

SCENARIO	
Title	Finance management
Summary	Students will learn to use money: calculate the total value of their coins, count how much change they will receive after payment, convert cents to euros and back.
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Didactic objectives	
<p>General aim:</p> <p>Students will to learn how to manage their own finances.</p> <p>Tasks of the lesson:</p> <p>after the lesson students:</p> <ul style="list-style-type: none"> - will learn to add up the value of their pocket money. - will be able to determine if the amount of money they have is enough to make a purchase. - will be able to calculate how much change they have to receive from the seller. 	
Physics <input type="checkbox"/> Mathematics <input checked="" type="checkbox"/> Information Technology <input type="checkbox"/> Robotics <input type="checkbox"/> Programming <input type="checkbox"/>	
Education Level: 10-12 years <input checked="" type="checkbox"/> 12-14 years <input type="checkbox"/>	
Problem Statement	
Students often not able to manage their finances in real-life situations. They are often not able to calculate how much change they have to receive or when counting cents do not realize that an amount equal to or higher than 100 cents needs to be converted into euros and cents.	
BOM (Bill Of Materials needed)	
Computer for each student, Scratch for Arduino, Arduino block with joystick and light (optionally possible to use buzzer).	

Activity description

Students must know that 1 euro is 100 eurocents. If there is a need for that, it should be revised.

Coins randomly appear on the screen, the value of which the students are supposed to count, convert the sum received in cents into euros and cents. After that, they enter the result into the appropriate window, or mark the result using a joystick.



How many euros are here?

 

2nd optional scenario

Coins and the amount of money the student should pay for the products they need randomly appear on the screen. The students have to count the value of their coins and mark with a joystick if they have enough money to purchase the item.

„InnoExperiment – Innovative Approach to Teaching through Experiment”

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3rd optional scenario

Coins and the amount of money the student should pay for the products they need randomly appear on the screen. The students have to count the value of their coins and calculate how much the seller must pay them back in change.

Resources

Pictures of various coins.

Animations (illustrations): a student counting coins, shopping, and receiving the change.

Students' Evaluation

By performing the activities described, the student will learn the proper management of their finances.

Students' skills will be improved:

- adding and subtracting,
- the ability to convert larger monetary units (euros) into smaller ones (cents) and vice versa,
- calculating the amount of change they are to receive from the seller.

Bibliography

Žydrūnė Stundžienė "Matematika tau plus 5 klasė", Vilnius, TEV (Mathematics textbook for class 5)

Scalability

We can use it when learning how to add and subtract during mathematics class and when learning how to properly manage money.

We can also use this program to learn how to convert money into another currency.

More information