

# TicTacToe Workshop Documentation

## Description

With this Coding Club we want to bring you closer to coding.

The task for this Coding Club: Tic Tac Toe.

In one of the most widespread programming languages used for software development.

Language: Python

## Setup

- 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>)
- Install Python3(<https://www.python.org/downloads/release/python-391/>)
- Install pygame via command prompt  
(python -m pip install --upgrade pip  
pip install pygame)

## Steps

1. Change window size  
New: change variables, execute file
2. Draw Grid  
New: use functions/ global variables
3. Detect click  
New: use function arguments
4. Track turns  
New: if-else conditions
5. Modify field  
New: use/change array
6. Draw field  
New: write function
7. Check for win
8. Check for draw
9. Draw end screen and let game end

## Available Functions

Drawing:

- drawGrid(screen, colour, windowSize, horizontalLines, verticalLines, lineWidth)
- drawCircle(screen, colour, positionX, positionY, radius)
- drawCross(screen, colour, positionX, positionY, sideLength, lineWidth)
- drawEndScreen(screen, text, bgColour, winSize)

Game logic:

- `createEndScreenText(text, colour)`
- `noMoreSpace(field)`
- `printField(field)`