

# Programming for the 21<sup>st</sup> century classrooms

## Future Classroom Scenario

*Title of the scenario:*

Field trip planner

*Names of team members:*

Barbara, Urszula, Dominik

### **Tools and Resources**

What resources, particularly technologies, will be required?

Scratch, Nonograms/"Graphic dictation", computers, paper, crayons, envelopes, boxes, jars, projector / smartboard,

### **Targeted grade levels**

What is the minimum and maximum age of students that can be involved with this scenario ?

Primary School from Year/Class 3 (8-9 y.o.) to Year/Class 8 (13-14 y.o.)

### **Learning Objectives, Skills and competencies**

What are the main objectives?

What skills will the learner develop and demonstrate within the scenario? (e.g. 21<sup>st</sup> Century Skills).

Students learn: planning, cooperation, computational thinking, using Scratch, making a presentation, decision making, presenting effects, encoding information, math, map orientation, reading coordinates/solving puzzles.

## Learner's Role

What sort of activities will the learner be involved in?

- Students will learn about encrypting information,
- Students will learn to organize trips,
- Students will decompose a problem (How to prepare for a field trip?),
- Students will know what to take for a field trip,
- Students understand why they go to chosen monuments in set order,
- Students use computational thinking,
- Students know how to make a presentation using Scratch,
- Students present their work in front of a bigger audience.

## Future Classroom Scenario Narrative

*Describe in max 10 sentences the main ideas of the scenario.*

1. Warm up - Prepare coding activity to draw according to instructions on a grid. (nonograms or "graphic dictation"). The picture shows where is their assignment is hidden.
2. They then decrypt the color of the item.
3. Divide the class into 2 groups. In each group, in pairs students plan where to go in a given time frame and prepare an information leaflet of what to take and when to meet.
  - 3a. MAP = The pairs receive a map with a grid and data (how long from one square to another) and plan where to go in 5 hours.
  - 3b. LEAFLET - make a list of items needed by each student (clothes, food, backpacks, phones, etc.) and time of meeting. They design a leaflet/poster for each student.
4. After the field trip, Students form pairs and program a presentation about the field trip in Scratch and present it in front of the class.

## Outcome

*Add the link to the video, drawing, photo collage or any other creative outcome you have created to explain your idea behind this learning scenario.*

<https://create.piktochart.com/output/25226809-field-trip-planner-scenario>