

**SilverCoders** EMPOWERING SENIORS

DIGITAL LITERACY IMPROVEMENT THROUGH EFFECTIVE

LEARNING EXPERCIENCES FOR ADULTS

# Challenge #23 PONG

ERASMUS+ No. *2020-1-SE01-KA227-ADU-092582*

**CODING TRAINING PROGRAMME FOR +55 ADULTS**



STRUCTURE OF THE CHALLENGE

## DESCRIPTION

## You were provided with a setup that is meant to work as the basis for this pong game. You already have the paddle and the ball. You now have to make them move correctly so that the player can hit the ball...

## GENERAL GOAL

## In this challenge you are going to create a pong-type game. But, in this case, with the added difficulty of having a circular playground.

## LEARNING OBJECTIVES

In the end of this challenge, you will be able ...:

* To have experience with a visual programming suite and be able to code standard small piece of software with it.
* Know what statements and command lines are and what they mean for a compiler.
* To be able to write instructions using correct syntax and with minimal errors.
* Know what operators are, what they do and which symbols stand for which operators.
* To be able to understand the assignment of values to variables and how to change them.
* To know all the basic arithmetic operations and how to use them.
* Recognize and know how to use all the data structures related to numbers.
* To know the structures linked to the use of text, such as strings and characters.
* To be able to use If statements correctly to execute code according to a certain defined fixed condition.

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| INSTRUCTIONS |
| This is your initial setup. Right now, you just have the objects there so you have to add the events to make the game work. But to strat with you should carefully look at the object properties and behaviours.    Here is the code to update the position of the paddle. The paddle is moved using the Left and Right keys. When that happens the variable PaddleAngle is updated.  Every frame the value of the variable PaddleAngle is checked and the position is changed accordingly. The Paddle is also rotated (angle change) to look always tangent with the circle.    We also check for the collision with the paddle and if we hit the ball the Score variable is updated    When the ball leaves the circle we count how many strikes we achieved. |

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| RESOURCES |
| Challenge 23 (Basic) |