

Introducción a la programación de APPs

Aula de informática
Colegio Claret

Traductor por SMS

Aula de informática
Colegio Claret

New Project

Delete Project

Projects

	Name	Date Created	Date Modified ▾
<input type="checkbox"/>	AZAR	2014 Sep 9 11:40:45	2014 Sep 9 11:40:45
<input type="checkbox"/>	ADIVINA	2014 Sep 8 00:38:59	2014 Sep 9 10:58:26
<input type="checkbox"/>	CALCULADORA	2014 Sep 1 08:44:07	2014 Sep 8 12:44:34

Create new App Inventor project

Project name:

Cancel

OK

The image shows the MIT App Inventor 2 web interface. At the top, the browser address bar shows 'ai2.appinventor.mit.edu/#5670429224075264'. The main header includes 'MIT App Inventor 2 Beta' and navigation links like 'Project', 'Connect', 'Build', 'Help', 'My Projects', 'Guide', and 'Report an Issue'. Below the header, there's a green bar with 'TRADUCTOR' and buttons for 'Screen1', 'Add Screen ...', and 'Remove Screen'. The interface is divided into four main panels: 'Palette', 'Viewer', 'Components', and 'Properties'. The 'Layout' tab in the 'Properties' panel is highlighted with a red circle. The 'Viewer' panel shows a mobile app preview with a red header containing the text 'traductor de voz'. A blue callout bubble at the bottom contains the text: 'Las etiquetas de texto se organizan utilizando la pestaña Layout'. The 'Properties' panel also shows 'HorizontalArrangement2' selected, with 'Fill parent' checked under the 'Width' section.

Las etiquetas de texto se organizan utilizando la pestaña Layout

MIT App Inventor 2

ai2.appinventor.mit.edu/#5670429224075264

MIT App Inventor 2 Beta

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TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Palette

User Interface

Layout

- HorizontalArrangement
- TableArrangement
- VerticalArrangement

Media

Drawing and Animation

Sensors

Social

Storage

Connectivity

LEGO® MINDSTORMS

Viewer

Display hidden components in Viewer

Screen1

traductor de voz

Text for Label2

Text for Label4

Text for Label3

Components

- Screen1
 - VerticalArrangement1
 - Label1
 - HorizontalArrangement1
 - Label2
 - TextBox1**
 - HorizontalArrangement2
 - Label4
 - HorizontalArrangement3
 - Label3

Properties

TextBox1

BackgroundColor

Default

Enabled

FontBold

FontItalic

FontSize

14.0

FontTypeface

default

Hint

Hint for TextBox1

MultiLine

NumbersOnly

En la caja de texto
Textbox1 se puede
modificar el n° de teléfono

The image shows the MIT App Inventor 2 web interface. At the top, the browser address bar shows the URL `ai2.appinventor.mit.edu/#5670429224075264`. The MIT App Inventor 2 Beta logo is in the top left, and navigation menus for Project, Connect, Build, Help, My Projects, Guide, and Report an Issue are in the top right. The main workspace is titled "TRADUCTOR" and contains a "Screen1" with a red header bar containing the text "traductor de voz". Below the header is a button labeled "Pulsa para hablar" and several text boxes, one of which contains "Texto traducido:". The interface is divided into four panels: "Palette" (User Interface components), "Viewer" (mobile app preview), "Components" (hierarchy of UI elements), and "Properties" (configuration for the selected "Label5" component). The Properties panel shows settings for BackgroundColor (None), FontBold, FontItalic, FontSize (14.0), FontTypeface (default), Text (Texto traducido:), TextAlignment (left), and TextColor (Black). A blue callout bubble is overlaid on the bottom center of the screen, containing the text: "El color y tamaño de las etiquetas se cambia usando Textcolor, backgroundcolor y fontsize".

The image shows the MIT App Inventor 2 web interface. On the left, the 'User Interface' sidebar lists various components. The 'SpeechRecognizer' component is circled in red. A red arrow points from this component to the 'Non-visible components' area at the bottom of the workspace, where a 'SpeechRecognizer1' component is also circled in red. Another red arrow points from this component to a blue oval containing the text: 'El speechrecognizer se inserta arrastrándolo al formulario'. The central workspace shows a mobile app preview with a red header 'traductor de voz', a button 'Pulsa para hablar', and several text input fields. The right sidebar shows the component palette for 'Screen1', with 'SpeechRecognizer1' also circled in red. The browser address bar shows 'ai2.appinventor.mit.edu/#5670429224075264'.

