

# JAFAR TEAM

**Project Name – Client-Side JavaScript Application**

**Ping Pong JavaScript Game**

**Team Members:**

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# Project Explanation

## 1. Game plot

The game represents a classical Ping Pong game. We have implemented the option of a two-player game. Each player uses two keys on the keyboard to control the movement of their bat. The objective of the game is to score more points. The main control options of the game consist of a navigation menu, ordered in three large buttons, placed in the header of the game. The game has also an option for pausing it which is activated through the "Start game" button in an active game mode only. The help menu includes a few very brief and simple instructions. That is why we have placed it just beneath the main navigation menu. By pressing the "Q" and the "A" keys the left player moves their bat respectively up and down. The same logic is valid for the right player and the "P" and the "L" keys. The live score is automatically updated and shown in the middle upper part of the game field.

## 2. Source Code

The game consists of **several logical sections**, each of which is responsible for a different part of the program:

**Initialization** – This is how we initialize the game by drawing the background and the game field, and by starting the rendering engine.

**Static Objects** – This is the place where we draw all the static elements of the game using the Canvas technology, including the score monitors which update their score dynamically.

**Dynamic Objects** – This is the place where all the object movements and calculations are made. This script is responsible for objects collision, score calculation, user interface and game engine. Via the developed JS OOP structure the instances of the classes maintain all the needed objects in a typical JS game.

**Background** – This is the place where we create the background using the SVG technology and JS DOM manipulations.

**Styling** – Two dedicated .css files and a background picture to make our game even more beautiful.

More detailed information can be found within the source code of the program.

## 3. Team Collaboration

For the creation of the game our team used GitHub CMS. Our project URL is:

<https://github.com/hristofornikolov/JS2JafarTeamProject>