

Introducción a App Inventor

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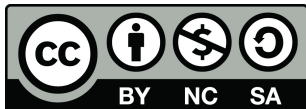
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Contenidos

- 1 Introducción
- 2 Acceso a MIT App Inventor 2
 - Cuenta de Google
- 3 Acceder a MIT App Inventor 2
- 4 Crear un Proyecto
- 5 Despliegue de Aplicaciones Móviles
 - AI2 Companion App
 - Conexión a Red Wi-Fi

Introducción:

- Como se ha comentado con anterioridad, MIT App Inventor 2 es una herramienta web para la creación de aplicaciones móviles.
- Es importante recordar que MIT App Inventor 2 es una herramienta accesible a través de un **navegador web** (Google Chrome, Firefox, Opera, etc.).
- Las aplicaciones creadas con la herramienta se almacenan en la **nube**. Sin embargo, se tiene la posibilidad de ir probando las aplicaciones creadas en un dispositivo móvil real a medida que éstas son creadas.

Acceso a MIT App Inventor 2:

Para poder emplear la herramienta MIT App Inventor 2 se requiere contar con los siguientes elementos:

- Ordenador conectado a Internet.
- Cuenta de correo de Google.
- Navegador web.
- Dispositivo Android.
- Conexión Wi-Fi o cable USB.

Acceso a MIT App Inventor 2:

El ordenador que se emplee para usar MIT App Inventor 2 debe contar con al menos uno de los siguientes sistemas operativos:

- **Windows.** Windows XP, Windows Vista, Windows 7, Windows 8 o Windows 10.
- **Linux.** Ubuntu 8 o superior o Debian 5 o superior.
- **Macintosh.** Mac OS X 10.05 o superior.

Acceso a MIT App Inventor 2:

El navegador web que se emplee para usar MIT App Inventor 2 debe ser al menos uno de los siguientes:

- Google Chrome 4.0 o superior.
- Apple Safari 5.0 o superior.
- Mozilla Firefox 3.6 o superior.



MIT App Inventor 2 no soporta el uso de **Internet Explorer**. Por tanto, es necesario instalar otro navegador web si fuera el caso.

Acceso a MIT App Inventor 2: Cuenta de Google

- El acceso a la herramienta MIT App Inventor 2 se realiza a través de la **cuenta de Google**.
- Al mismo tiempo, la cuenta de correo es la que permite acceder a las aplicaciones creadas.
- En el caso de que se cuente con una de estas cuentas se puede pasar a la siguiente sección.
- La creación de cuentas de Google se realiza a través del enlace mostrado a continuación.

Acceso a MIT App Inventor 2: Cuenta de Google

<https://accounts.google.com/signup>



Sign in

Create your Google Account

One account is all you need

One free account gets you into everything Google.



Take it all with you

Switch between devices, and pick up wherever you left off.



Name

First

Last

Choose your username

@gmail.com

[I prefer to use my current email address](#)

Create a password

Confirm your password

Birthday

Month

Day

Year

Gender

I am...

Mobile phone

+34

Your current email address

Location

Spain (España)

Next step

[Learn more about why we ask for this information.](#)

Acceder a MIT App Inventor 2:

Entrar en <http://appinventor.mit.edu/>

The screenshot shows the MIT App Inventor 2 website homepage. At the top, there is a navigation bar with the MIT App Inventor logo, and links for "About", "News & Events", "Resources", and a "Create apps!" button. Below the navigation bar is a search bar with the text "Google Custom S" and a search icon. A row of social media icons (Facebook, Twitter, YouTube, LinkedIn, Instagram, and RSS) is displayed. The main content area features a large banner for the "MIT Master Trainers Program in Educational Mobile Computing". The banner includes the MIT logo, the program title, and details: "MOOC Begins: Mar 19, 2018" and "In-Person Workshop at MIT: July 30-Aug 1, 2018" with a link "http://bit.ly/MMT2018". A prominent "Enroll in MOOC Now!" button is present. Below the banner, statistics are shown: "Active Users: This Month: 985.5K, This Week: 56.6K, Today: 48.7K" and "Registered Users: 6.8M, Countries: 195, Apps Built: 24.6M". A link for "App Inventor code is open source" is also visible. To the right of the banner, there is a "Donate!" button and a photo of Paul Winkler, who has received the "MassTLC 2017 Distinguished Leader Award". Below this is a section titled "Introducing App Building Guides!" with a sub-header "Check out our second App Building Guide developed by MIT App Inventor and Youth Radio." and a link to "Start today with the Translation App Guide." and "Learn more about Youth Radio." At the bottom, there are two columns: "Get Started" with a flag icon and a "Start" button, and "Tutorials" with a lightbulb icon and a "Tutorials" button. On the far right, there is a "Tweets by @MITAppinventor" section showing a tweet from @Scrapps_MS about 7th-grade students using MIT App Inventor.

