Workshop 3 – Games and Tools for Programming

Session 4: Introduction into visual programming with Scratch

**Expected Learning Outcomes**

* Understand the concept of computational creation in the context of Scratch
* Find and analyse different possibilities for own Scratch-based computational creation
* Become familiar with resources that support computational creation
* Establish Scratch accounts and create Scratch projects (stories)

**Teaching Methods/Approaches**

* Teacher presentation and demonstration
* Individual activity
* Group activity - collaboration
* Peer evaluation

**Sources of Training Materials**

* Brennan, K., Balch, C., Chung, M. (2014). *Creative Computing*. Harvard Graduate School of Education. Retrieved from <http://scratched.gse.harvard.edu/guide/files/CreativeComputing20140806.pdf> (5.1.2019.)

**Duration:** 3 hours (135 minutes)

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| **Topic/Sub-topics** | **Learning Objectives** | **Evaluation** |
| **1. INTRODUCTION INTO VISUAL PROGRAMMING WITH SCRATCH** | *Participants will be able to understand the concept of computational creation in the context of Scratch and to imagine possibilities for their own Scratch-based computational creation.* | Learners (in pairs) inspect prepared stories/games in Scratch and comment them.  Learners explore different parts of the Scratch interface (drag and drop blocks), experiment by clicking on each block to see what happens, snapping blocks together etc. |
| 1.1. Testing Scratch examples | Test already prepared examples |
| 1.2. Short introduction to Scratch elements | Explore how Scratch works - how to start, where and what are blocks, how to move blocks |
| **2. CREATING PROJECTS IN SCRATCH** | *Participants will be able to create some projects with the help of lecturers’ instructions and recognize important programming concepts through different activities.* | Learners with the help of teachers create few examples in Scratch.  Learners create their own simple project – story in Scratch. |
| 2.1. Creating a presentation-story | Create a presentation-story in Scratch |