

Introducción a la programación de APPs

Aula de informática
Colegio Claret

Adivinar un número

Aula de informática
Colegio Claret

Escribe un número 10 y pulsa OK

OK

¡has acertado!

Blocks

Control

Logic

Viewer

initialize

initialize

when

do

Tecnología de la Información. 1ª Evaluación

PROGRAMA adivina número



Pseudocódigo

PROGRAMA adivina
ENTORNO: X,N

$x \leftarrow$ número al azar

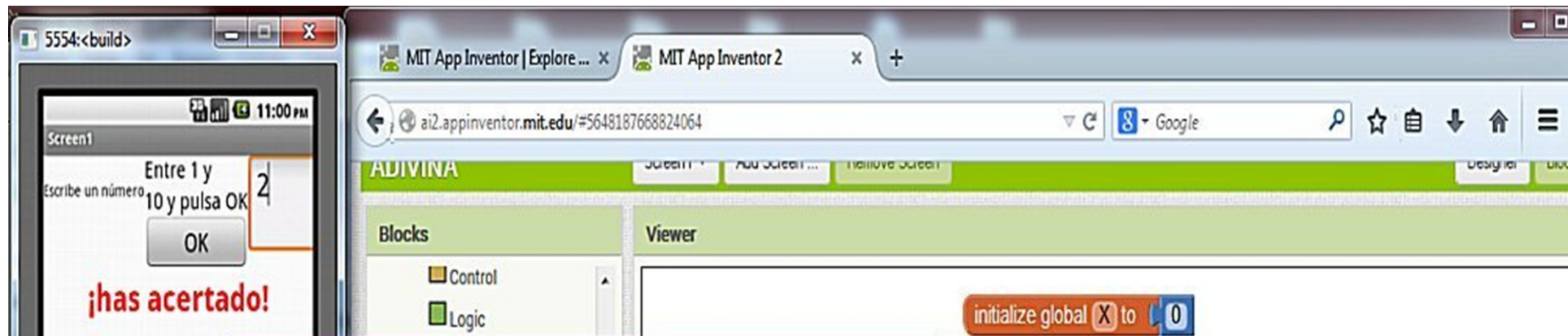
ALGORITMO:

PEDIR n

SI $N=X \rightarrow$ CORRECTO

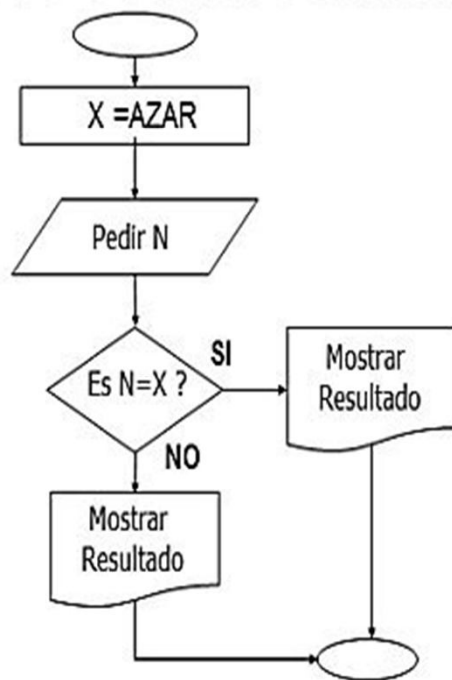
SI $N < > X \rightarrow$ INCORRECTO

FINPROGRAMA



Tecnología de la Información. 1ª Evaluación

PROGRAMA adivina número



Pseudocódigo

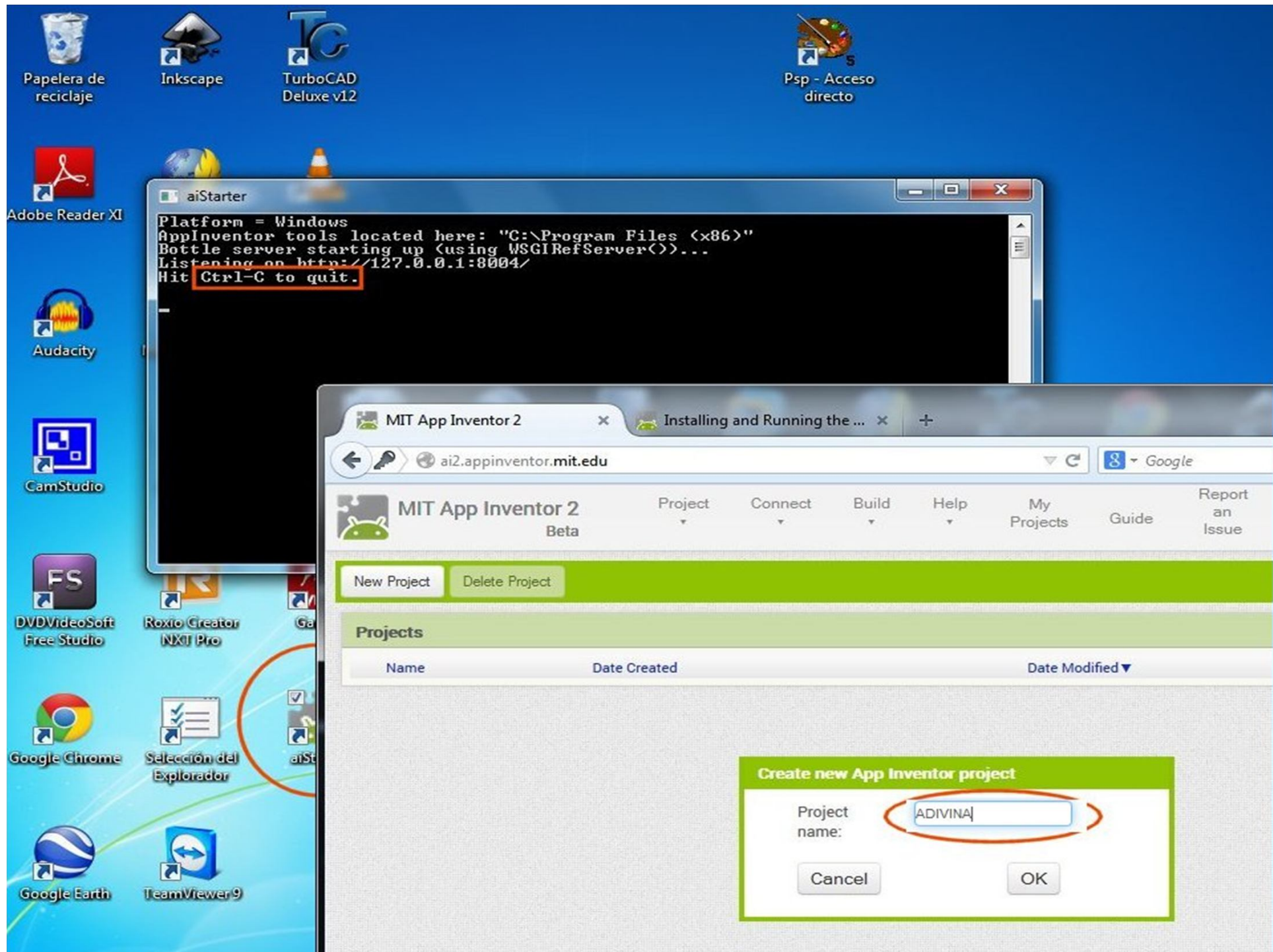
PROGRAMA adivina
 ENTORNO: X,N
 x ← número al azar
 ALGORITMO:
 PEDIR n
 SI N=X → CORRECTO
 SI N <> X → INCORRECTO
 FINPROGRAMA