MIT APP INVENTOR

About ▾ News & Events ▾ Resources ▾ [Create apps!](#)

Anyone Can Build Apps That Impact the World

Google Custom S

[f](#) [t](#) [v](#) [i](#) [i](#) [r](#) [s](#)

[Donate!](#)

MIT Master Trainers Program
in Educational Mobile Computing

MOOC Begins: Mar 19, 2018
In-Person Workshop at MIT: July 30-Aug 1, 2018
<http://bit.ly/MMT2018>

Enroll in MOOC Now!

Active Users: This Month: 985.5K, This Week: 56.6K, Today: 48.7K
Registered Users: 6.8M, Countries: 195, Apps Built: 24.6M

[App Inventor code is open source](#)

Get Started

Follow these simple directions to build your first app!

[Start](#)

Tutorials

Step-by-step guides show you how to create even more apps.

[Tutorials](#)

Introducing App Building Guides!

Check out our second App Building Guide developed by MIT App Inventor and Youth Radio.

Start today with the [Translation App Guide](#).

Learn more about [Youth Radio](#).

Tweets by @MITAppinventor

MIT App Inventor Retweeted

Scrapps MS @Scrapps_MS
7th grade students fully immersed in #STEM today. Applied tech building @LEGOMindsomN and computers 7 programming an app with @MITAppinventor!

Acceder a MIT App Inventor 2:

Pulsar el botón **Create apps!** (situado en la parte superior derecha de la pantalla)



Si no se está logueado en la cuenta de Google, se mostrará una pantalla de login donde introducir el nombre de usuario y contraseña.

Acceder a MIT App Inventor 2:

- Si no se está logueado en la cuenta de Google, se mostrará una pantalla de login donde introducir el nombre de usuario y contraseña.
- Si se está logueado al pulsar sobre Create apps!, se mostrará el siguiente mensaje:

Google Accounts

An application is requesting permission to access your Google Account.

Please select an account that you would like to use.

christopherexpositoizquierdo@gmail.com

Google is not affiliated with the contents of the application or its owners. If you sign in, Google will share your email address with the application but not your password or any other personal information.

Allow

No thanks

[Sign in to another account](#)

Remember this approval for the next 30 days

©2018 Google - [Google Home](#) - [Terms of Service](#) - [Privacy Policy](#) - [Help](#)

La cuenta de Google con la que se está logueado aparece seleccionada. Sin embargo, se puede emplear otra cuenta pulsando `Sign in to another account`.



Una vez se pulsa `Allow`, se redirige al usuario a MIT App Inventor 2, donde debe aceptar los términos de uso.

Acceder a MIT App Inventor 2:

Pulsar el botón I accept the terms of service!

To use App Inventor for Android, you must accept the following terms of service.

Terms of Service

MIT App Inventor Privacy Policy and Terms of Use

MIT Center for Mobile Learning

Welcome to MIT's Center for Mobile Learning's App Inventor website (the "Site"). The Site runs on Google's App Engine service. You must read and agree to these Terms of Service and Privacy Policy (collectively, the "Terms") prior to using any portion of this Site. These Terms are an agreement between you and the Massachusetts Institute of Technology. If you do not understand or do not agree to be bound by these Terms, please immediately exit this Site.

MIT reserves the right to modify these Terms at any time and will publish notice of any such modifications online on this page for a reasonable period of time following such modifications, and by changing the effective date of these Terms. By continuing to access the Site after notice of such changes have been posted, you signify your agreement to be bound by them. Be sure to return to this page periodically to ensure familiarity with the most current version of these Terms.

