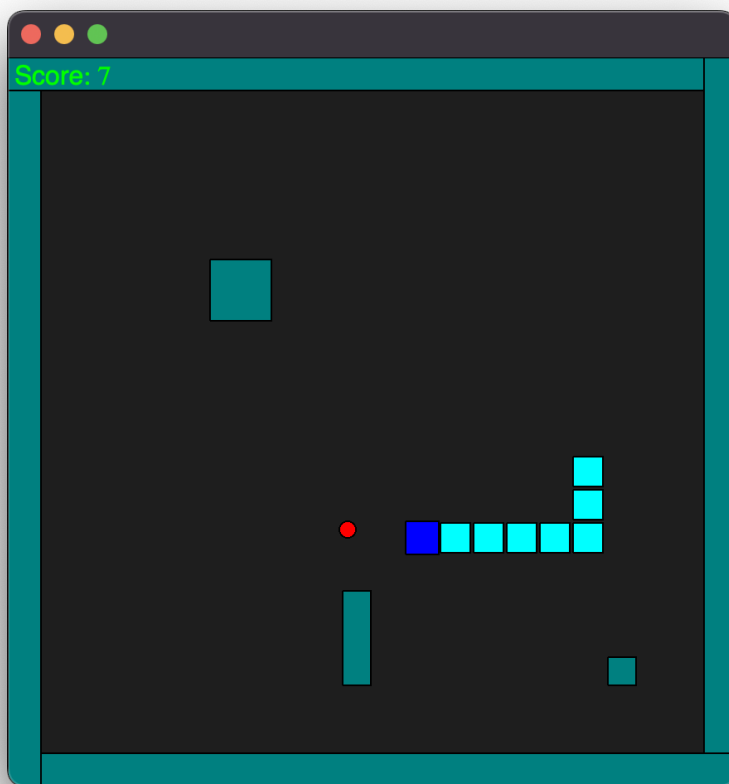
This is how the end of the game looks like:



If you won then the game will show you this page:



Gameplay looks like:



This is an algorithm of the game:

