

## Breve introduzione all'informatica

-- terza lezione – 23 Febbraio --

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## SECOND MEETING

*About Scratch:* we become familiar with the Scratch environment and

- work on the translations the students propose\*,
- show how the sequence of instructions and how the selection are expressed in Scratch by considering the GoingHomeFromSchool project.

\* See the Russian translation

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2

## SECOND MEETING cont.

- **Step-6)** *Quite similar to step-1 of First-meeting: I say aloud a sequence of numbers, again they can be temperatures for example. The attendees have to find the highest and the lowest among them and, possibly, also their position in the sequence.*

*Attendees are not allowed to use paper but they are allowed to use their phones, they can work in groups of two or three.* Again, only not to be confused, numbers are positive integers.

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3

## SECOND MEETING cont.

- **Step-6)** ..... *The attendees have to find the highest and the lowest among them and, possibly, also their position in the sequence.*  
*Attendees are not allowed to use paper but they are allowed to use their phones, they can work in groups of two or three.* Again, only not to be confused, numbers are positive integers.  
– How many students use names to register highest and lowest numbers and their positions? How many not?

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4

## Quiz in Scratch

- Quiz e numero risposte corrette
- proposta senza variabile (di Fabrizio)
  - Vediamo l'esecuzione del file FabriQuestion\_time.sb nella cartella AttivitaScratch
- Proposta con variabile: vedere file QuestionTimeVariab sempre nella cartella AttivitaScratch

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5

## Middle school



ISSEP 2014

6

## Big entry: variables

- As you can maintain in your portable numbers but also text, you also can write inside your pc.
- **With a difference:** *the data (or values) in the telephone book of your portable are maintained even if you switch off your portable. Not everything you can write inside your laptop is maintained.*
- You have to decide which data in your laptop have to be maintained when you switch off.

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7

## Persistent and not persistent memory

We have to decide:

- the data to be maintained in your laptop when you switch off, these are called files
- the other data not in files have a life long as the program they belong to

*This difference is because in our pc there are two different types of memory:*

- *the persistent memory similar to that of our phones book*
- *the non persistent memory*

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8

## Why we write “precise” and not precise?

- Because they are precise only for some part
- For example using the diagrams the inside is not precise .....
- Languages precise in every component are also called formal (short on grammars)
- Informatics is a discipline of precision.

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9

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### Assignment:

1. learn how to change the background by reading Lawrence’s web pages and practice on the Nocturnal animals
2. draw a storyboard to describe some topic dealt with in current lectures of any discipline
3. Consider the inside of the quiz with score as different costumes of a sprite: introduce variables.

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10

## SECOND MEETING last

### Accomplishments:

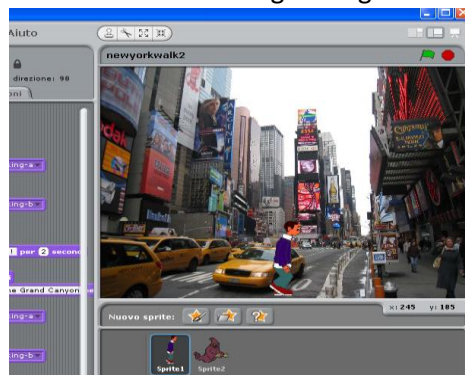
1. there are many “precise” languages, already seen flow diagrams and a pseudoLanguage: the Scratch language is the third one we see and this one is precise or formal.
2. **Grammars** are a way to specify a formal language such as a programming language.

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11

## Middle school: walking through New York



12