MIT App Inventor 2

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User Interface

Layout

Media

- Camcorder
- Camera
- ImagePicker
- Player
- Sound
- SoundRecorder
- SpeechRecognizer**
- TextToSpeech
- VideoPlayer
- YandexTranslate

Drawing and Animation

Sensors

Social

Storage

Connectivity

LEGO® MINDSTORMS®

Display hidden components in Viewer

Screen1

traductor de voz

Pulsa para hablar

Texto para enviar:

Text for Label2

Texto traducido:

Text for Label3

Non-visible components

SpeechRecognizer1

Screen1

- VerticalArrangement1
 - Label1
- HorizontalArrangement1
 - Button1
 - TextBox1
- Label4
- HorizontalArrangement2
 - Label2
- Label5
- HorizontalArrangement3
 - Label3
- SpeechRecognizer1**

Rename Delete

Media

Upload File ...

El speechrecognizer se inserta arrastrándolo al formulario

The image shows the MIT App Inventor 2 web interface. On the left is a component palette with categories like User Interface, Media, Drawing and Animation, Sensors, Social, Storage, Connectivity, and LEGO® MINDSTORMS®. The 'Media' category is expanded, showing components like Camcorder, Camera, ImagePicker, Player, Sound, SoundRecorder, SpeechRecognizer, TextToSpeech, and VideoPlayer. The 'YandexTranslate' component is circled in red. A blue callout bubble with white text says "El acceso al servicio de traducción se arrastra igualmente". A red arrow points from this bubble to the 'YandexTranslate1' component in the 'Non-visible components' section at the bottom of the workspace. The central workspace shows a preview of the app with a red header "traductor de voz", a button "Pulsa para hablar", and several text input fields. The right side shows a component tree for "Screen1" and a "YandexTranslate1" component in the "Media" section.

El acceso al servicio de traducción se arrastra igualmente

The image shows the MIT App Inventor 2 web interface. The browser address bar displays `ai2.appinventor.mit.edu/#5670429224075264`. The interface is divided into several panels:

- User Interface:** A central canvas showing a mobile app design for a voice translator. The title bar says "Screen1" and the status bar shows "9:48". The app has a red header with the text "traductor de voz". Below it is a button labeled "Pulsa para hablar" and a text input field. Further down are labels for "Texto para enviar:", "Texto traducido:", and "Text for Label3".
- Left Panel (Social):** A list of social services. The "Texting" service is circled in red.
- Right Panel (Components):** A tree view of the app's components. Under "Screen1", there are several "HorizontalArrangement" and "VerticalArrangement" containers, along with "Label" components, a "Button", a "TextBox", a "SpeechRecognizer1", a "YandexTranslate1", and a "Texting1" component. The "Texting1" component is highlighted in green.
- Bottom Panel (Non-visible components):** A row of components that are not currently visible on the screen. It includes "SpeechRecognizer1", "YandexTranslate1", and "Texting1". The "Texting1" component is circled in red.
- Properties Panel (Texting1):** A panel on the right showing the configuration for the "Texting1" service. It includes a "Message" input field, a "PhoneNumber" input field, and a "ReceivingEnabled" dropdown menu set to "Foreground".

A blue oval with white text is overlaid on the center of the interface, containing the text: "Y también el servicio de mensajería".

MIT App Inventor 2

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MIT App Inventor 2 Beta

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TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Variables
- Procedures
- Screen1
 - VerticalArrangement1
 - Label1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1

ny component

Viewer

```
when SpeechRecognizer1 .AfterGettingText
  result
do

when SpeechRecognizer1 .BeforeGettingText
do

call SpeechRecognizer1 .GetText
  Solicits speech input from the user. After the speech is converted to text, the AfterGettingText event will be raised.
SpeechRecognizer1 .Result
SpeechRecognizer1
```

when Button1 .Click
do
 call SpeechRecognizer1 .GetText

Una vez en la zona de bloques, y dentro del contenedor Button1 se inserta la llamada al speechrecognizer

MIT App Inventor 2

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MIT App Inventor 2 Beta

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TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Variables
- Procedures
- Screen1
 - VerticalArrangement1
 - Label1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1

