



CHILDREN'S RIGHTS

Brief description: Students study the United Nations Convention on the Rights of the Child by moving around on its' poster with the help of algorithms.

Target group: 4-6th grade

Subject: Ethics, Mathematics, Social Studies, Science,

Background: Computational Thinking, Real-Life Learning

Duration: ~45min.

Diagram type: Activity diagram

Language: English

Materials needed: UN's Children Right poster and small figures.



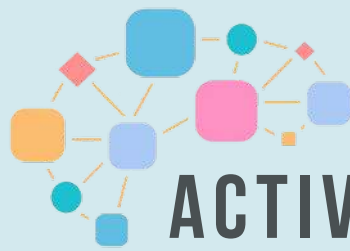
MODELING AT SCHOOL



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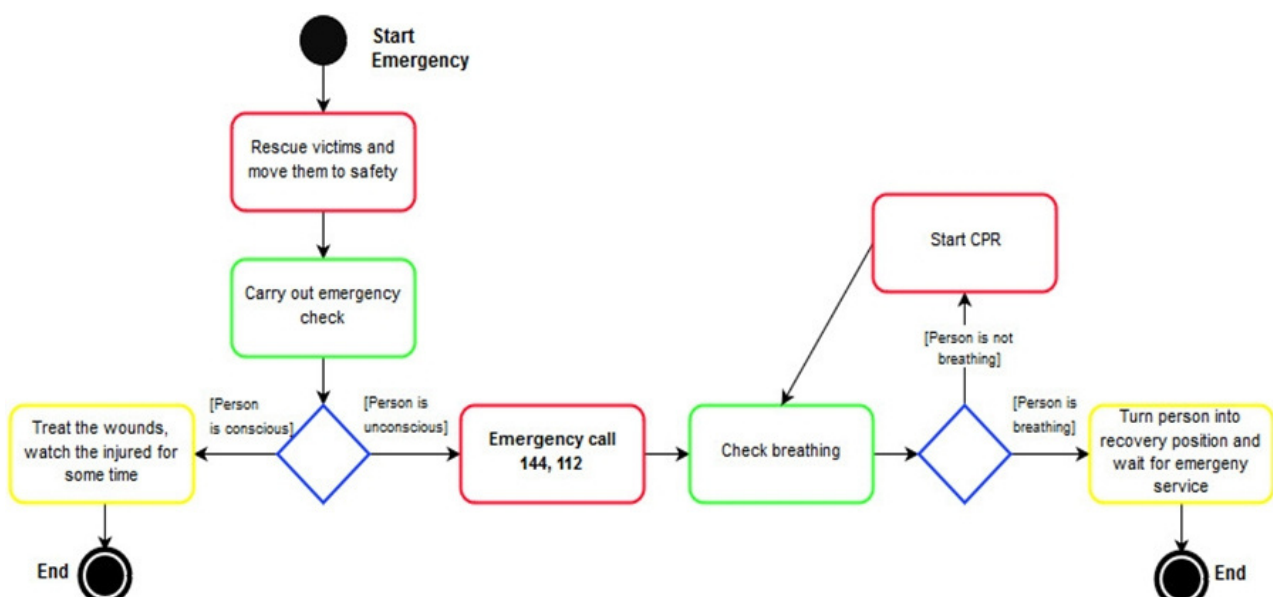
ACTIVITY DIAGRAM

ACTIVITIES, PROCESSES & RULES

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"Promote the algorithmic thinking skills to your students! Have a recipe, a grammar rule, or a chemical experiment; students can easily represent individual steps of an activity, a process, or a rule with the activity diagram."

General processes are shown in an activity diagram. They indicate a series of activities that lead from an initial state to an end state. This example shows the action steps of the first aider in an emergency. The rectangles represent the individual activities, and the diamonds represent the so-called decision points. In this example, the first decision (marked with a diamond) depends on whether the person to be rescued is conscious or not. The second diamond shows a branch with a loop. The loop is included here if the first aider determines that the person does not breathe. When the situation changes positively, the first aider can finish chest compressions and leave the loop.



CHILDREN'S RIGHTS

- *Students learn why precise and unambiguous instructions are important.*
- *Students understand that instructions must come in a certain order, otherwise, the robot will not be able to complete the task.*
- *Students learn simple principles of programming languages.*
- *Students notice the importance of common language and unambiguous words.*
- *Students learn the idea of conditional sentences in programming.*
- *Students learn debugging.*

Exercise:

The students work in 3-4 persons small teams. Each team discusses separately, which children's rights they find especially important to introduce and why. They select one, but not telling their selection to the other team.

The 2 teams are sitting around a table with the Children Right poster on it. They put questions to each other and based on the questions, they try to find out each others' selection. After the selection is found they place 1-1 figure on it. Then each team creates an algorithm of how their figure could move to the other place.

When the figures changed place based on the successful algorithms, each team discuss the other team's selection.

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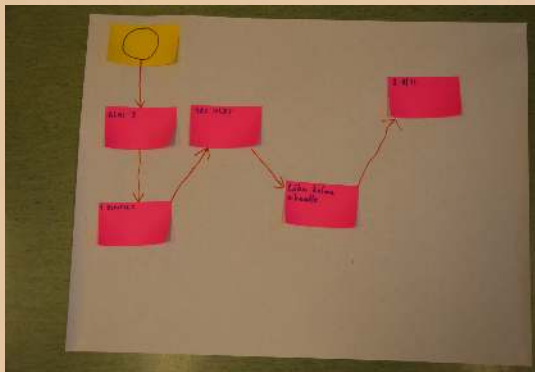
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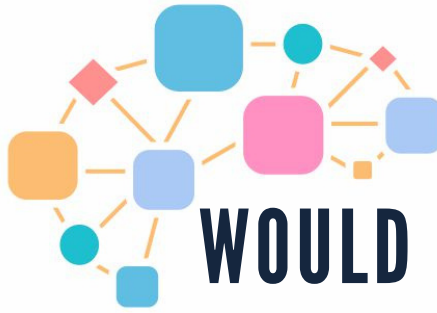
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