Scratch Activity

What is Scratch and how can you download it?

Scratchisaprogramming languagethat hasits own stand-alone environment. It is free and userfriendly. It is a great way to introduce difficult programming concepts, such as:

- **Parallel programming**: Many programs that seemingly run in parallel.
- **Object-oriented programming**: Each object is programmed separately, such as our character or obstacles.
- **Event-driven programming**: The object moves based on events / events that occur, such as pressing a button.

You can use Scratch online as well as standalone on a computer/tablet.

Below you can find ways to download the appropriate program for your needs.

- **Online**: You can download Scratch from the link below:

https://scratch.mit.edu/projects/editor/

- **Desktop app**: You can download Scratch for your computer from the link below:https://scratch.mit.edu/download

Follow the instructions based on your operating system.

You can also download the app from Microsoft Store or Mac App Store.

- **Mobile devices (mobile/tablet)**: You can download Scratch using the play store of your device (**Google Play**, **App Store**, etc.).

Women in Science storytelling program

Aims of the activity

- Students will learn to work cooperatively.
- Students will be introduced to the concept of programming.
- Students will be introduced to algorithmic thinking.
- Students will understand how a character can speak through a cloud dialog.
- Students will learn how to search for facts in the Internet.

Tools and materials you will need

- Tablet or computer (laptop/desktop), in which the Scratch app is pre-installed.
- Internet connection so students can search for facts online, or books with information, or students can search information as homework the day before.

Funded by the European Union

Activity description

Introduction

- The theme is introduced to the students with questions such as: “Do you know a great woman scientist?”.
- Introduce the Scratch environment to the students.

Activity

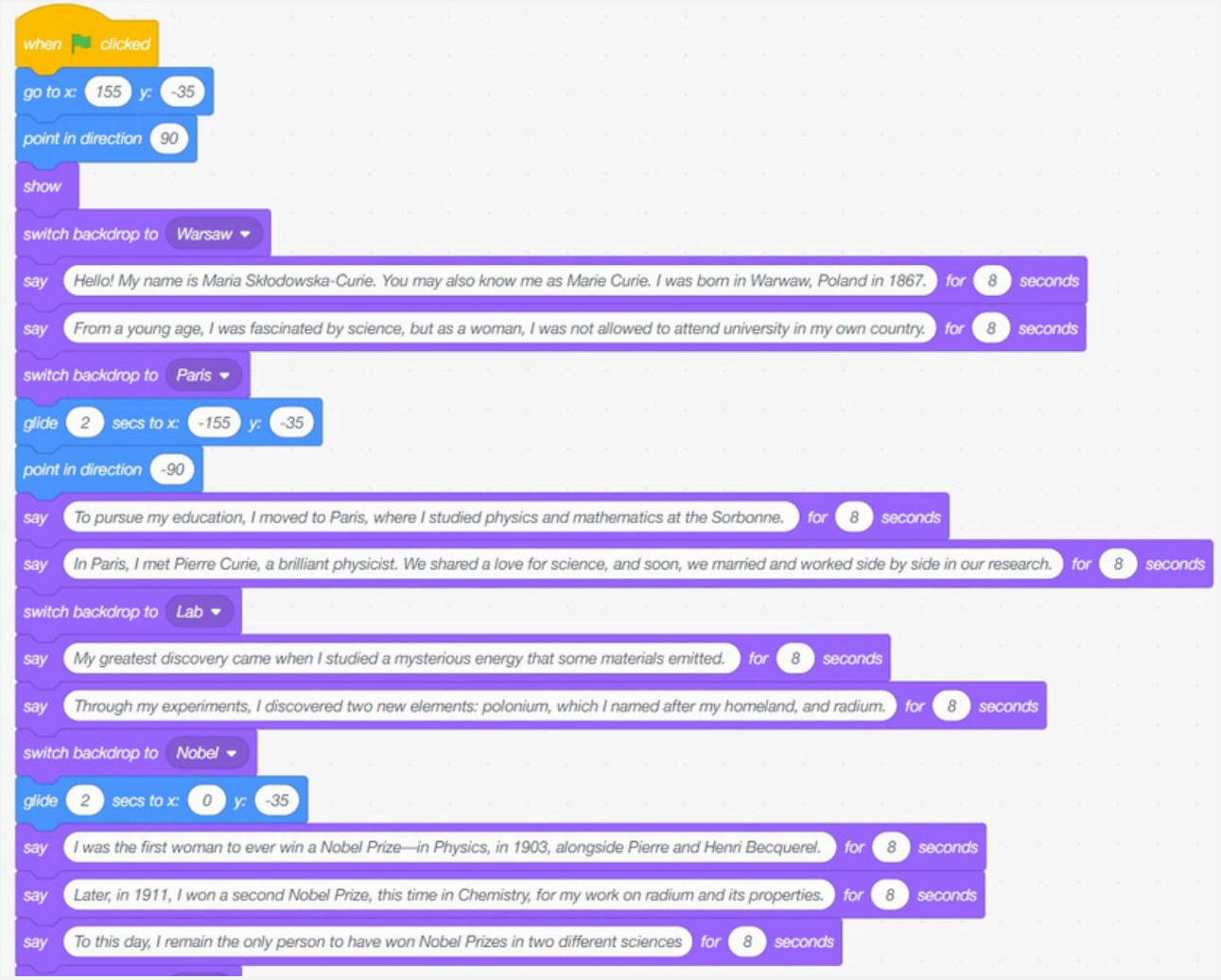
The aim of this activity is to create a storytelling program for a woman in Science or technology. This example is a storytelling for Marie Curie.

- Students create teams of 2-4 people, each team can take on the task of presenting another female scientist (Marie Curie, Grace Hopper, Katherine Johnson, Hedy Lamarr, Ada Lovelace, etc.)
- At first, students need to find the facts for the woman they chose.
- They can also search for a picture or a sprite to use as the narrator of the story.
- Students can also find images to use as background for their story.(optional)
- They can use movements so their story is more interactive, and not just a simply narration. (optional)
- They can also create a background with a known quote from the person they chose. (optional)

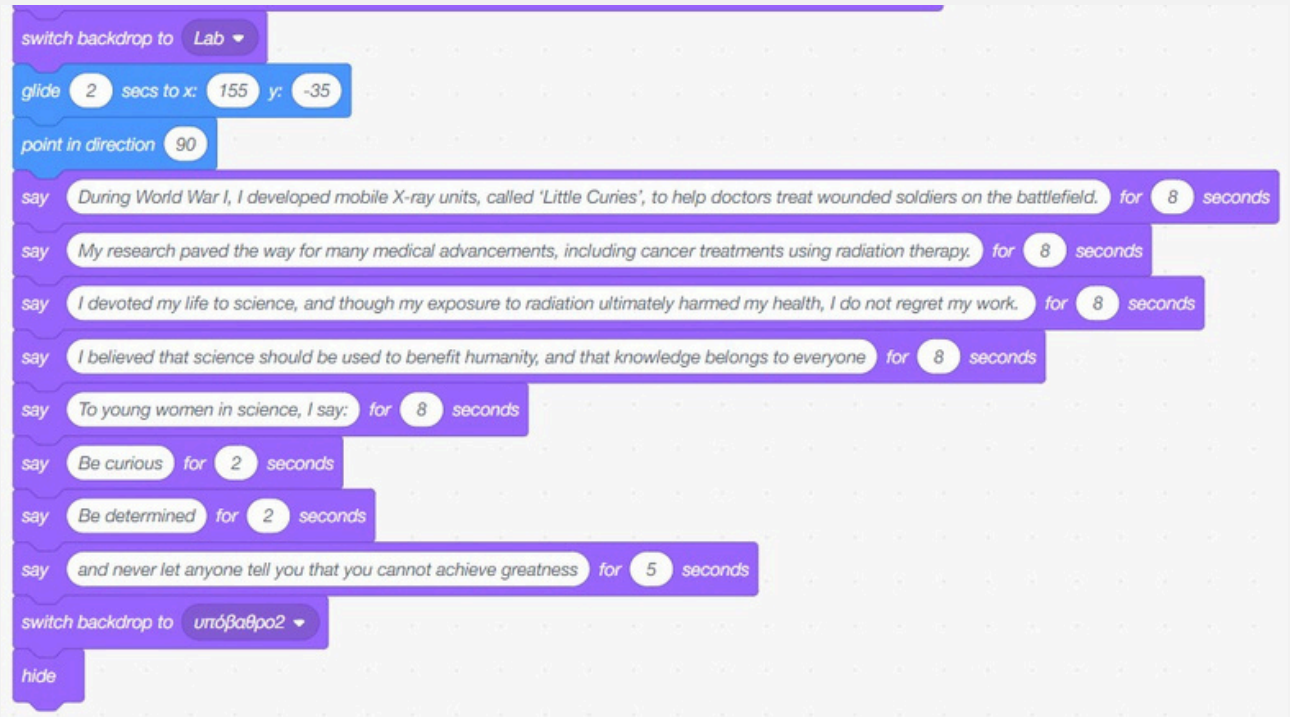
The basic program can be found in the images below.

Funded by the European Union

For the narrator's sprite:



Funded by
the European Union



Funded by
the European Union