

# Module 0

## Good Start

These materials have been developed by the trainers of Coding Masters programme as part of the “Mistrzowie Kodowania” (“Coding Masters”) Programme funded by Samsung Electronics Polska, licensed under CC BY-SA “Attribution – Share Alike 3.0”.

MISTRZ  WIE  
K  D  WANIA



***In this scenario you will find a number of practical tips on how to start moving around the Scratch Junior application. Remember that we will repeat certain things in the following scenarios.***

***Topics:***

- ***Icons in modules***
- ***How to start***
- ***First steps in the application***
- ***Graphics editor***
- ***Adding and removing objects and scenes***
- ***Copying objects and code diagrams***
- ***Saving projects and giving names to sprites***
- ***"Yellow" block group***
- ***"Blue" block group***
- ***"Purple" block group***
- ***"Green" block group***
- ***"Orange" block group***
- ***"Red" block group***

## **Icons in modules.**

*To facilitate communication in our modules, we introduce two image elements*



*Fig. Elements for the instructor.*

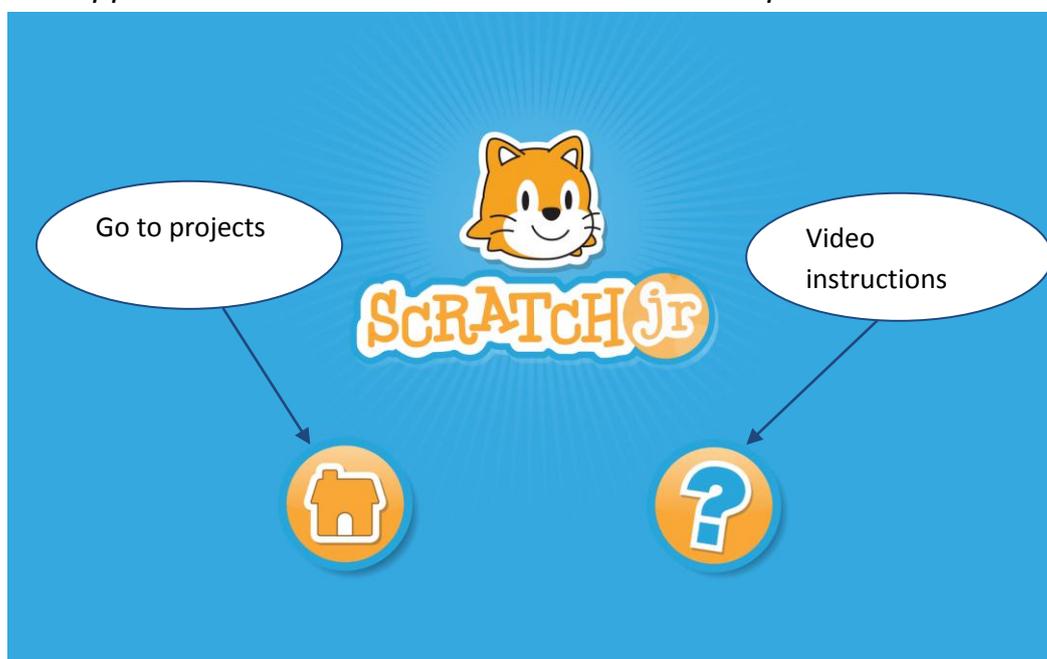
*The table with the sun icon will include proposals for activities or additional details about a given scenario. The table with a cloud, always at the end of the module, is where you enter your remarks as they follow from the course of the classes. Those can be the instructor's thoughts but also, equally important,*

*views and expectations from students. It is worth taking down unconventional solutions that may improve the quality of the scenarios.*

## How to start?

*Find the Scratch Junior application and install it. No worries, it's free.*

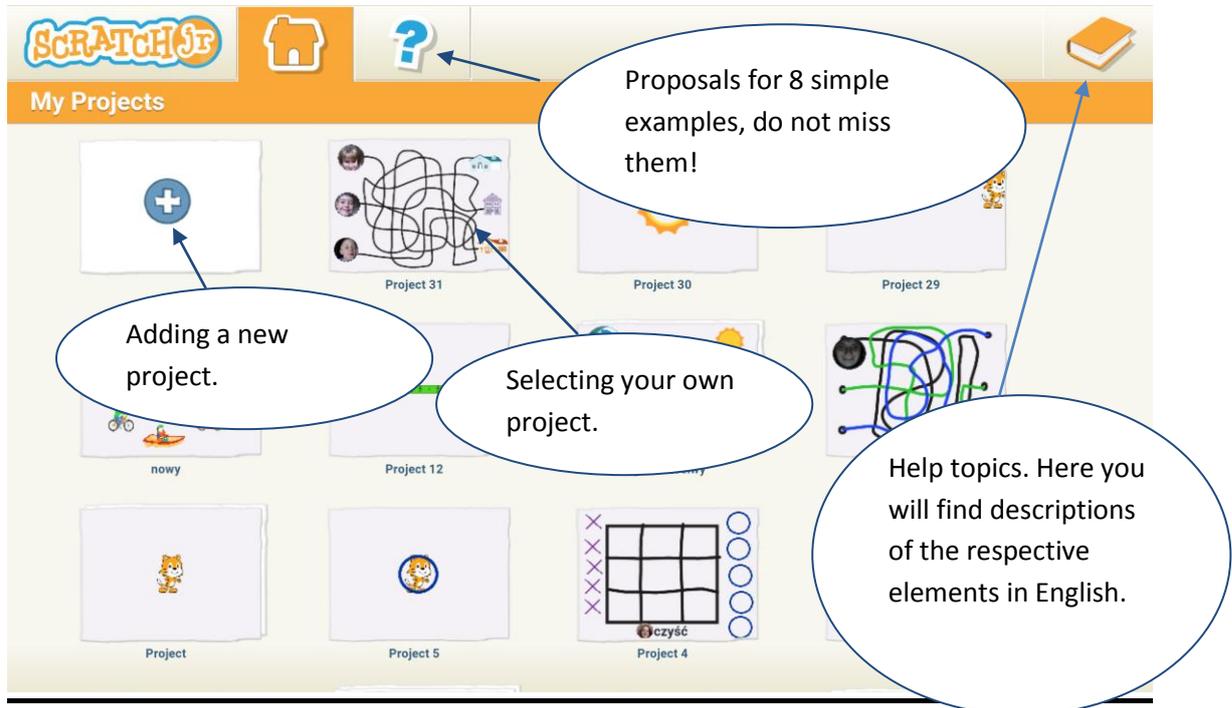
*Open the application. You can see a window with two options:*



*Fig. Application start screen.*

*Let's start with the video. It will explain a lot about how the application works. Then we'll go to the application itself.*

## First steps in the application



*Fig. Application window view with ready projects.*

*When you are ready, start a new project and have fun.*

*Now we will describe elements that you can see on the screen. It's been divided into 4 areas:*

- 1) adding sprites area (that is what we call the characters from our applications for which we will create scripts from colourful blocks);*
- 2) scene area;*
- 3) adding scenes area;*
- 4) building scripts area.*



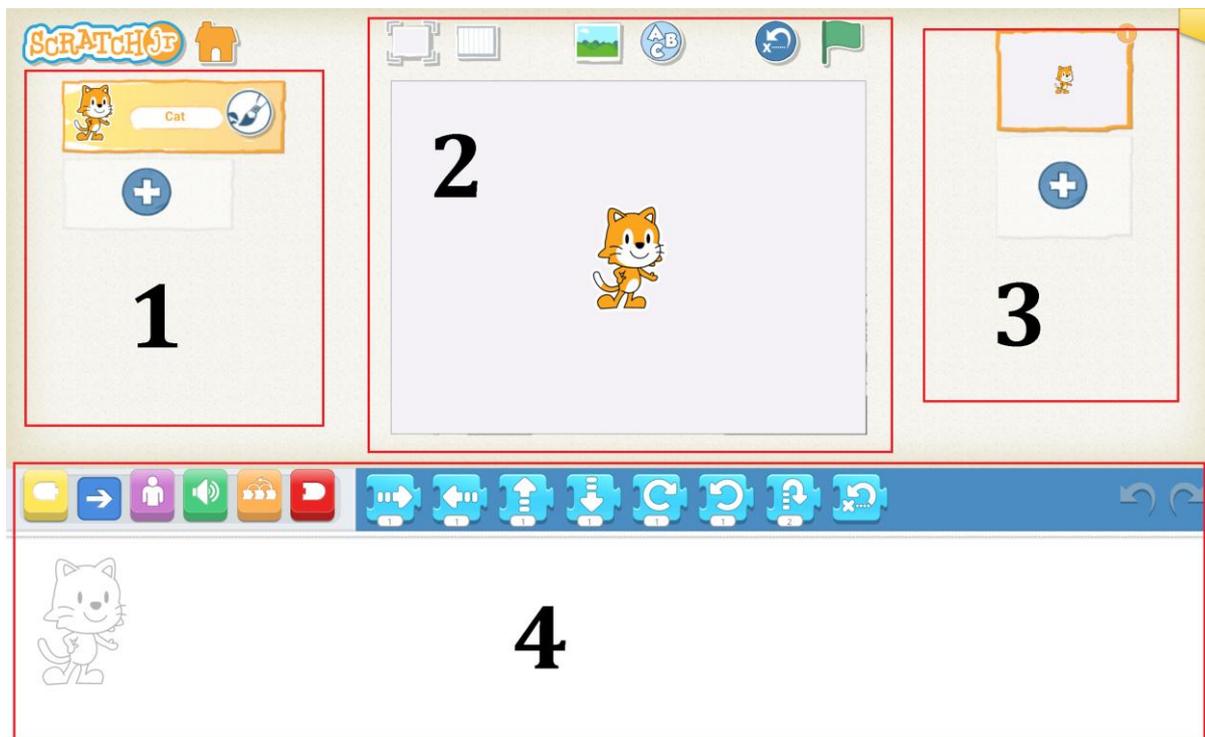
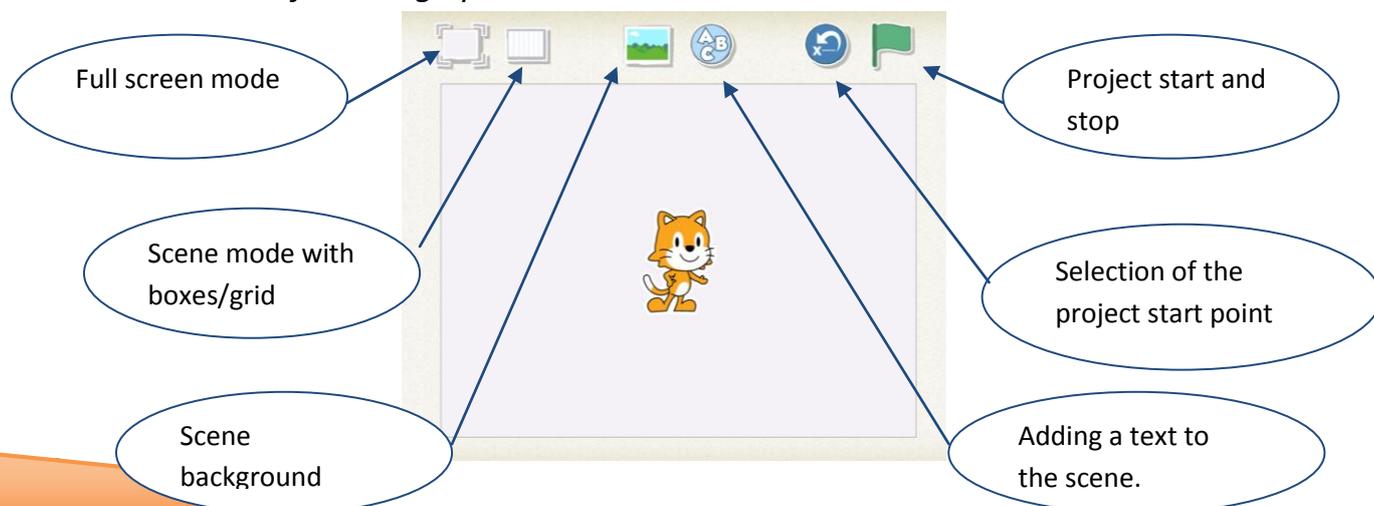


Fig. Areas as seen when working with the application.

Fields 1 and 3 are very similar – this is where we add a sprite or a scene using the blue plus icon. After holding a specific sprite or a scene, we can also delete or move them, or change their sequence.

Field 2 has the following options:



A few comment on those elements. The scenes we are adding can have graphics edited, or you can create your own scenes, which we will show later. The "ABC" button is for adding text that does not have the properties of a sprite. It is not possible to create scripts for this text.

Field 4 is where we build our script by dragging blocks from the bar above. The blocks are classified by colours and functions.

## Graphics editor.

The graphics editor helps you create your own projects and improve those stored in Scratch Junior. The graphics editor is always launched after pressing

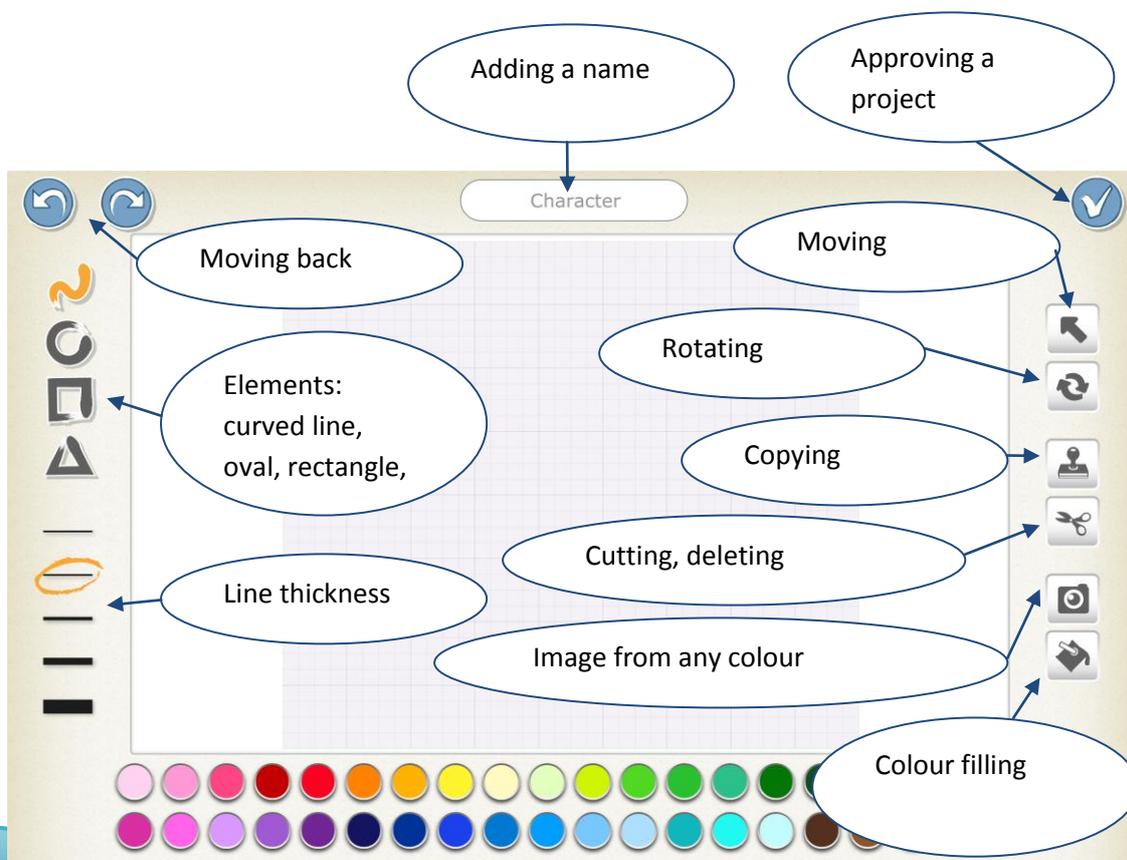


Fig. Description of the graphics editor functions

## Adding and deleting sprites, scenes.

Sprites are added after pressing the blue plus icon on the left side of the screen; scenes are added by pressing the same button on the right side of the screen.

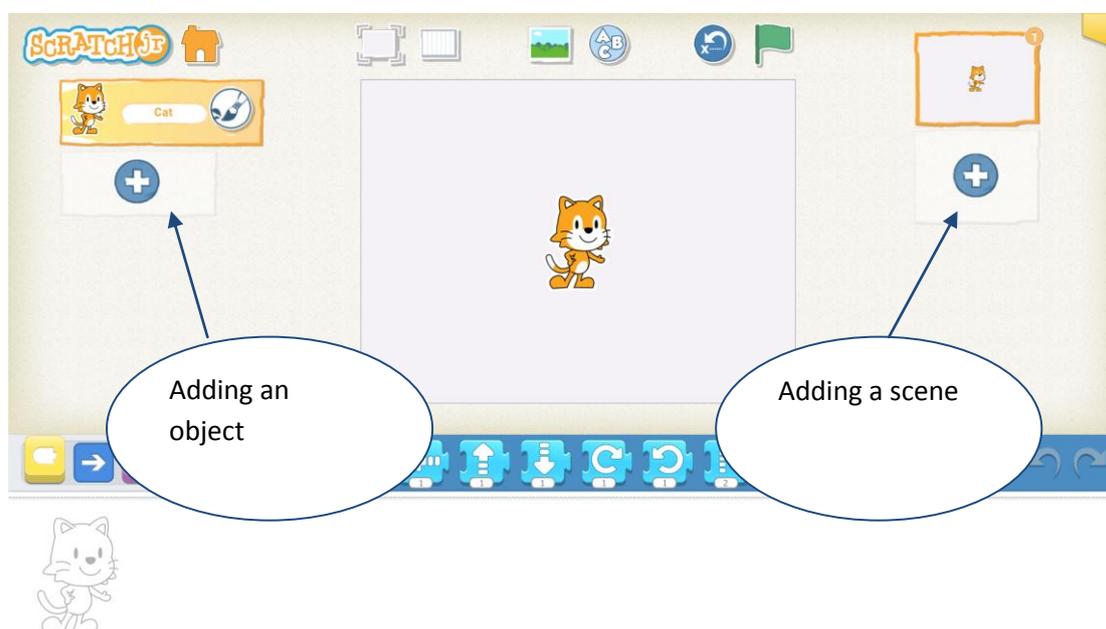
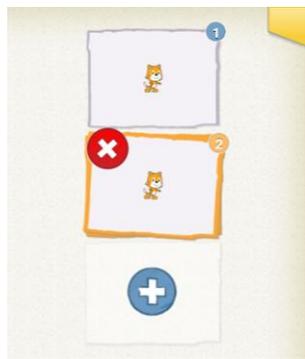


