Breve introduzione all'informatica

-- secondo incontro --

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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

SECOND MEETING cont.

- **Step-1)** short introduction to the Scratch environment while we work on some translations the students had as assignement to show today

- **Step-2)** *As a recall of what we went through during our first meeting I ask if someone can tell other examples of tasks from our everyday life that we need to communicate quite precisely.*

  – *One of my favorite and easiest example is the table: "What to do in case the alarm sounds" present in every school. The order of the actions is important.*

  – *Other examples are dances: they can be very easy sequences of instructions. Specify a dance in a flow diagram*

Installazione Scratch 1.4:

- andare all'indirizzo http://scratch.mit.edu/scratch_1.4/

- A seconda del sistema di cui si dispone scaricare Scratch 1.4 per
  – Mac OS X pigiando su **MacScratch1.4.dmg**
  – Windows su **ScratchInstaller1.4.exe**
  – Debian su **Installa Scratch usando Software Center**

- Se avete problemi mandate una richiesta di aiuto sul forum e noi provvediamo con l'assistenza

When deciding about introducing computing in schools the problem is partly WHAT but mostly HOW: → methodology

- *What*: programming among short introduction to basic aspects such as architecture, formal languages, etc.
- *for introducing programming to persons with little knowledge of computing story-telling is the approach currently followed*

HOW: → methodology

- Story-telling is the approach we currently follow for introducing programming to persons with little knowledge of computing
- *has proved to be quite appealing for both students and teachers who need retraining*
- recommended to begin with a look-seeInside-modify methodology where teachers look at an already running activity with their students, explore the inside of what they have seen and then change it developing a story of their own.
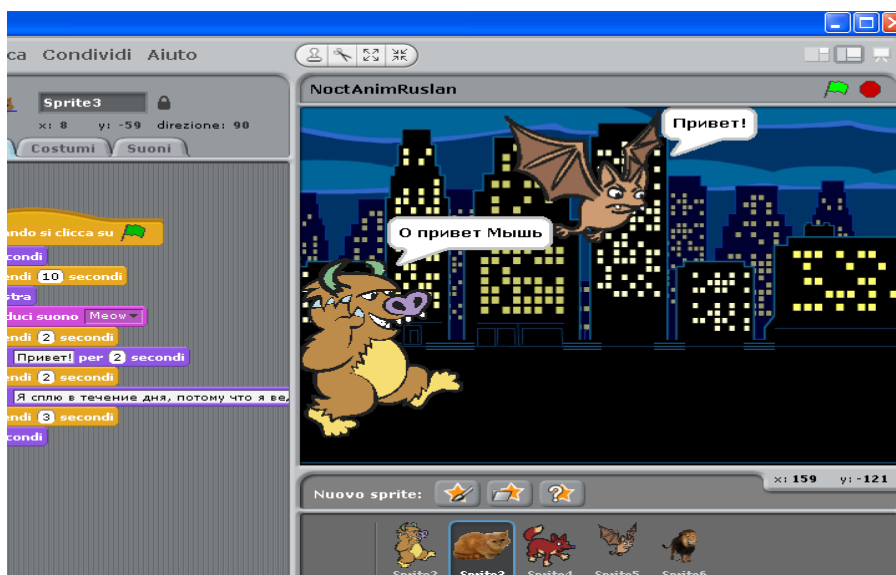
What about stories …..

The story named "Nocturnal animals", has been conceived and developed by an English student 11 years old

In it, a "monster", out for a walk in a modern city, meets different animals learning that they are going around by night because they are nocturnal animals, but a lion, when challenged, says, "Of course not (nocturnal animal), silly! I am lost!"

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The translation of a Russian boy:

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Esempio di diagramma di flusso per una danza:

inizio → 3 passi avanti → ripeti fino a stop musica

Stop musica è Vero → fine

Stop musica è Falso

femmina → vero → Piroetta 360 verso sinistra → Battere le mani

falso → Piroetta 360 verso destra → Battere i piedi

2 passi a destra

5

Guardiamo lo script (cioè la parte) del gatto nella storia degli Animali Notturni:

Sequenza di azioni da svolgere una volta ciascuna e una dopo l'altra dopo che si è pigiato sulla bandiera verde

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Guardiamo lo script (cioè la parte) del mostro nella storia degli Animali Notturni:

Sequenza di azioni che saranno svolte una o due (come qui) o più volte una dopo l'altra dopo che si è pigiato sulla bandiera verde

GoingHomeFromSchool

Sequenza di azioni che saranno svolte una o 0 volte (istruzione se) una dopo l'altra. Inizio della sequenza è sempre pigiare sulla bandiera verde

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- We analyse what is going on in schools for deciding HOW

Stories can be backgrounds for scholchildren performances

An evolution of the projects described in the previous meeting concern using if-then and if-then-else commands learnt developing our-on-stories into more sophisticated general stories and producing "stories-with-crossroads" [..], i.e. stories having not only sequential actions yet having a development that depends on user interactions or on other interactions among characters

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SECOND MEETING last

Assignment:

1. learn how to change the background by reading Lawrence Williams web pages and practice on the Nocturnal animals story

   http://www.literacyfromscratch.org.uk/teaching/secindex.htm

   Teaching Materials Secondary Creating a Story in Scratch:

   … 3: How to change Backgrounds ….

2. draw a storyboard to describe some topic you like better dealt within current lectures of any discipline

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