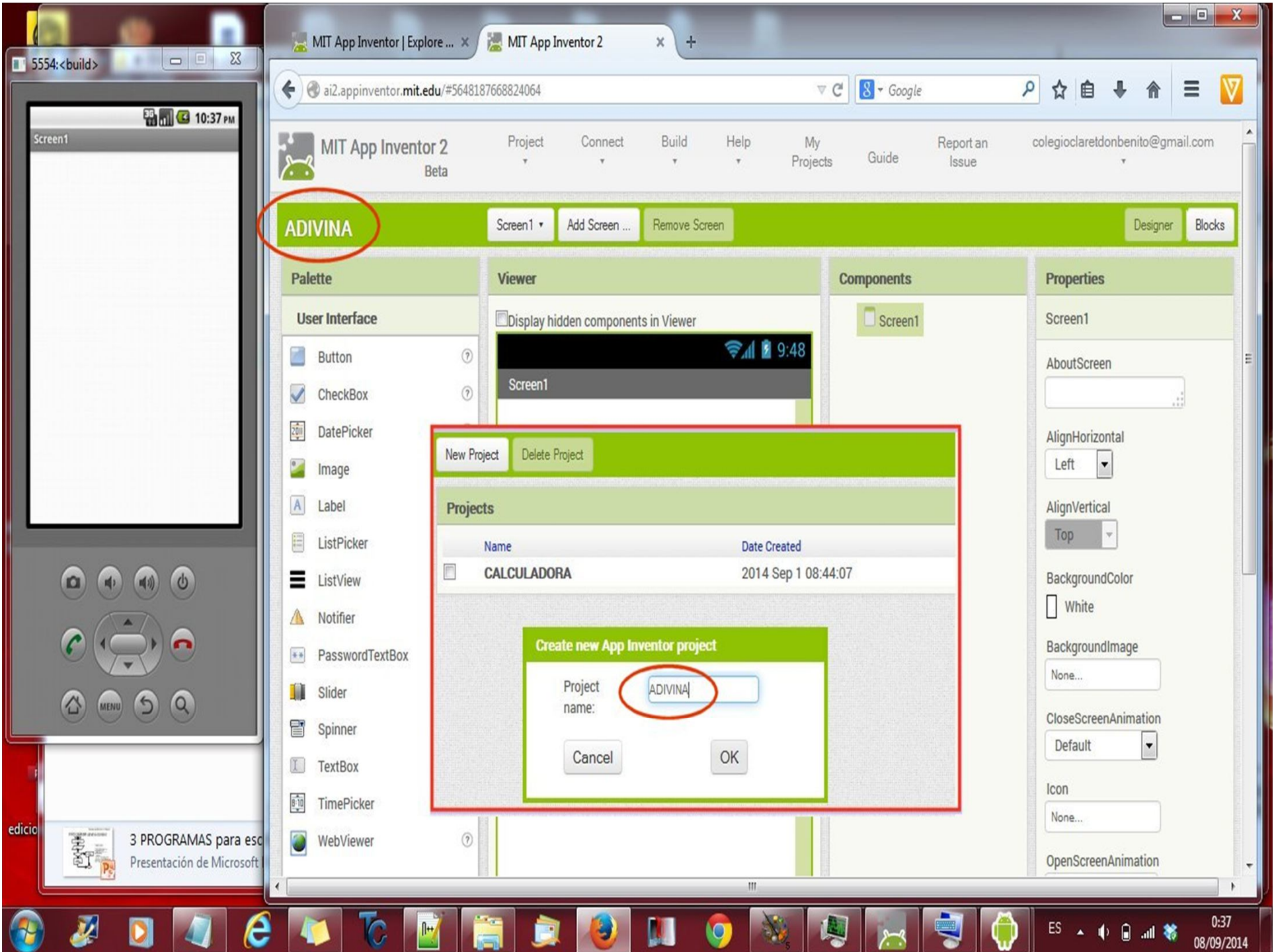
```

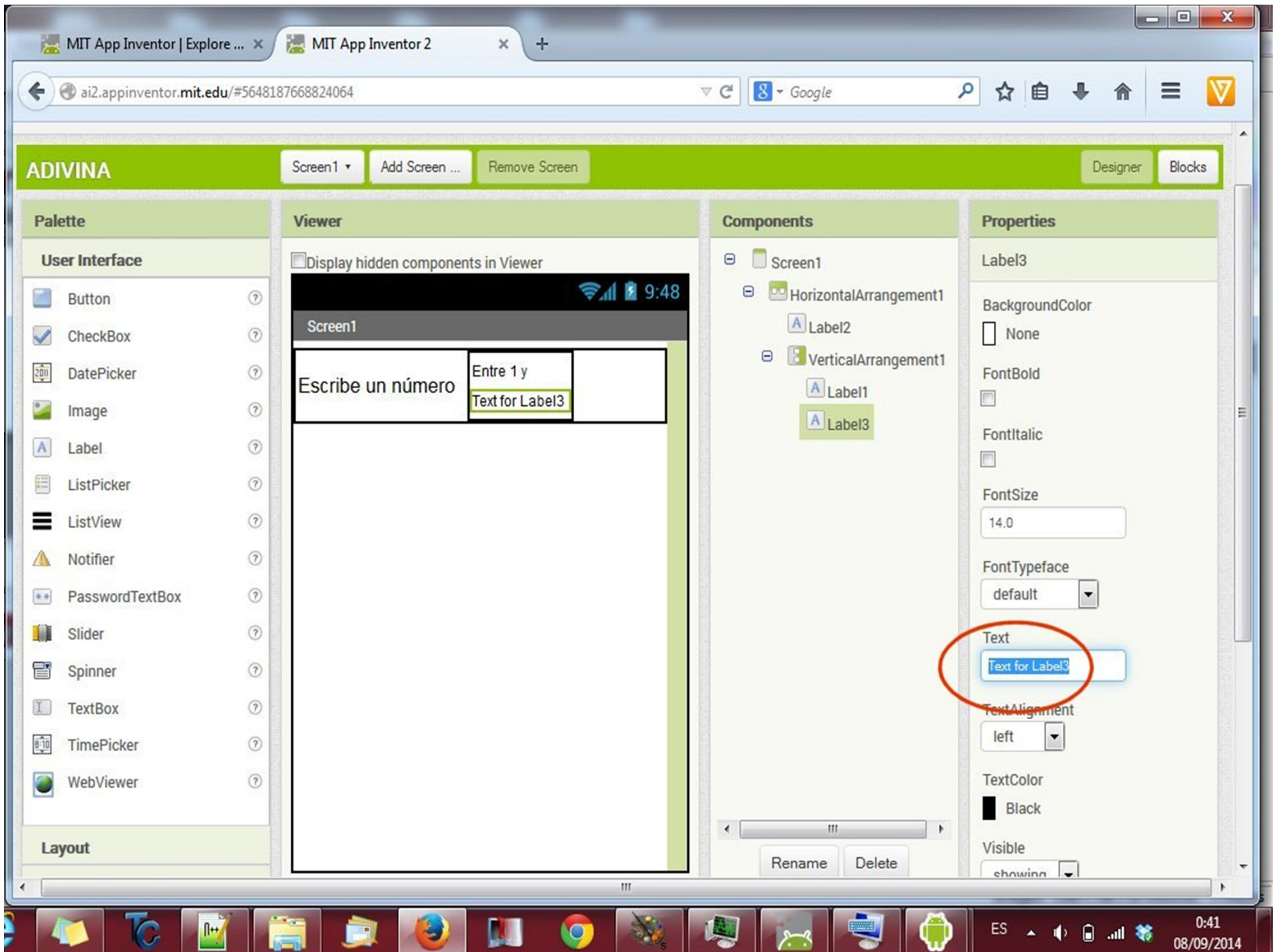
initialize global X to 0
initialize global N to 0

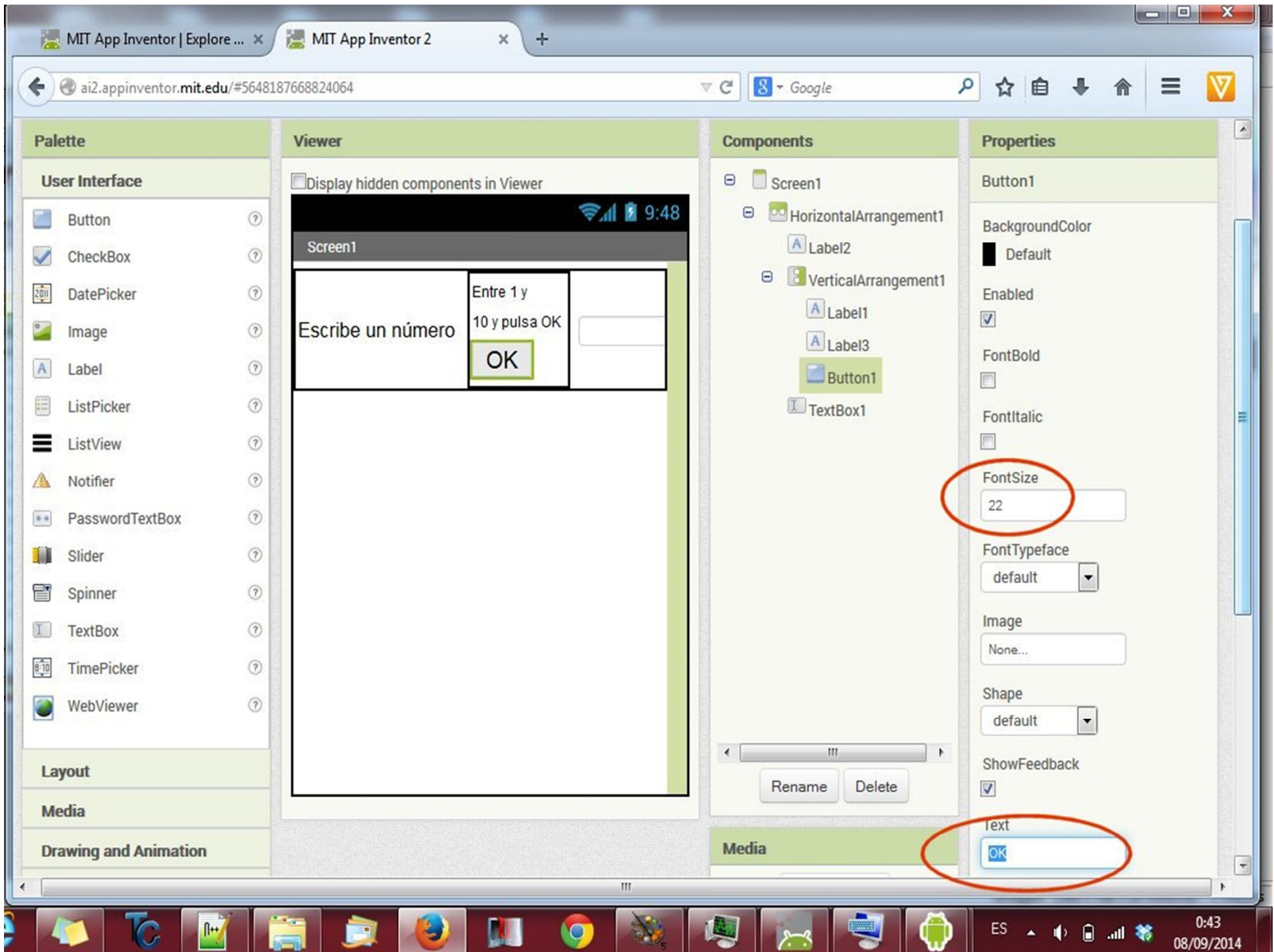
when Button1.Click
do
  set global X to random integer from 1 to 10
  set global N to TextBox1.Text
  if get global X = get global N
  then
    set Label4.Text to ¡has acertado!
  else
    set Label4.Text to ¡número equivocado!
  
```

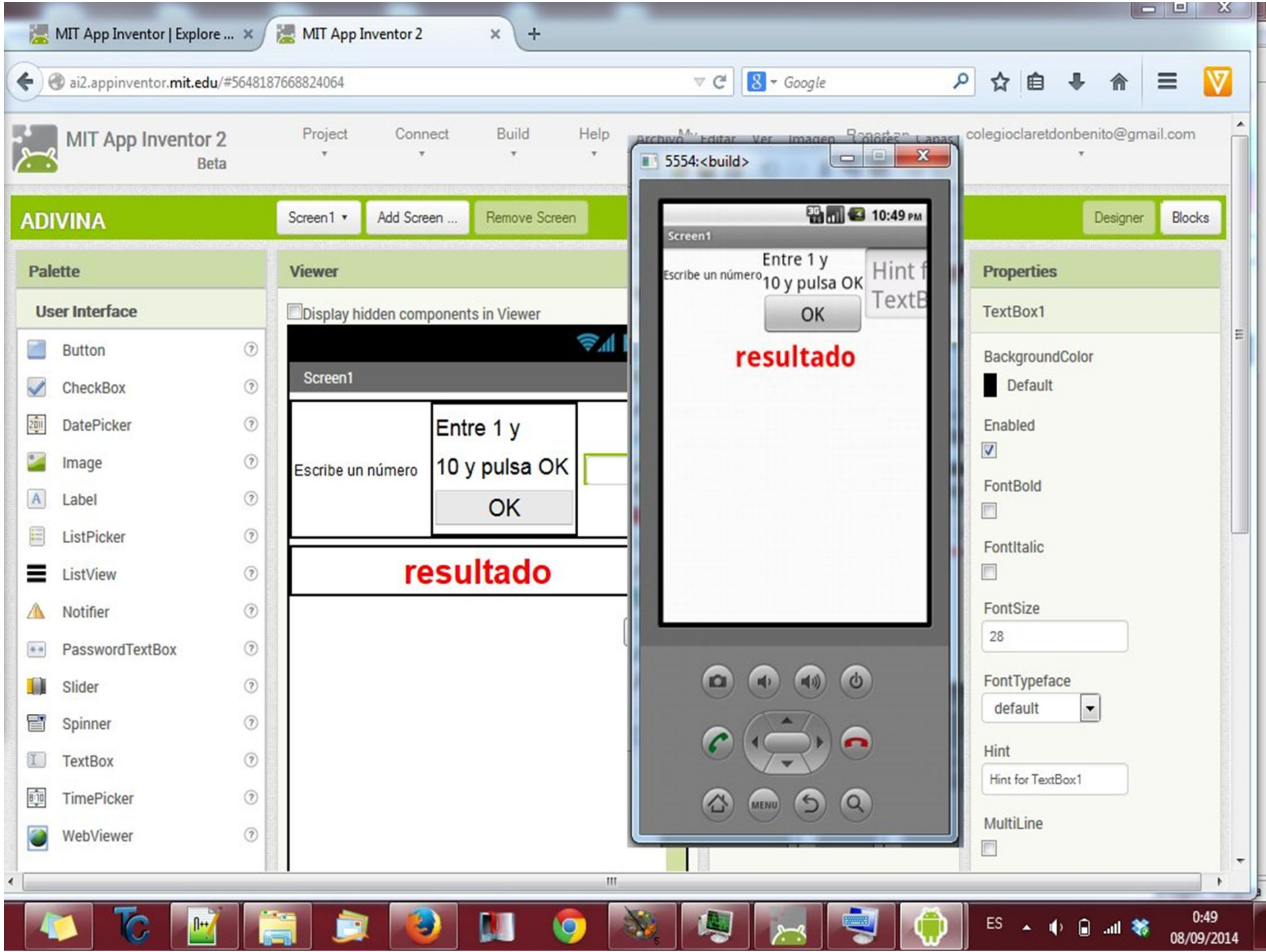












MIT App Inventor | Explore ... MIT App Inventor 2

ai2.appinventor.mit.edu/#5648187668824064

MIT App Inventor 2 Beta

Project Connect Build Help My Projects Guide Report an Issue colegioclairetdonbenito@gmail.com

ADIVINA Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Colors
 - Variables
 - Procedures
- Screen1
 - HorizontalArrangemer
 - Label2
 - VerticalArrangemer
 - Label1
 - Label3
 - Button1
 - TextBox1
 - HorizontalArrangemer

Viewer

0

initialize global X to 0

initialize global N to 0

random integer from 1 to 100

Show Warnings

random fraction

The screenshot shows the MIT App Inventor 2 web interface. The browser address bar displays 'ai2.appinventor.mit.edu/#5648187668824064'. The page title is 'MIT App Inventor 2 Beta'. The user's email 'colegioclairetdonbenito@gmail.com' is visible in the top right. The project name 'ADIVINA' is shown in a green header bar, along with 'Screen1', 'Add Screen ...', and 'Remove Screen' buttons. Below the header, there are 'Designer' and 'Blocks' tabs. The 'Blocks' panel on the left lists categories: Built-in (Control, Logic, Math, Text, Lists, Colors, Variables, Procedures), Screen1, HorizontalArrangemer (Label2), VerticalArrangemer (Label1, Label3, Button1, TextBox1), and another HorizontalArrangemer. The 'Viewer' panel on the right shows a canvas with several code blocks. A red circle highlights a '0' block in the 'Math' category of the 'Blocks' panel. An orange arrow points from this circle to a '0' block in the 'initialize global X to 0' block in the viewer. Other blocks in the viewer include 'initialize global N to 0', 'random integer from 1 to 100', 'random fraction', and a trash can icon. The Windows taskbar at the bottom shows the date '08/09/2014' and time '0:51'.

MIT App Inventor | Explore ... x MIT App Inventor 2 x +

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Google

ADIVINA

Screen1 ▾ Add Screen ... Remove Screen Designer Blocks

Blocks

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Colors
 - Variables
 - Procedures
- Screen1
 - HorizontalArranger
 - Label2
 - VerticalArranger
 - Label1
 - Label3
 - Button1
 - TextBox1
 - HorizontalArranger

Rename Delete

Viewer

when Button1 .Click
do User tapped and released the button.

when Button1 .GotFocus
do

when Button1 .LongClick
do

when Button1 .LostFocus
do



when Button1 .TouchDown
do

when Button1 .TouchUp
do

initialize global X to 0

initialize global N to 0

when Button1 .Click
do



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Google

ADIVINA

Screen1 ▾ Add Screen ... Remove Screen Designer Blocks

Blocks

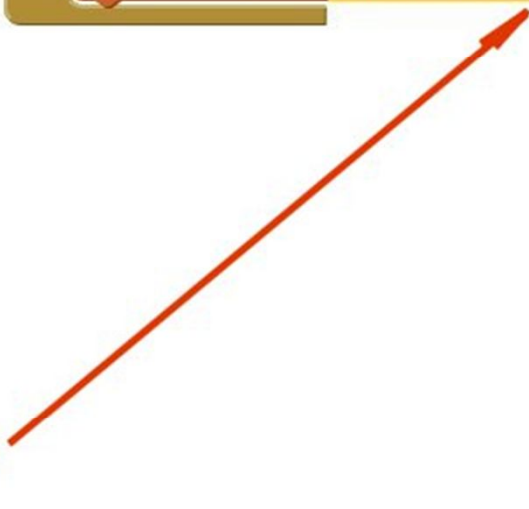
- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Colors
 - Variables
 - Procedures
- Screen1
 - HorizontalArranger
 - Label2
 - VerticalArranger
 - Label1
 - Label3
 - Button1
 - TextBox1
 - HorizontalArranger

