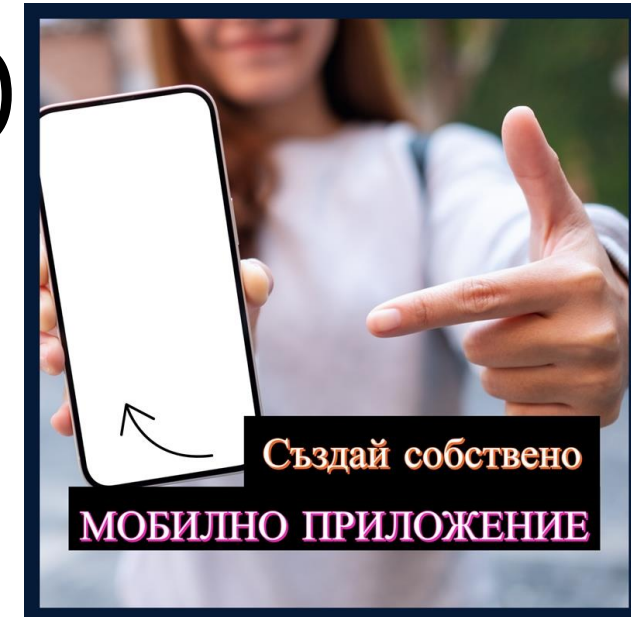


ЕВРОПЕЙСКА СЕДМИЦА НА ПРОГРАМИРАНЕТО

10.2022





Европейска седмица на програмирането в ЕГ



- От 2014 г.



ФОНДАЦИЯ
РАБОТИЛНИЦА
ЗА ГРАЖДАНСКИ
ИНИЦИАТИВИ

покрепяме инициативните

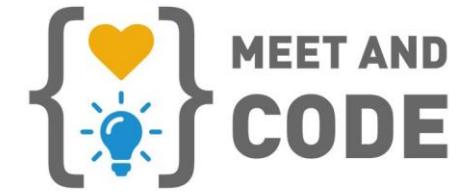
Proudly supported by



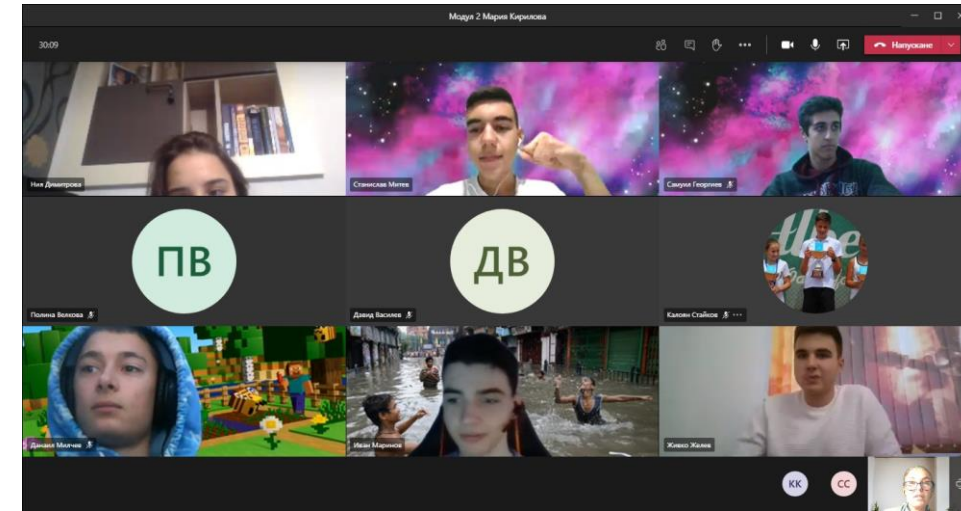
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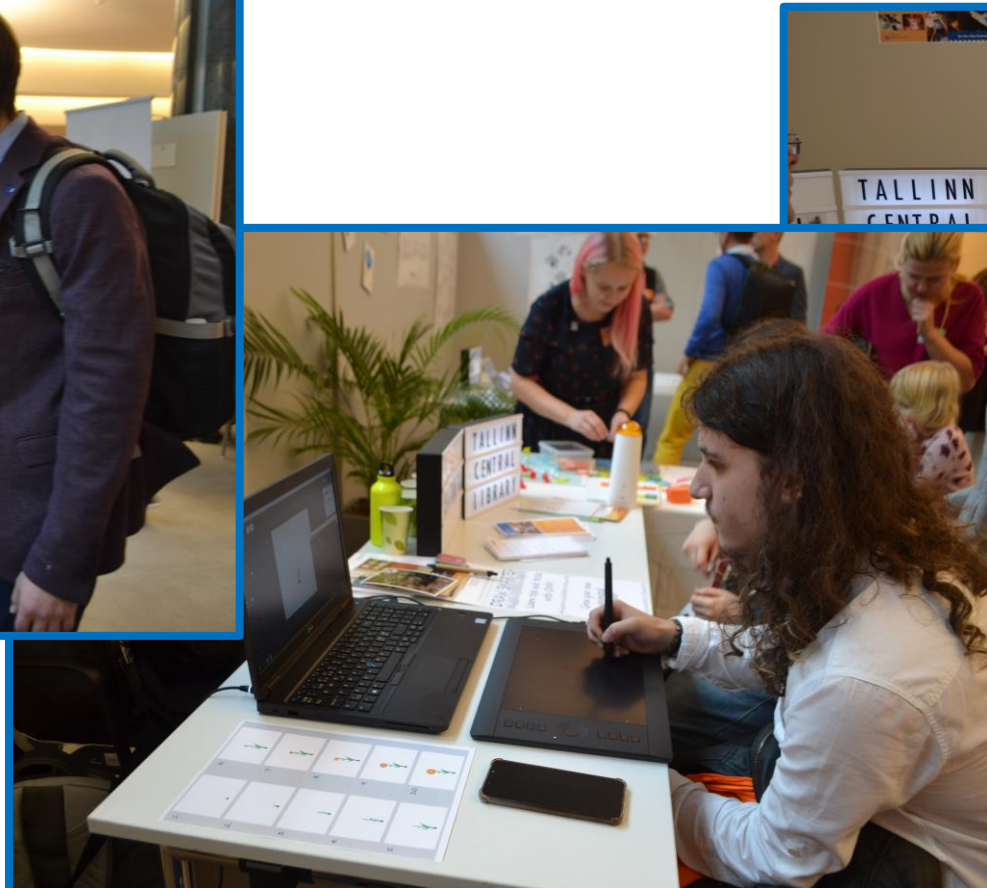
Настоящият проект се осъществява благодарение на подкрепата на Фондация „Работилница за граждански инициативи“, SAP и TechSoup, в рамките на инициативата „Запознайте се и програмирайте“.

Европейска седмица на програмирането в ЕГ



- От 2018 г. по проект Meet And Code





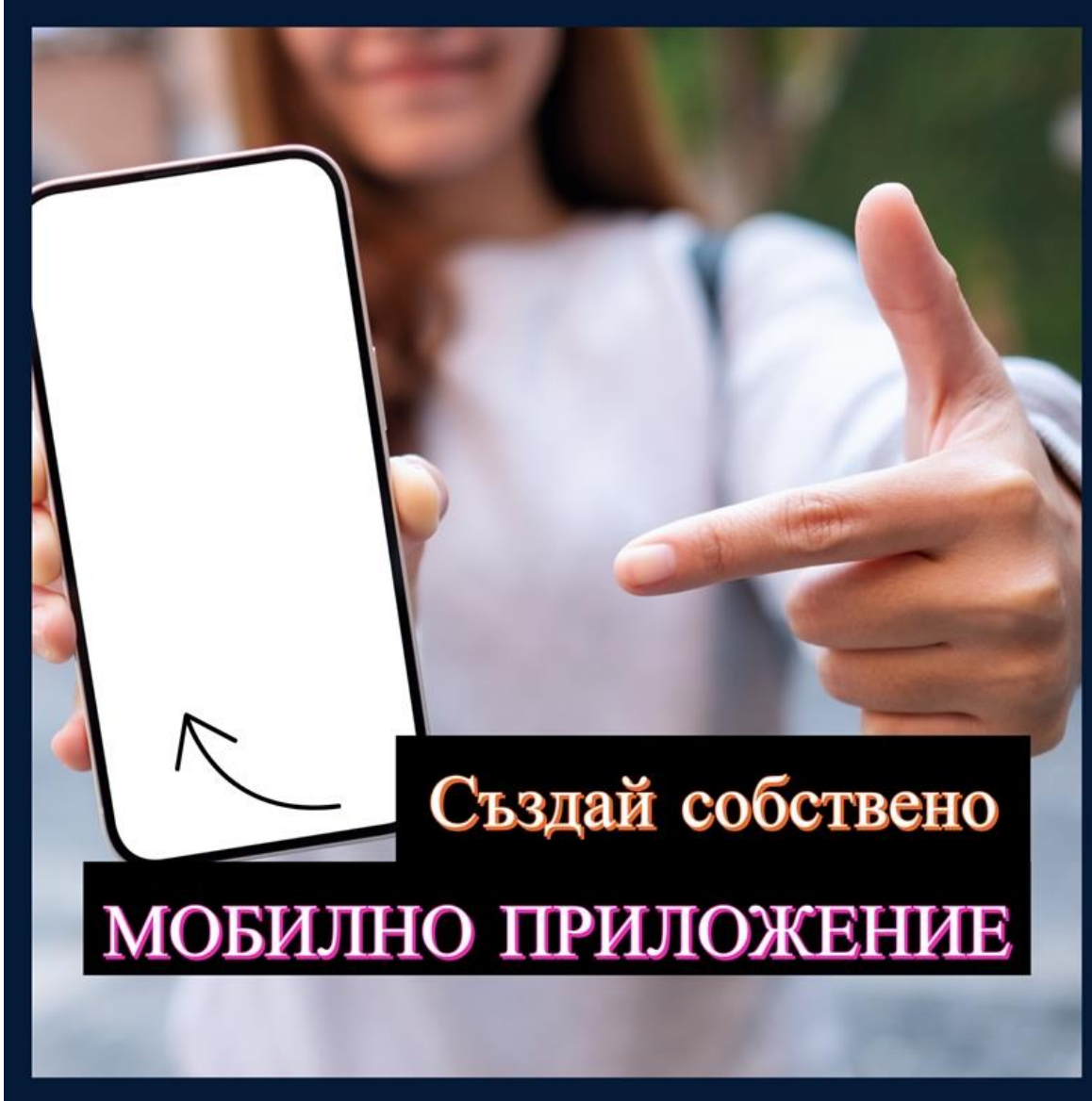
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Създай собствено
МОБИЛНО ПРИЛОЖЕНИЕ



