GIMNAZIJA DR. MATE UJEVIĆA U IMOTSKOM

SCIENCES AND MATHEMATICS INTO LEARNING ENGLISH

S.M.I.L.E.

Erasmus+ project KA229

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Class: 4c

M. M.
BAGO

A.SELAK-ZELJKO,
4.C

DEFINING THE SIZE OF AN UNKNOWN OBJECT

REPUBLIC OF CROATIA

INDEPENDENCE DAY, JUNE 25TH IS MEMORIAL DAY OF INDEPENDENCE OF CROATIA FROM OTHER YUGOSLAVENIAN REPUBLICS

THE FLAG AND THE CREST

SPECIAL IN EVERY ASPECT, BUT ITS SYMBOLS, THE FLAG AND THE CREST, ARE ONE OF THE PRETTIEST IN THE WORLD.

INTERESTING

- The crest of RC has a shape of a shield divided in 25 red and white fields and a crown made up of 5 shields with historic Croatian crests.
- https://www.hkv.hr/hkvpedija/lijepa-nasa/8051-o-postanku-hrvatske-zastave.html

- In honor of war volunteers in district Bage in Imotski military buildings have been built with a Croatian flag at the entrance.

HIGHT OF THE FLAG

WE CHOSE THE FLAG AS THE OBJECT OF WHICH WE WILL DETERMINE THE UNKNOWN HIGHT.

1. Outdoor teaching
2. Choosing the object of unknown height
3. Assuming the height
4. Making a clinometer
5. Measurements
6. Data proccessing
7. Results

METHOD

MING THE HEIGHT

- With the height of the building in mind we were able to assume the flag's height.
- 3.5m to 4m

4. MAKING A CLINOMETER

- With protractor, straw, a piece of ribbon and an eraser as a weight we made a clinometer.

5. MEASURING

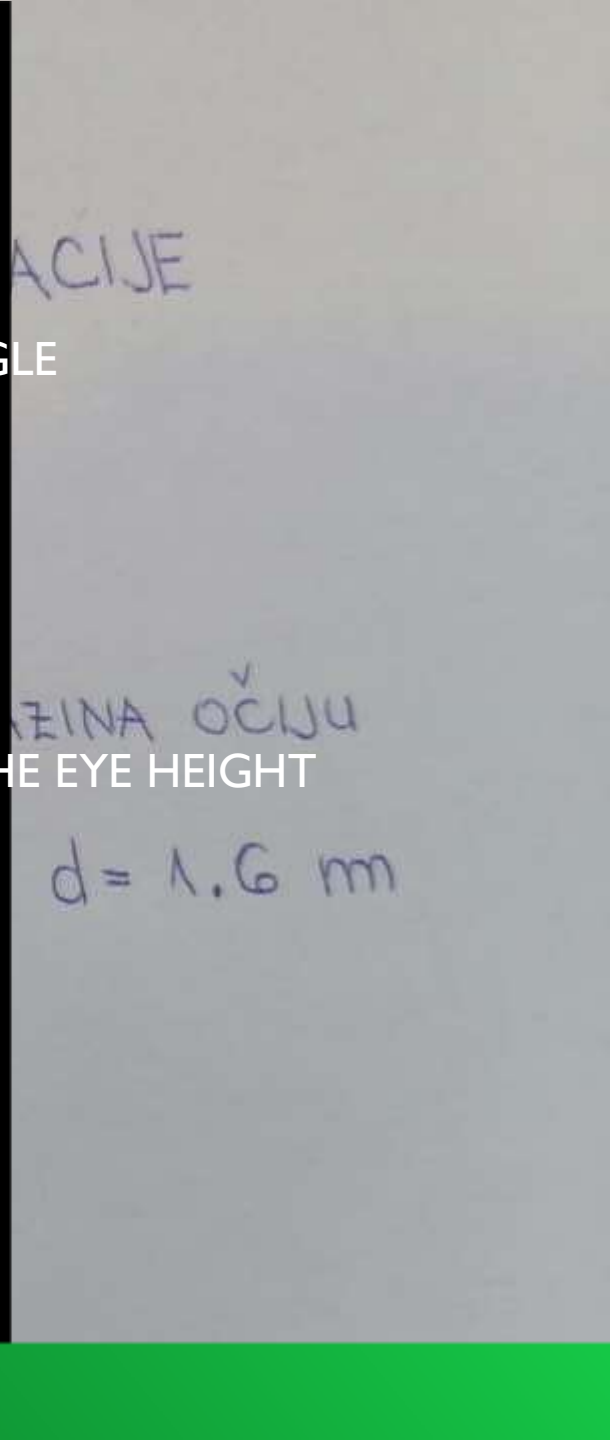
1. Stand a certain distance from the object -5m
2. Determine the angle with clinometer- 64°