Fig. Adding a sprite or a scene.

Elements are deleted after holding a sprite or a scene for a few seconds, until a red circle appears next to them. This can be done from the application screen or scene level.



*Fig. Deleting an object*



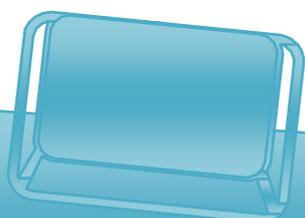
*Fig. Deleting a scene*

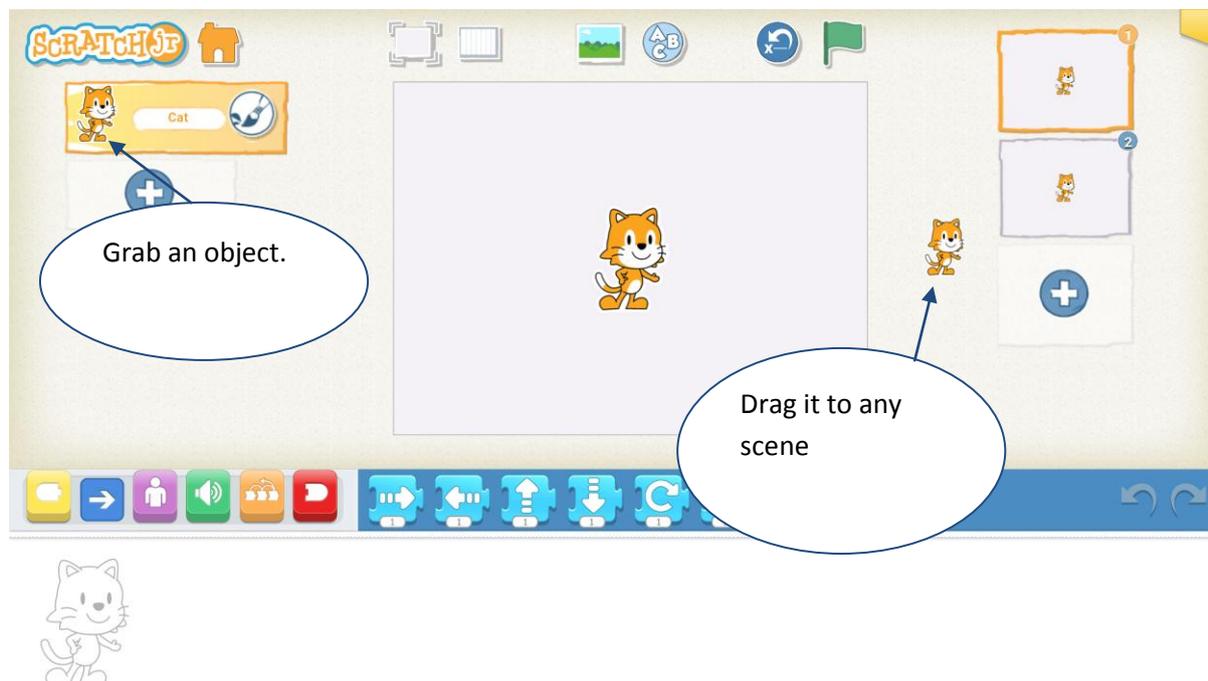


*Fig. Removing a sprite object from the scene level*

## Copying sprites and code diagrams

*After loading a sprite to the scene, you can copy it again for the same scene, or another scene in the same project. Copying is done together with all codes in a given object. Copying is done by dragging a picture to a designated place, just like on the illustration below:*