ФОНДАЦИЯ
РАБОТИЛНИЦА
ЗА ГРАЖДАНСКИ
ИНИЦИАТИВИ

покрепяме инициативните

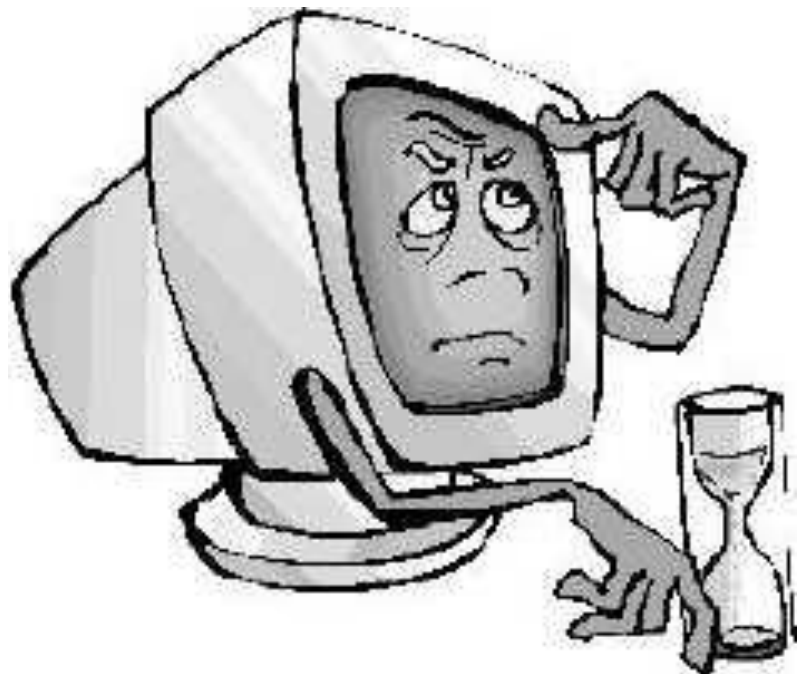
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Настоящият проект се осъществява благодарение на подкрепата на Фондация „Работилница за граждански инициативи”, SAP и TechSoup, в рамките на инициативата „Запознайте се и програмирайте“.

Как компютрите взимат решения?



- Компютрите не могат да измислят собствени решения а действат по предназначертан план.
- Те никога няма да минат по неописан път, което ги прави изключително надеждни.

SIMPLE PROCESS



Какво е Mit App Inventor?



- свободен софтуер
- графично средство за създаване на програми за операционната система Android/iOS, без за целта да са необходими специални умения в програмирането
- Процесът на създаване става директно чрез подреждането и свързване на „блокчета“ с различни функции, които в целостта си описват логиката и работата на създаваната програма

<https://appinventor.mit.edu>

с google акаунт

Среда Design



MoleMash Screen1 - Add Screen ... Remove Screen Publish to Gallery Designer Blocks

Palette

Search Components...

User Interface

- Button
- CheckBox
- DatePicker
- Image
- Label
- ListPicker
- ListView
- Notifier
- PasswordTextBox
- Slider
- Spinner

Viewer

Display hidden components in Viewer

Components

- Screen1
- MyCanvas
- Mole
- ScoreLabel
- ResetButton
- Noise
- MoleTimer

Properties

Screen1

AboutScreen

AccentColor: Default

AlignHorizontal: Left : 1

AlignVertical: Top : 1

AppName: MoleMash

BackgroundColor: Default

BackgroundImage: None...

BigDefaultText:

Среда Blocks



MoleMash Screen1 Add Screen ... Remove Screen Publish to Gallery Designer Blocks

Blocks

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Dictionaries
 - Colors
 - Variables
 - Procedures
- Screen1
 - MyCanvas
 - Mole
 - ScoreLabel
 - ResetButton

Viewer

```
set Mole.Y to random fraction * (MyCanvas.Height - Mole.Height)
```

```
initialize global score to 0
```

```
when Mole.Touched do  
  x y  
  do  
    set global score to get global score + 1  
    call Noise.Vibrate milliseconds 100  
    call UpdateScore  
    call MoveMole
```

```
to UpdateScore do  
  set ScoreLabel.Text to join ("Score: " get global score)
```

```
when MoleTimer.Timer do  
  call MoveMole
```

Show Warnings

```
when ResetButton.Click
```

Среда Blocks



MoleMash

Screen1 ▾ Add Screen ... Remove Screen Publish to Gallery

Designer Blocks

Blocks

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Dictionaries
 - Colors
 - Variables
 - Procedures
- Screen1
 - MyCanvas
 - Mole
 - ScoreLabel
 - ResetButton

