

# Pong Game Workshop Documentation

## Description

Pong is one of the most simplest games out there. Code it in one afternoon and learn the basic concepts of programming. Also host your browser game for free to show everyone what you learnt.

Language: JavaScript

## Prerequisites

- GitHub account (can be created during the workshop)
- own Laptop (can be provided in offline sessions) with Visual Studio Code (<https://code.visualstudio.com/Download>) or a similar Text Editor
- the repository downloaded (<https://github.com/CodingClubs-Berlin/PongCodingClub>)

## Steps

1. Draw Gameboard  
New: use a function
2. Create gameboard variables  
New: create variables
3. Draw Circle  
New: Use variables
4. Create Players  
New: create an object
5. Read user input
6. Move players  
New: if conditions
7. Create ball
8. Move ball
9. Ball wall collisions
10. Scoring
11. Ball paddle collision
12. End the game

## Bonus

13. Add an ai

## Available Functions

Drawing:

- function drawBoard (width, height, fillColor)  
draw the gameboard
- function drawCircle(x, y, radius, colour)  
draw a circle at the x, y coordinates on the gameboard
- function drawRect(x, y, width, height, borderColor)  
draw a rectangle at the coordinates x, y on the gameboard

- function drawScore1 (score)  
draw the score of Player1
- function drawScore2(score)  
draw the score of Player2

general

- function showEnd(winningPlayer)  
display the end screen
- function getRandomNumber(min, max)  
returns a random number between the min and the max