Viewer

set Label2 Height to

Label2 Text

set Label2 Text to

Label2 TextColor

set Label2 TextColor to

Label2 Visible

set Label2 Visible to

Label2 Width

set Label2 Width to

Show Warnings

Label2

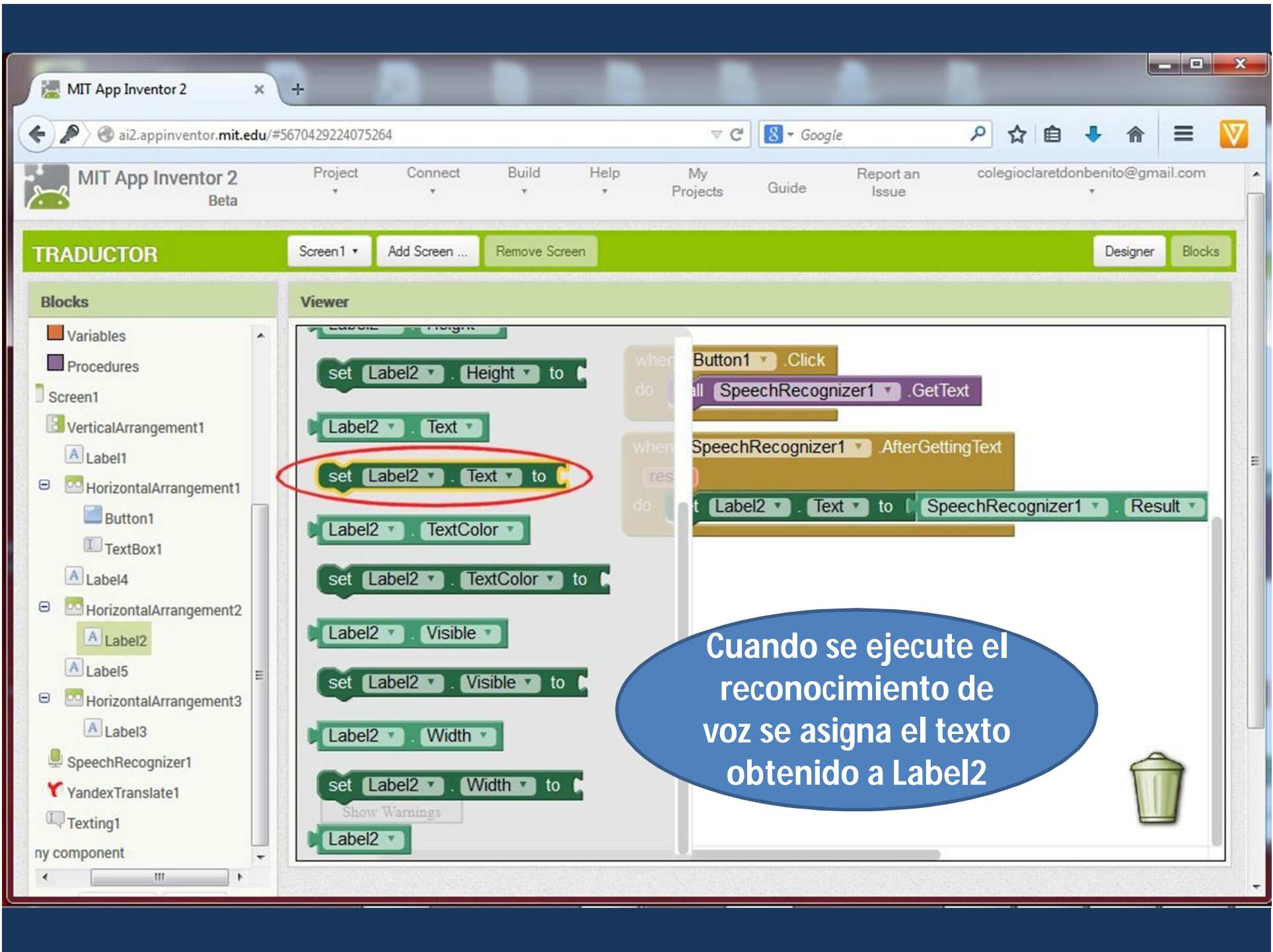
when Button1 Click

do call SpeechRecognizer1 GetText

when SpeechRecognizer1 AfterGettingText

do set Label2 Text to SpeechRecognizer1 Result

Cuando se ejecute el reconocimiento de voz se asigna el texto obtenido a Label2



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Google

TRADUCTOR

Screen1 ▾ Add Screen ... Remove Screen

Designer Blocks

Blocks

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

Screen1

- VerticalArrangement1
 - Label1
- HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
- HorizontalArrangement2
 - Label2
 - Label5