Viewer

```
set Mole.Y to random fraction × (MyCanvas.Height - Mole.Height)
```

```
initialize global score to 0
```

```
when Mole.Touched do  
  x y  
  do  
    set global score to get global score + 1  
    call Noise.Vibrate milliseconds 100  
    call UpdateScore  
    call MoveMole
```

```
to UpdateScore do  
  set ScoreLabel.Text to join ("Score: " get global score)
```

```
when MoleTimer.Timer do  
  call MoveMole
```

Show Warnings

```
when ResetButton.Click
```

Screen 1

The screenshot shows the Xamarin Studio interface. On the left, the **Components** panel lists the hierarchy: Screen1 > MyCanvas > Mole, ScoreLabel, ResetButton, Noise, and MoleTimer. The **Properties** panel for Screen1 is open, showing various settings:

- ScreenOrientation: Unspecified
- Scrollable:
- ShowListsAsJson:
- ShowStatusBar:
- Sizing: Fixed
- Theme: Classic
- Title: Screen1
- TitleVisible:
- TutorialURL: (empty)
- VersionCode: 1
- VersionName: 1.0
- AboutScreen: (empty)
- AccentColor: Default
- AlignHorizontal: Left: 1
- AlignVertical: Top: 1
- AppName: MoleMash
- BackgroundColor: Default
- BackgroundImage: None...

The screenshot shows the Xamarin Studio interface with the **Properties** panel for the Mole component open. The component list on the left includes MyCanvas, Mole, ScoreLabel, ResetButton, Noise, and MoleTimer. The Mole component is selected, and its properties are shown:

- BackgroundColor: Default
- BackgroundImage: None...
- ExtendMovesOutsideCanvas:
- FontSize: 14.0
- Height: 300 pixels...
- Width: 300 pixels...
- LineWidth: 2.0
- PaintColor: Default
- TapThreshold: 15
- TextAlignment: left: 0
- Visible:

At the bottom, there is a **Media** panel showing a file named mole.png.



The screenshot shows the Xamarin Studio interface with the **Properties** panel for the ScoreLabel component open. The component list on the left includes ScoreLabel, ResetButton, Noise, and MoleTimer. The ScoreLabel component is selected, and its properties are shown:

- ScoreLabel
- ResetButton
- Noise
- MoleTimer

At the bottom, there are **Rename** and **Delete** buttons.

Screen 1



ScoreLabel

ResetButton

Noise

MoleTimer

FontBold

FontItalic

FontSize 14.0

FontTypeface default

HTMLFormat

HasMargins

Height Automatic...

Width Automatic...

Text ---

Rename Delete

MyCanvas

Mole

ScoreLabel

ResetButton

Noise

MoleTimer

BackgroundColor Default

Enabled

FontBold

FontItalic

FontSize 14.0

FontTypeface default

Height Automatic...

Width Automatic...

MyCanvas

Mole

ScoreLabel

ResetButton

Noise

MinimumInterval 500

Source None...

MyCanvas

Mole

ScoreLabel

ResetButton

Noise

MoleTimer

TimerAlwaysFires

TimerEnabled

TimerInterval 500

Blocks



```
to MoveMole
do
  set Mole . X to random fraction × (MyCanvas . Width - Mole . Width)
  set Mole . Y to random fraction × (MyCanvas . Height - Mole . Height)
```

```
initialize global score to 0
```

```
when Mole .Touched
  x y
  do
    set global score to [get global score] + 1
    call Noise .Vibrate
      millisecs 100
    call UpdateScore
    call MoveMole
```

```
when MoleTimer .Timer
  do
    call MoveMole
```

```
when ResetButton .Click
  do
    set global score to 0
    call UpdateScore
```

```
to UpdateScore
  do
    set ScoreLabel .Text to [join "Score: " [get global score]]
```


Тестване

- При smartphone и лаптоп, свързани към една Wi-Fi мрежа:
- Инсталиране на приложение на smartphone – MIT AI2 Companion

- Сканиране на QR кода с приложението от телефона

II В-Т:

- Изтегляне на .apk
- С кабел прехвърляне на smartphone