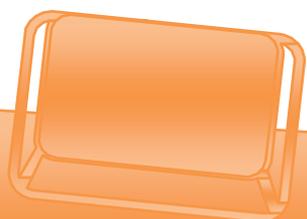




*Fig. Sprite copying by dragging*

## *Saving projects and sprite names.*

*Before we describe particular blocks, remember that a project can be saved under any name, by using the yellow field in the top-right corner of the screen, Our projects are saved in our application and we cannot export them to another one – they are only ours.*



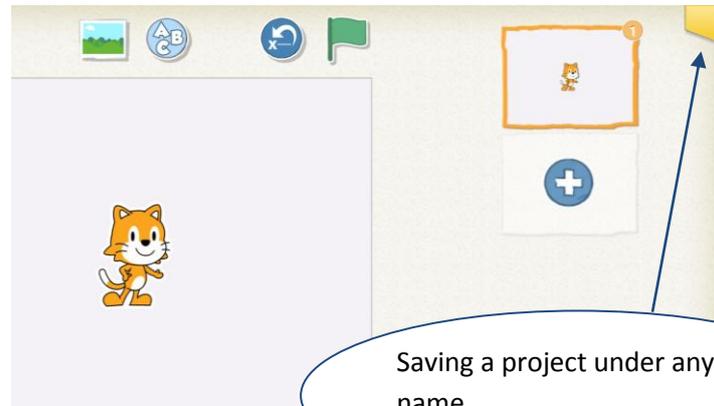


Fig. Project saving view

*Apart from saving projects under any names, you can give your own names to sprites. Sometimes, when one sprite must be copied a few times, this helps you find the right sprite. The sprite's name can be changed immediately after selecting the image in the graphics editor, or from the scene level, by selecting a brush tag next to the figure.*



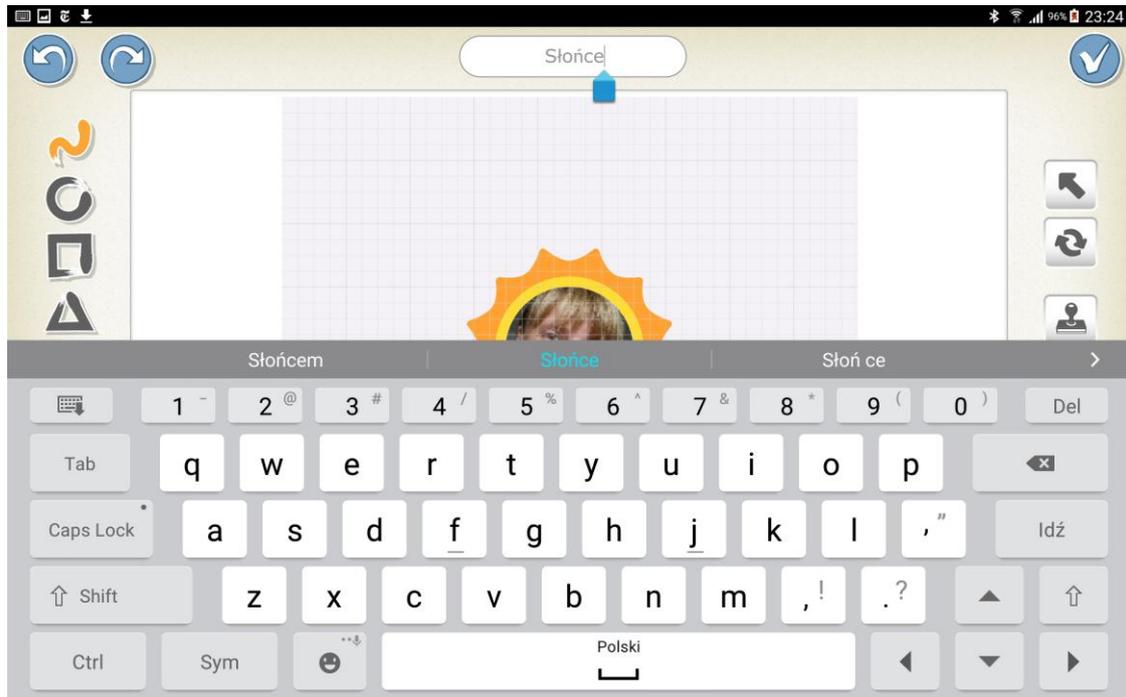


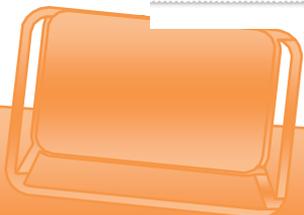
Fig. Giving names to sprites in the graphics editor.



Fig. Moving from a scene directly to the graphics editor.

## Colourful blocks

"Yellow" block group.