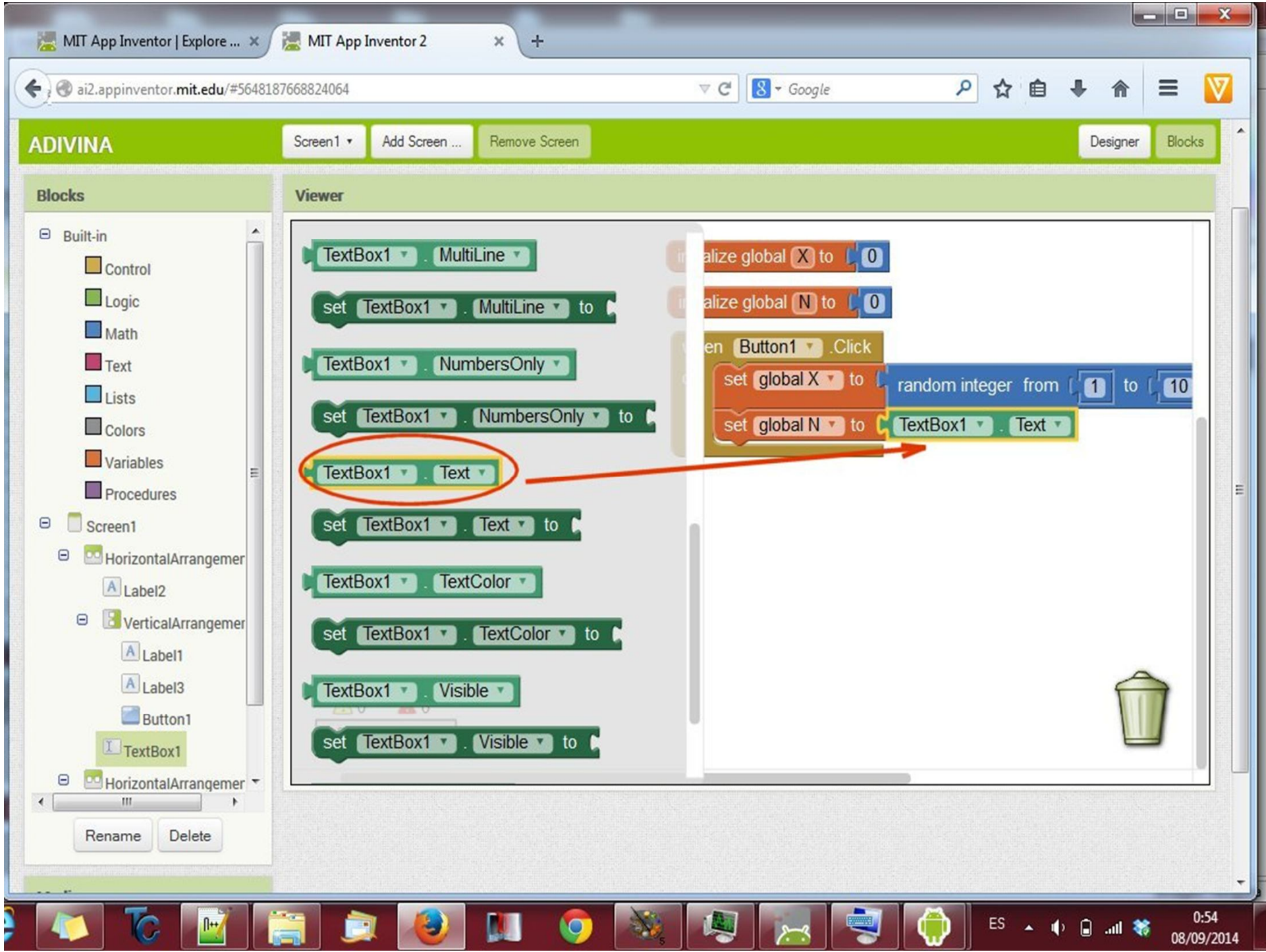
Rename Delete

Viewer

```
0
=
+
-
x
/
^
random integer from 1 to 100
random fraction
```

```
initialize global X to 0
initialize global N to 0
when Button1 .Click
do set global X to random integer from 1 to
```





ADIVINA

Screen1 Add Screen ... Remove Screen

Designer Blocks

Blocks

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Colors
 - Variables
 - Procedures
- Screen1
 - HorizontalArranger
 - Label2
 - VerticalArranger
 - Label1
 - Label3
 - Button1
 - TextBox1
 - HorizontalArranger

Viewer

```

TextBox1 MultiLine
set TextBox1 MultiLine to
TextBox1 NumbersOnly
set TextBox1 NumbersOnly to
TextBox1 Text
set TextBox1 Text to
TextBox1 TextColor
set TextBox1 TextColor to
TextBox1 Visible
set TextBox1 Visible to
  
```

```

initialize global X to 0
initialize global N to 0
when Button1 Click
  set global X to random integer from 1 to 10
  set global N to TextBox1 Text
  
```



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Google

ADIVINA Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Built-in
 - Control
 - Logic
 - Math
 - Text
 - Lists
 - Colors
 - Variables
 - Procedures
- Screen1
 - HorizontalArrangemer
 - Label2
 - VerticalArrangemer
 - Label1
 - Label3
 - Button1
 - TextBox1
 - HorizontalArrangemer

Viewer

initialize global X to 0

initialize global N to 0

when Button1 .Click do

- set global X to random integer from 1
- set global N to TextBox1 .Text
- if then else
 - else if
 - else
 - if else else

