Snake Game

We were inspired by the game commonly called "Snake". It was first developed in 1976 by the video games company Gremlin Interactive, under the name of "Blockage". The game is rather simple: the player maneuvers a snake, keeping it from colliding with both other obstacles and itself, which gets harder as the snake lengthens during the game.
We questioned ourselves on how we could improve this game and add more functionalities. Indeed, we wanted to make it more entertaining.

I.   New functionalities

We gathered a few ideas on how to improve the game. You have different game modes which are available in the menu.

A. Multiplayer mode
Each player controls one snake in the game. The winner is the last snake standing. This multiplayer mode works locally. Each player controls one snake by its assigned keys (arrows, w/a/s/d). You can pause the game.

B. Trivia mode
The game selects a question from the database. The player has to control its snake across the screen to select the correct answer. If he touches the wrong one, he loses. The questions are drawn from a database file.

C. Single Player Mode
Of course the classic single player mode will still be available.

II.   Databases

A. Rules
Use of a json file where the rules of the different game modes are implemented.

B. Score memory
The player can enter his name at the beginning of the game which will be stored in a database file. A highscore can then be linked to each player.

C. Trivia questions
The questions are randomly drawn from a large pool of questions which will be stored in a database file.

III.   Graphical interface

A first window presents the game, the rules and a menu. This menu leads to the different gameplays. It contains :
  - a text area presenting the game
  - the options (radiobutton) to be chosen by the player (snake's speed)

There is also the game window :
- on the top: score
- on the rest of the window: A square area where the game would take place. The snake is piloted thanks to the keyboard

There are also windows that appear when the player loses in the game. It gives the score and proposes to enter it in the database's highscores. It also proposes to replay or go back to the main menu.

Enjoy !