6. DATA PROCESSING

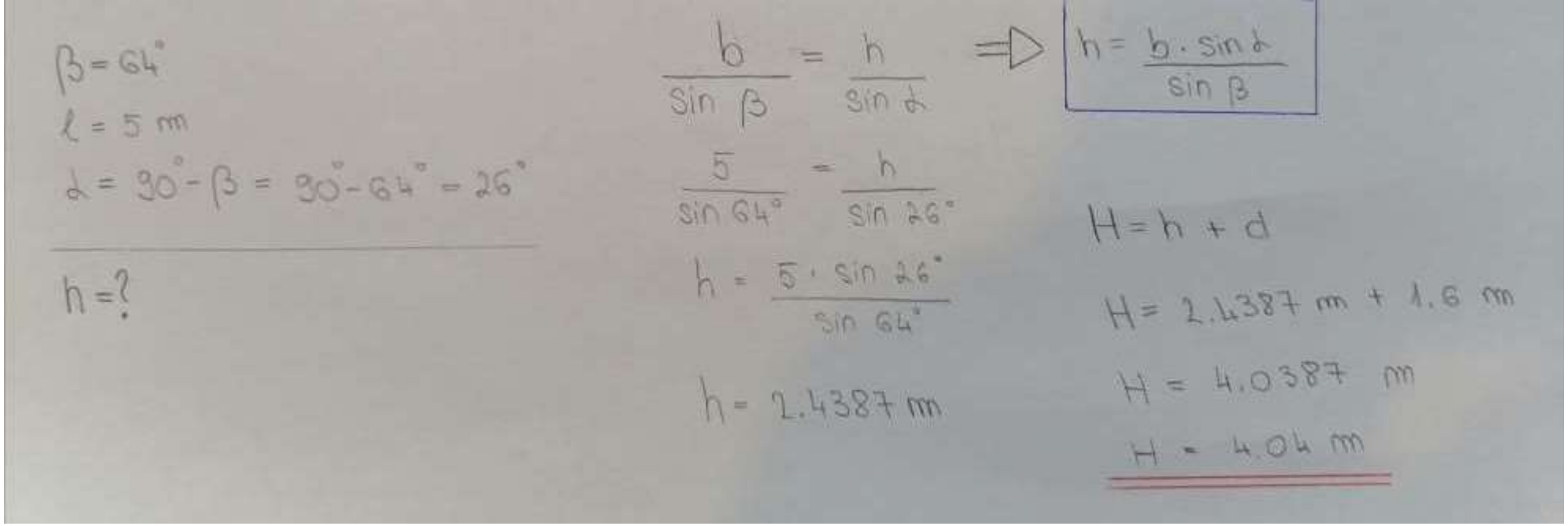
ELEVATION ANGLE

WE CALCULATE THE UNKNOWN ANLGE'S SIZE KNOWING OTHER TWO ($90° - B$)

WE KNOW THE DISTANCE FROM THE OBJECT (ℓ)



THE EYE HEIGHT



- Using the sinuses theorem we calculated the height.

7. RESULTS

- The flag's heigh equals 4.04 m.
- A comment on the aasumption:
- Comparimg the results we got with the assumed flag's height before the calculation itself, we conclude that the assumption is close to the actual height.

WHOS ASSUMPTION WAS MO ACCURATE?

TEAM ANA

- Before measurements Ana assumed the flag's height was 4.2 m.
- A= 4.2 - 4.04 = 0.16 m = 16 cm

TEAM MAGDALENA

- Before measurements Magdalena assumed the flag's height was 3.75 m.
- M= 4.04 - 3.75 = 0.29 m = 29 cm

$3.75 < 4.04 < 4.2$

$16 < 29$

TEAM Ana was more accurate!

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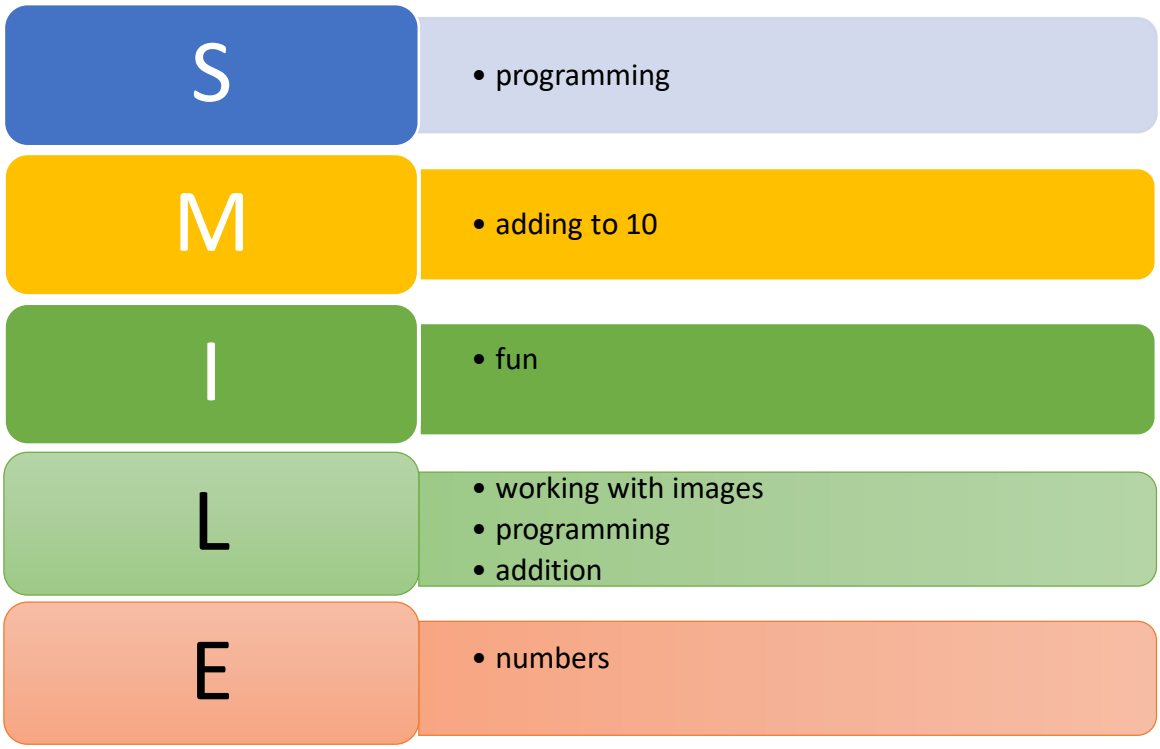
AppInventor is a simple tool available for everyone. Lower grade students can take their first steps in the programming world through AppInventor. We will show you a simple app students can make on their own along with learning Maths and English.

If you want to learn more about AppInventor, visit https://appinventor.mit.edu/ where you have excellent support, tutorials and everything needed to make mobile apps.