for each number from 1 to 5 by 1 do

for each item in list do

while test do

if then

Warnings

Rename Delete

0:55 08/09/2014

ADIVINA

Screen1 Add Screen ... Remove Screen

Blocks

Built-in

- Control
- Logic
- Math**
- Text
- Lists
- Colors
- Variables
- Procedures

Screen1

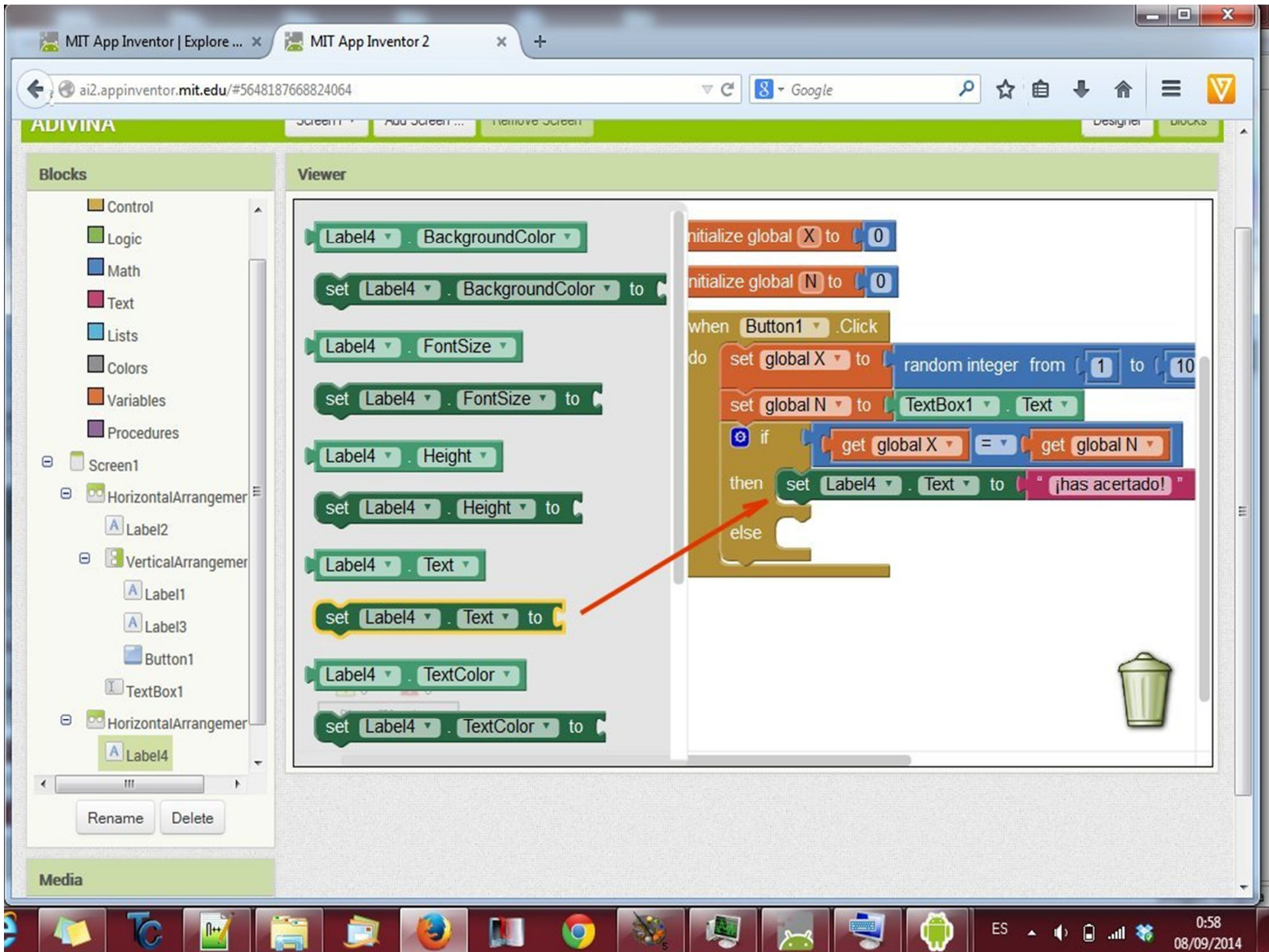
- HorizontalArrangemer
- Label2
- VerticalArrangemer
- Label1
- Label3
- Button1
- TextBox1

Rename Delete

Viewer

```
initialize global X to 0
initialize global N to 0
when Button1.Click
do
  set global X to random integer from 1 to 10
  set global N to TextBox1.Text
  if
  then
  else
```





Blocks

- Control
- Logic
- Math
- Text
- Lists
- Colors
- Variables
- Procedures

Screen1

- HorizontalArrangem...
 - Label2
- VerticalArrangem...
 - Label1
 - Label3
 - Button1
 - TextBox1
- HorizontalArrangem...
 - Label4

Rename Delete

Viewer

```

Label4 . BackgroundColor
set Label4 . BackgroundColor to
Label4 . FontSize
set Label4 . FontSize to
Label4 . Height
set Label4 . Height to
Label4 . Text
set Label4 . Text to
Label4 . TextColor
set Label4 . TextColor to
  
```

```

initialize global X to 0
initialize global N to 0
when Button1 .Click
do
  set global X to random integer from 1 to 10
  set global N to TextBox1 . Text
  if get global X = get global N
  then set Label4 . Text to ¡has acertado!
  else
  
```

Trash icon

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ADIVINA

5554:<build>

Screen1

Entre 1 y 10 y pulsa OK

2

OK

¡has acertado!

Control
Logic
Math
Text
Lists
Colors
Variables
Procedures

Screen1

- HorizontalArrangement
- Label2
- VerticalArrangement
- Label1
- Label3
- Button1
- TextBox1
- HorizontalArrangement
- Label4

Rename Delete

Media

initialize global X to 0

initialize global N to 0

when Button1 .Click do

- set global X to random integer from 1 to 10
- set global N to TextBox1 . Text
- if get global X = get global N then set Label4 . Text to "¡has acertado!" else set Label4 . Text to "¡número equivocado!"

11:00 PM

q w e r t y u i o p
a s d f g h j k l
z x c v b n m
7123 , _ . Done

ES 1:00 08/09/2014

LA App en el móvil

