


Financial literacy with Makey Makey

In this tutorial you will learn how to set up an activity on coding based on Scratch and simple financial literacy for kids.

 Difficulté Facile

 Durée 25 minute(s)

 Catégories Électronique

 Coût 25 EUR (€)

Sommaire

Introduction

Étape 1 - Connecting the Makey Makey to the computer

Étape 2 - Coding on Scratch: Declaring variables

Étape 3 - Coding: Conditional statements

Étape 4 - Coding: finalizing the code

Étape 5 - The final result

Notes et références

Commentaires

Introduction

In this tutorial you will learn how to set up an activity on coding based on Scratch and simple financial literacy for kids.

Une version de ce tutoriel en français est disponible en ligne / A French version of this tutorial is available [here](#).

A Bulgarian version of this tutorial is available [here](#).

Matériaux

1 x DIY makey makey (see [this tutorial](#)), or original makey makey

Different coins (10 cents, 20 cents, 50 cents, 1 cent, etc.)

A bunch of alligator clips

Outils

1 computer with Scratch (Offline or on-line)

Étape 1 - Connecting the Makey Makey to the computer

If it's your first installation of Makey makey or Arduino Leonardo on Windows or MacOS, just plug the board to your computer and wait for the automatic installation.

(2 minutes maximum).

Next, plug some alligator clips into the board.



Étape 2 - Coding on Scratch: Declaring variables

Let's get started with the coding.

To declare a variable go to DATA (orange), and click on 'make a variable' and give a name to the value. For this exercise you will need two values : 1. 'price asked' and 2. 'bucket'.

Next, pick up two blocks of the type 'set to 0' add one block per each value (one for bucket and one for price objective) to the code.

For the value 'price asked' add a block 'change by 1' and go in OPERATOR (Light green), and replace the 1 in change by one by the block 'pick random 1 to 50'.

At this stage you should have a price and an empty bucket.



Étape 3 - Coding: Conditional statements

In a “forever” loop (available under CONTROL), pick the condition of your first key.

IF ... pressed THEN

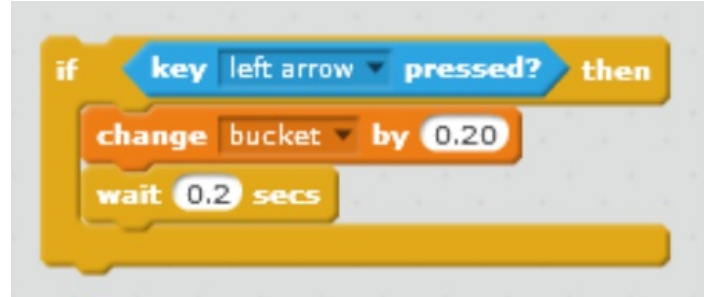
In our example the key will be represented by a coin, so we will use this value to define the extent to which the ‘bucket’ value will increase.

For 1 euro choose the value 1 and for 10 cents of euro (0.10euro) set to 0.1.

To change the value go to Data (orange) and choose ‘change ... by 1’, and modify it to have ‘change bucket by (the value of coin)’.

To improve the code add a ‘wait 0.20 seconds’ in each conditional statement.

Repeat the operation for each coin.



Étape 4 - Coding: finalizing the code

Important! to avoid problems you need to add an end to your code.

In this example, when the bucket value will be equal to the price, that will mark the end of the code.

We need to add an IF (yellow) and use the Operator (light green) ‘... = ...’ in our case we will add our variables (bucket from Data (orange)).



Étape 5 - The final result

The final code should look like this (see image below).



Notes et références

This tutorial has been developed as part of the I TECH project, co-financed by the Erasmus + Program of the European Commission. To contact us: info@digijeunes.com