*Blocks from this group trigger a given event. It can be done after launching a green flag, after we touch a sprite, or when a sprite touches another sprite in our project, or after sending or receiving a message in a specific colour. Remember that we only have six message colours to choose from.*



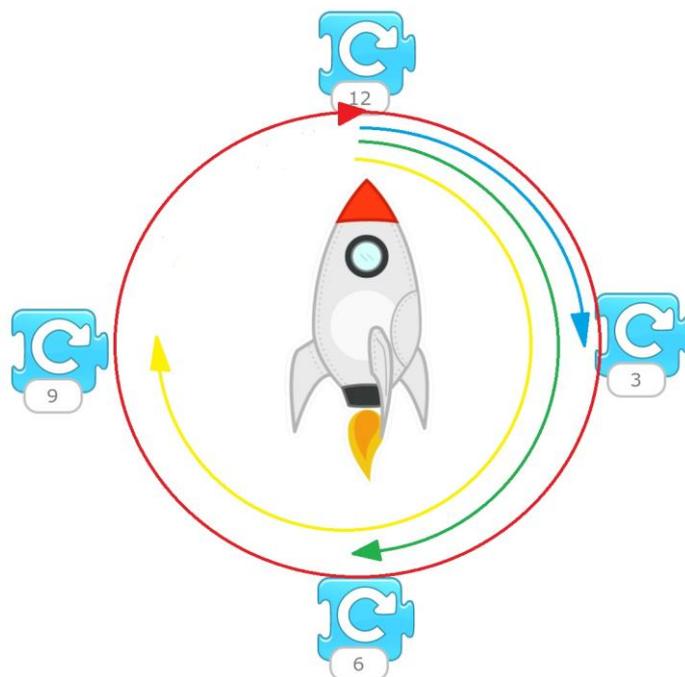
*"Blue" block group.*



*Blue is for movement: left, right, up and down, but also rotations, bounces, and returning to the starting position. Please note that nearly all blocks are provided with windows with the number one, which can be edited, and its value can be changed (just click on it and enter a new number). Launching the boxes/grid mode for the scene helps you estimate the number of steps the sprite needs to take in order to cover a specific distance. The length of the box corresponds to one unit of movement.*



*Rotations are as shown on the picture below: one rotation is a rotation by 30 degrees (5 minutes).*

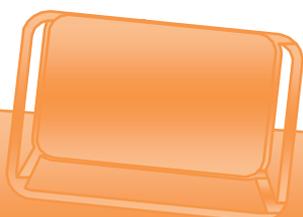


*Fig. Rotations diagram.*

*"Purple" block group.*



*The blocks from this category help you manipulate the figure itself – increase and reduce its size. There are also options for disappearing and appearing, and for displaying any words in an emerging cloud.*



### "Green" block group.



Green blocks make it possible to add sounds. One short sound is available as a standard, but you can record your own sounds by activating the block with a microphone.

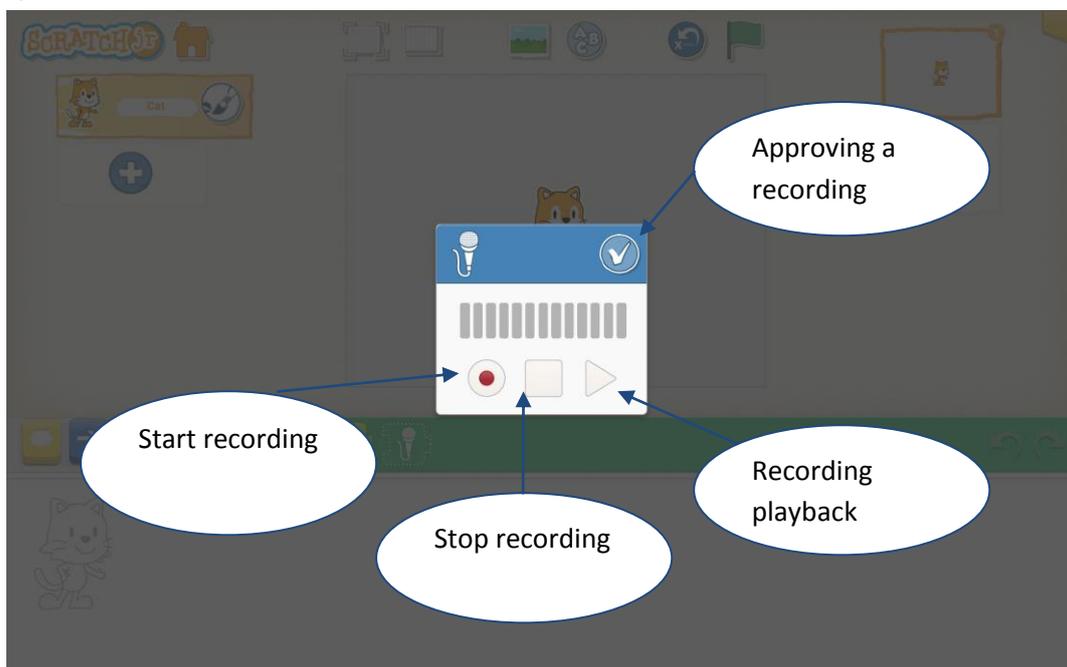


Fig. Descriptions of elements for recording.