Rename Delete

Viewer

```
when Button1 .Click
do call SpeechRecognizer1 .GetText

when SpeechRecognizer1 .AfterGettingText
result
do set Label2 . Text to SpeechRecognizer1 . Result
call YandexTranslate1 .RequestTranslation
   languageToTranslateTo "en"
   textToTranslate Label2 . Text
```

Y se llama al servicio de traducción poniendo en Language "en" e indicando la etiqueta que contiene el texto a traducir= Label2



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Google

TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Procedures
- Screen1
 - VerticalArrangement1
 - Label1
 - ListPicker1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1
- Any component

Rename Delete


Viewer

```
when Button1 .Click
do call SpeechRecognizer1 .GetText

when SpeechRecognizer1 .AfterGettingText
result
do set Label2 . Text to SpeechRecognizer1 . Result
call YandexTranslate1 .RequestTranslation
languageToTranslateTo " en "
textToTranslate Label2 . Text

when YandexTranslate1 .GotTranslation
responseCode translation
do set Label3 . Text to get translation
```

Y en el evento que se ejecuta tras la traducción se indica el destino de la misma: Label3



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MIT App Inventor 2 Beta

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TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Palette

User Interface

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

Viewer

Display hidden components in Viewer

Screen1

traductor de voz

Text for ListPicker1

Pulsa para hablar

Texto para enviar:

Text for Label2

Texto traducido:

Text for Label3

Components

- Screen1
 - VerticalArrangement1
 - Label1
 - ListPicker1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - HorizontalArrangement2
 - Label4
 - HorizontalArrangement3
 - Label2
 - HorizontalArrangement4
 - Label5
 - HorizontalArrangement5
 - Label3
 - SpeechRecognizer1

Properties

ListPicker1

BackgroundColor: Default

ElementsFromString: 691,5,691,5

Enabled:

FontBold:

FontItalic:

FontSize: 14.0

FontTypeface: default

Image: None...

Los números de teléfono se introducen en la propiedad ElementsFromString del ListPicker "separados por comas"

MIT App Inventor 2

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Google

TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Procedures
- Screen1
 - VerticalArrangement1
 - Label1
 - ListPicker1**
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1
- Any component

Rename Delete

Viewer

when ListPicker1 .AfterPicking

do

Simple event to be raised after the picker activity returns its result and the properties have been filled in

when ListPicker1 .BeforePicking

do

when ListPicker1 .GotFocus

do

when ListPicker1 .LostFocus

do

when ListPicker1 .TouchDown

do

when ListPicker1 .TouchUp

do

SpeechRecognizer1 .GetText

AfterGettingText

SpeechRecognizer1 .Result

YandexTranslate1 .RequestTranslation

languageToTranslateTo "en"

textToTranslate Label2 .Text

YandexTranslate1 .get translation

Label3 .Text

get translation

Añadimos el evento correspondiente al ListPicker

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TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Procedures
- Screen1
 - VerticalArrangement1
 - Label1
 - ListPicker1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1
- Any component

Rename Delete

Viewer

when Button1 .Click

do call SpeechRecognizer1 .GetText

when SpeechRecognizer1 .AfterGettingText

result

do set Label2 . Text to SpeechRecognizer1 . Result

call YandexTranslate1 .RequestTranslation

languageToTranslateTo " en "

