Workshop 3 – Games and Tools for Programming

Session 2: Basic programming concepts

**Expected Learning Outcomes**

* Identify the basic programming concepts
* Recognise the basic programming concepts in examples of different educational games
* Analyse and compare existing examples of computer games for learning programming

**Teaching Methods/Approaches**

* Teacher presentation and demonstration
* Discussion
* Group activity - collaboration

**Sources of Training Materials**

Games:

* Run Marco: <https://runmarco.allcancode.com/> (5.1.2019.)
* Blockly-games: <https://blockly-games.appspot.com/?lang=en> (5.1.2019.)
* Code.org: [https://studio.code.org/](https://studio.code.org/s/course1/stage/10/puzzle/1) (5.1.2019.)

**Duration:** 1 hour (45 minutes)

|  |  |  |
| --- | --- | --- |
| **Topic/Sub-topics** | **Learning Objectives** | **Evaluation** |
| **1. BASIC PROGRAMMING CONCEPTS** | *Participants will be able to identify the basic programming concepts.* | Learners explore existing educational games for learning programming, point out and discuss usage of programming concepts (group activity). |
| 1.1. Introduction to basic programming concepts | Describe the basic programming concepts (sequence, branching, loop, variables) |
| 1.2. Educational computer games for learning basic programming concepts | Recognise the basic programming concepts in examples of different educational games  Analyse and compare existing examples |