Note that after the recording, on the green bar there will be another element with the number 1 on it. It is there to place a recording in the script.

### "Orange" block group.





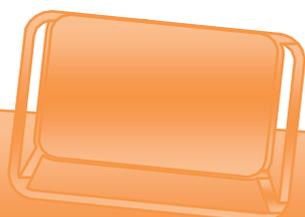
*The following elements are available here: block with a loop, which repeats certain intentional activities placed "inside it," a block with a clock, which stops the execution of the script at a point in time. We also have the option of accelerating the script (block with a walking man) or stopping it (block with a hand).*

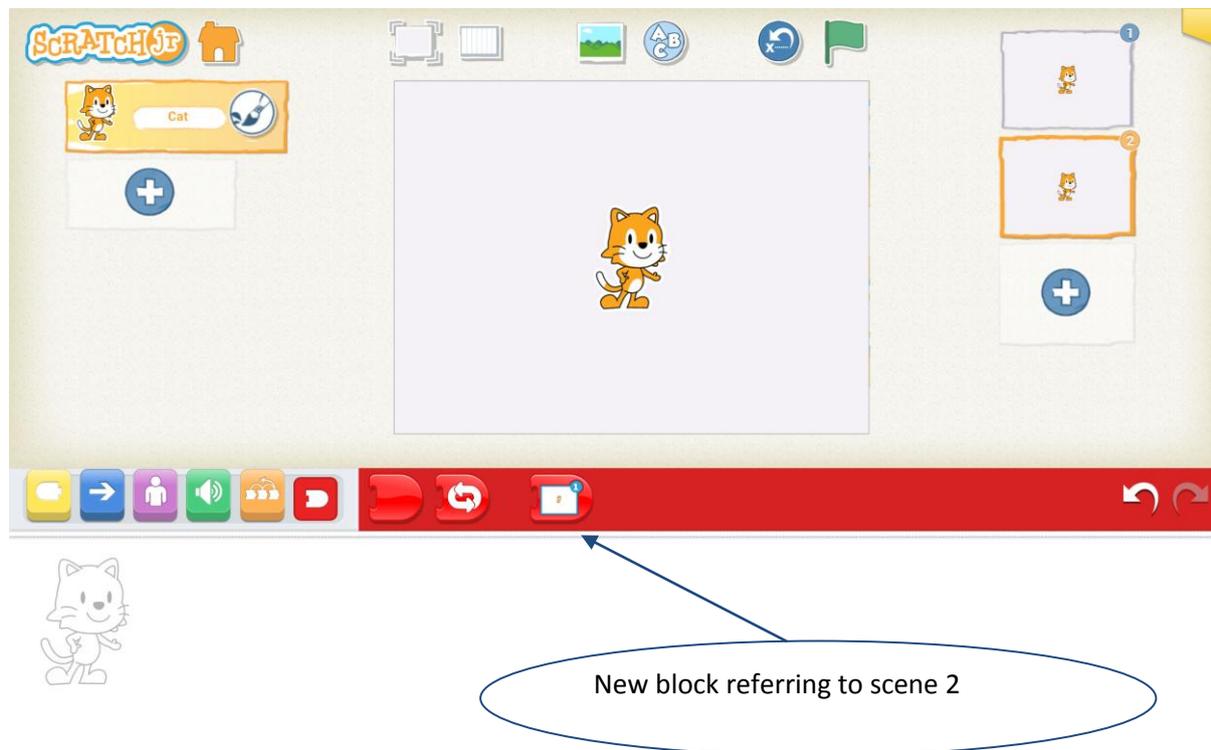
*"Red" block group.*



*There are two blocks in this category. The first ends the script in the sense that it is the end of a given sequence, and not the end of the entire project. The second block is an element which helps to code perpetual repetition of a given script.*

*If we add another scene to our project, similarly to adding sounds, there will be a new block, which helps you refer back to a specific scene.*





*Fig. Red bar after adding a new scene.*

