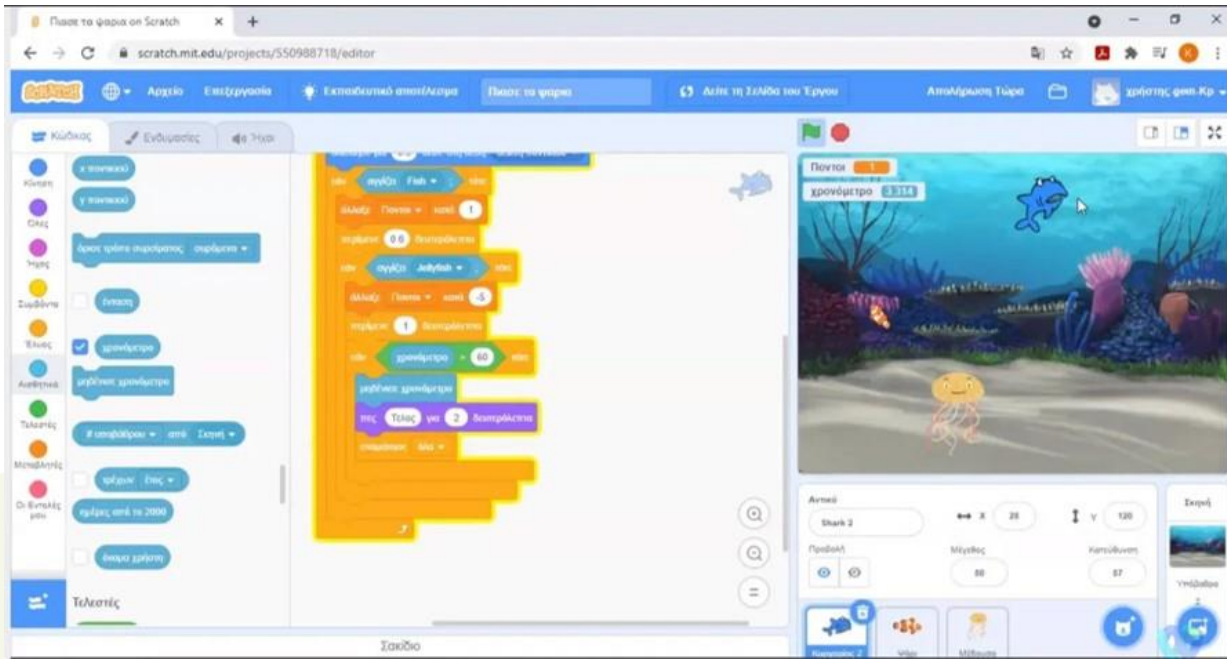


Become a Programmer



School subjects
Informatics
Age of students
13 - 15
Aim of the Activity
<ul style="list-style-type: none"> • ICT subject knowledge • knowledge about the STEM/digital world of work • transversal skills (art and design, organising tasks, music)
Background
<p>This activity was part of a summer school that was introducing girls (aged 13-15 years old) to different STEM fields and the activities were adapted to diverse levels and profiles including connections to women's contribution to STEM fields and favouring the girls' reflections on their own educational and professional path. The activities of the summer school were chosen to (a) introduce the girls to featured STEM fields and corresponding professional spaces, (b) inform girls about women's contribution to scientific domains, and (c) improve girls self-confidence in their abilities related to STEM.</p>

<p>Activity</p> <p>The girls had the opportunity to get in touch with Scratch (a programming platform) and learn the basics of programming using this IT program for kids. They understood the meaning of commands in ICT and their use. Additionally, they had to be in the role of a programmer and also a gamer in order to think the scenario of the video game to be developed and the logic of each move and reaction of the main characters of the game. Therefore, they did not only used their knowledge in programming but also reasoning and imagination.</p> <p>Before the activity we have sent via email useful guidelines to the participants in order to create an account at the platform of scratch. During the introduction session of the lab the mentor explained main commands and gave basic guidelines to the girls in terms of programming using Scratch.</p> <p>The activity involved the development of a scenario of a video game using specific characters and environment and its programming. The girls divided into groups of approximately 10 participants cooperated and decided the marking and the score of the game, the scenario to become a scorer of the game and programmed the movements and the outcome of these to the game using basic programming commands of Scratch.</p>
<p>Time necessary</p> <p>90 minutes</p>
<p>Learning outcomes</p> <p>The girls managed to:</p> <ul style="list-style-type: none"> • cooperate in teams • develop a scenario of a video game, • programming it, using a programming tool. • develop presentation skills
<p>Materials and costs</p> <p>Use of the platform is open and free.</p>