Also, you can watch us explore AppInventor in school through the following link: https://padlet.com/mmarsic/appInventor

About the app

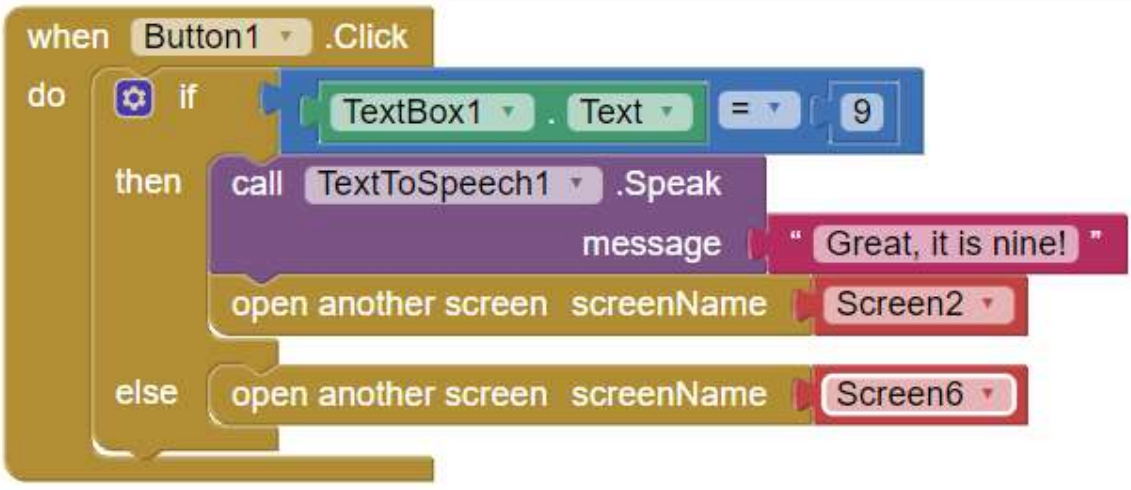
The app is intended for fist-graders who will learn to add numbers to 10 through solving the tasks on the pictures and hear the answers meaning they will learn numbers in english.



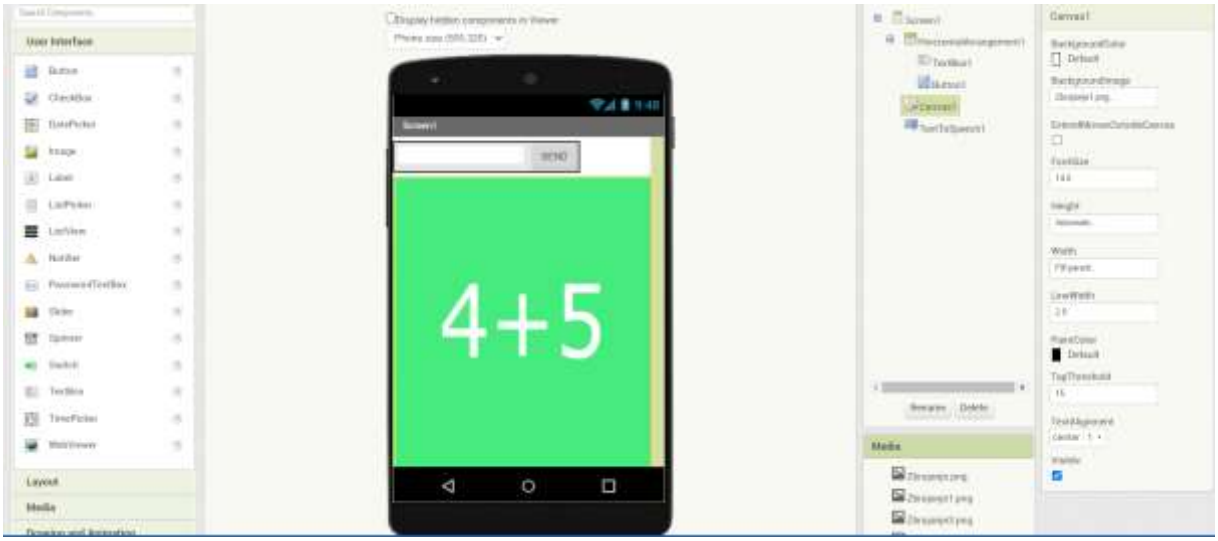
Check out our App!!!

You can install it on your Android by scanning this QR code:

Programming the code looks like this:



And the front page like this:



And here you can see how developing mobile applications looks like in our classroom:



Can first-graders do this?

Yes they can!!!

So :