textToTranslate Label2 . Text

when YandexTranslate1 .GotTranslation

responseCode translation

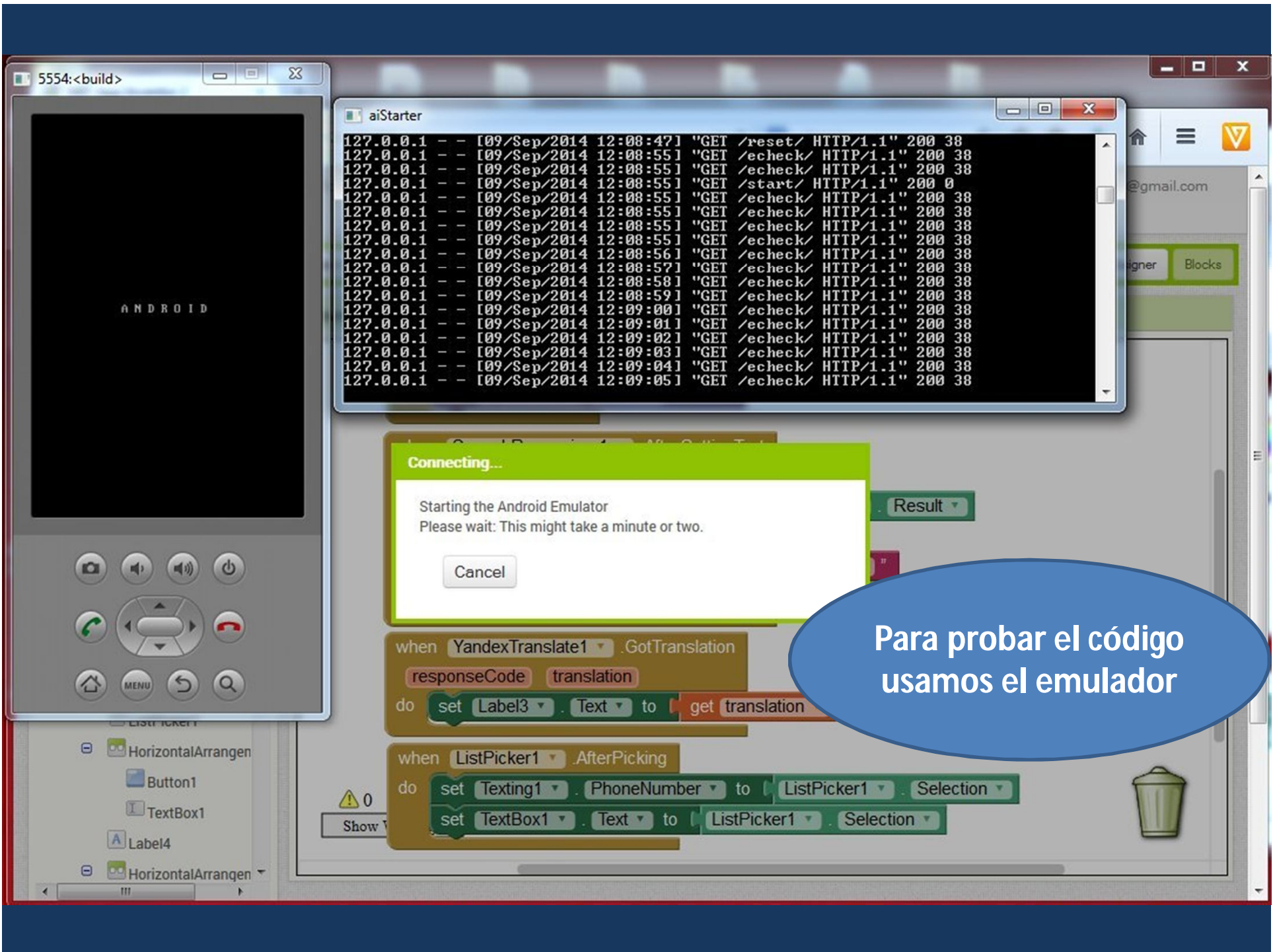
do set Label3 . Text to get translation

when ListPicker1 .AfterPicking

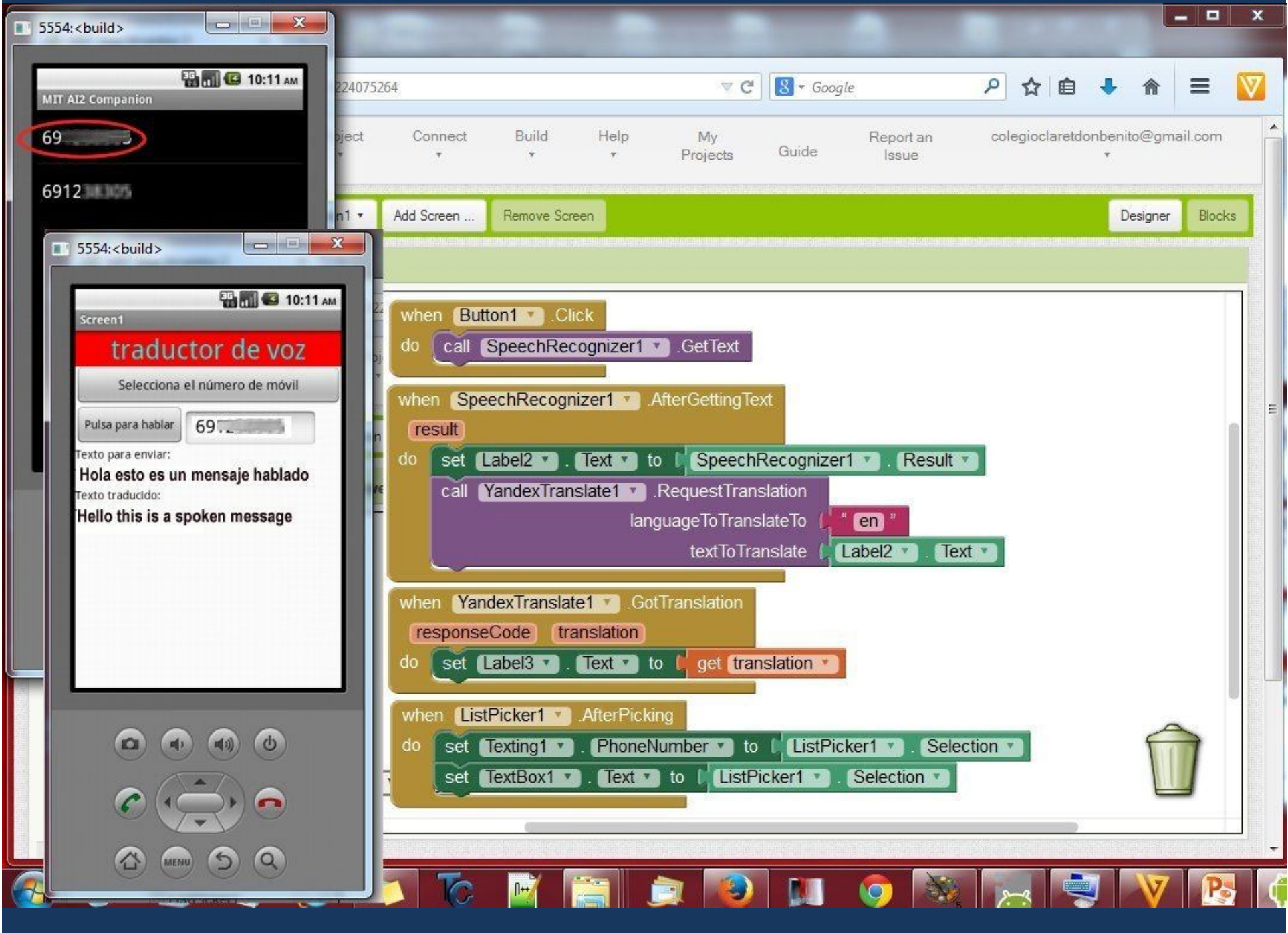
do set Texting1 . PhoneNumber to ListPicker1 . Selection

set TextBox1 . Text to ListPicker1 . Selection

Asignamos el número de teléfono al servicio de mensajería



Para probar el código usamos el emulador



The image shows the MIT App Inventor 2 web interface. At the top, the browser address bar shows `ai2.appinventor.mit.edu/#5670429224075264`. The MIT App Inventor 2 Beta logo is in the top left. The main interface has a green header with the title "TRADUCTOR" and buttons for "Screen1", "Add Screen ...", and "Remove Screen". Below the header are four panels: "Palette", "Viewer", "Components", and "Properties".

- Palette:** Lists various UI components. The "Button" component is circled in red.
- Viewer:** Shows a mobile app preview. It has a red header "traductor de voz", a text input field "Selecciona el número de móvil", a "Pulsa para hablar" button, and two text labels: "Texto para enviar:" and "Texto traducido:". A button at the bottom of the preview is labeled "ENVIAR AL MÓVIL SELECCIONADO" and is also circled in red.
- Components:** Shows a tree view of the app's components. A "Button2" component is highlighted in green.
- Properties:** Shows the properties for the selected "Button2" component, including "BackgroundColor", "Enabled", "FontTypeface", "Image", and "Shape".

