

**SilverCoders** EMPOWERING SENIORS

DIGITAL LITERACY IMPROVEMENT THROUGH EFFECTIVE

LEARNING EXPERCIENCES FOR ADULTS

# Challenge #31 SPACE INVADERS

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

**CODING TRAINING PROGRAMME FOR +55 ADULTS**



STRUCTURE OF THE CHALLENGE

## DESCRIPTION

## In this challenge you are going to analyse an existing game that replicates the traditional game play of Space Invaders.

## GENERAL GOAL

## In this case we will use a very simple game and assess each of its complex features. At this stage, you’ve done enough exercises to understand how Gdevelop works.

## 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 for the complete application. As usual, the first thing you should do is to preview it and see how it works.    In this challenge, analyse:   * How you can have different **Scenes** in a game and how you can transition between them (**Change the scene)**. * Play sounds * Change the order of object visibility (**z-order**) * Create and delete **Objects** during the game * Make the **Objects** move * Create scores and display high-score |

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| RESOURCES |
| Challenge 31 |