A blue callout bubble with white text is overlaid on the right side of the interface, stating: "Por último añadimos un botón para enviar la traducción al servicio de mensajería".

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MIT App Inventor 2 Beta

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TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Screen1
 - VerticalArrangement1
 - Label1
 - ListPicker1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - Button2
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1

Viewer

when Button2 .Click
do

when Button2 .GotFocus
do

when Button2 .LongClick
do

when Button2 .LostFocus
do

when Button2 .TouchDown
do

when Button2 .TouchUp
do

call YandexTranslate1 .RequestTranslation
languageToTranslateTo "en"
textToTranslate Label2 .Text

when YandexTranslate1 .GotTranslation
responseCode translation
do set Label3 .Text to get translation

when ListPicker1 .AfterPicking
do set Texting1 .PhoneNumber to ListPicker1 .SelectedText
set TextBox1 .Text to ListPicker1 .Selection

MIT App Inventor 2

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Google

TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Screen1
 - VerticalArrangement1
 - Label1
 - ListPicker1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - Button2
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1**
 - Any component

Viewer

```
when Texting1 . MessageReceived
  number messageText
do
  call YandexTranslate1 . RequestTranslation
    languageToTranslateTo "en"
    textToTranslate Label2
  call Texting1 . SendMessage
  Texting1 . GoogleVoiceEnabled
  set Texting1 . GoogleVoiceEnabled to
  Texting1 . Message
  set Texting1 . Message to
  Texting1 . PhoneNumber
  set Texting1 . PhoneNumber to
  Texting1 . ReceivingEnabled
  when YandexTranslate1 . GotTranslation
    responseCode translation
do
  set Label3 . Text to get translation
  when ListPicker1 . AfterPicking
do
  set Texting1 . PhoneNumber to ListPicker1 .
  set TextBox1 . Text to ListPicker1 . Selection
  when Button2 . Click
do
  set Texting1 . Message to Label3 . Text
```

En el evento del botón asignamos a la propiedad Message la traducción

MIT App Inventor 2

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TRADUCTOR

Screen1 Add Screen ... Remove Screen Designer Blocks

Blocks

- Screen1
 - VerticalArrangement1
 - Label1
 - ListPicker1
 - HorizontalArrangement1
 - Button1
 - TextBox1
 - Label4
 - HorizontalArrangement2
 - Label2
 - Label5
 - HorizontalArrangement3
 - Label3
 - Button2
 - SpeechRecognizer1
 - YandexTranslate1
 - Texting1
- Any component

Rename Delete

Viewer

```
when Texting1 . MessageReceived
  number messageText
do
  call YandexTranslate1 . RequestTranslation
    languageToTranslateTo "en"
    textToTranslate Label2
  call YandexTranslate1 . GotTranslation
    responseCode translation
do
  set Label3 . Text to get translation
  when ListPicker1 . AfterPicking
    set Texting1 . PhoneNumber to ListPicker1
    set TextBox1 . Text to ListPicker1 . Selection
  when Button2 . Click
    set Texting1 . Message to Label3 . Text
    call Texting1 . SendMessage
  set Texting1 . GoogleVoiceEnabled
  set Texting1 . GoogleVoiceEnabled to
  Texting1 . Message
  set Texting1 . Message to
  Texting1 . PhoneNumber
  set Texting1 . PhoneNumber to
  Texting1 . ReceivingEnabled
```

Y llamamos al servicio para enviar el SMS

when Button1 .Click
do call SpeechRecognizer1 .GetText

when SpeechRecognizer1 .AfterGettingText

result

do set Label2 . Text to SpeechRecognizer1 . Result

call YandexTranslate1 .RequestTranslation
languageToTranslate "en"
textToTranslate Label2 . Text

call ListPicker1 .Open

TRADUCE EL
TEXTO
RECONOCIDO

when YandexTranslate1 .GotTranslation

responseCode translation

do set Label3 . Text to get translation

LLAMA AL
LISTADO DE
TELEFONOS

when ListPicker1 .AfterPicking

do set Texting1 . PhoneNumber to ListPicker1 . Selection

set TextBox1 . Text to ListPicker1 . Selection

when Button2 .Click

do set Texting1 . Message to Label2 . Text

call Texting1 .SendMessage

ENVIA EL MENSAJE TRADUCIDO AL TELEFONO SELECCIONADO



Resultado con el
emulador





Mensaje recibido en el móvil