Description of MIT App Inventor

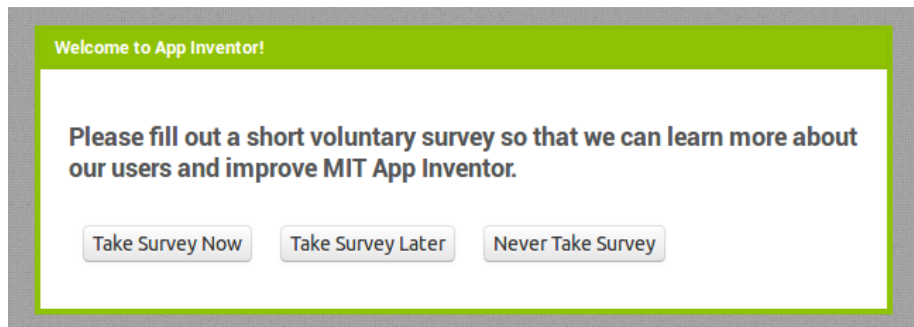
From this Site you can access MIT App Inventor, which lets you develop applications for Android devices using a web browser and either a connected phone or emulator. You can also use the Site to store your work and keep track of your projects. App Inventor was originally developed by Google. The Site also includes documentation and educational content, and this is being licensed to you under the Creative Commons Attribution 4.0 International license ([CC BY 4.0](#)).

Account Required for Use of MIT App Inventor

I accept the terms of service!

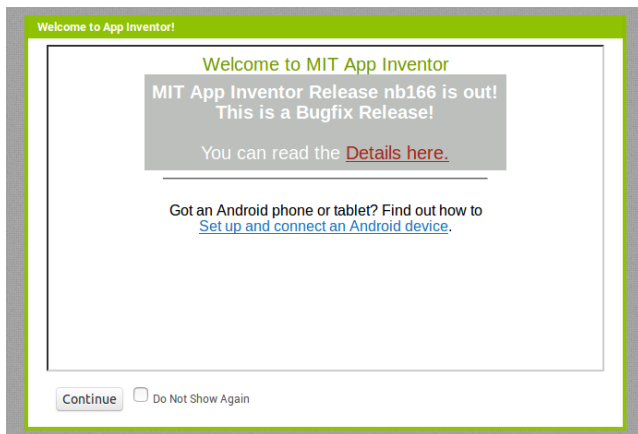
Acceder a MIT App Inventor 2:

La primera vez que se entra en la herramienta también se solicita rellenar un **cuestionario voluntario** para ayudar a mejorar el funcionamiento de MIT App Inventor.



Acceder a MIT App Inventor 2:

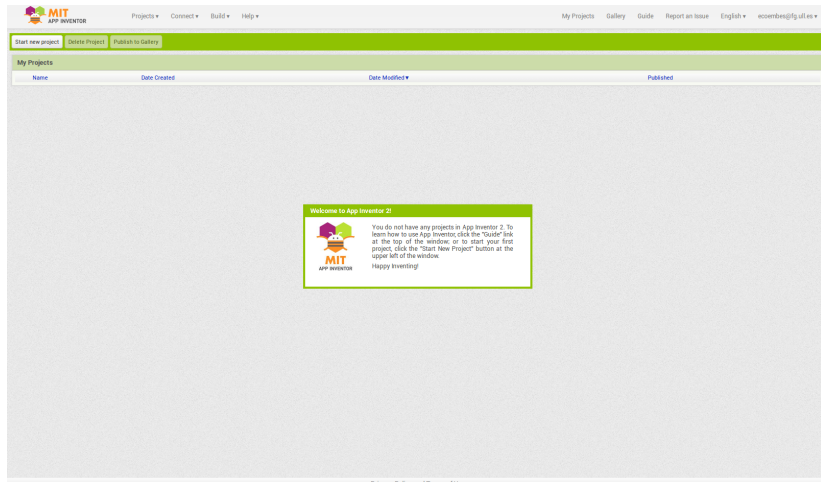
Lo siguiente que se muestra es una ventana emergente con la última información acerca de la herramienta.



Pulsar el botón Continue

Acceder a MIT App Inventor 2:

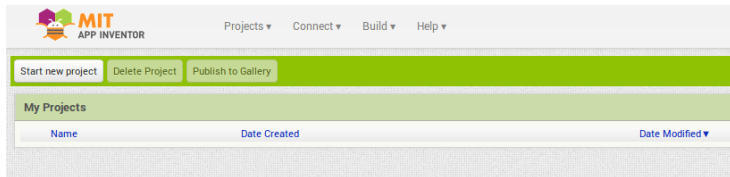
En este punto ya se está dentro de la herramienta MIT App Inventor. La apariencia de la herramienta se muestra en la siguiente imagen:



The screenshot displays the MIT App Inventor 2 web interface. At the top, there is a navigation bar with the MIT App Inventor logo on the left and menu items: Projects, Connect, Build, and Help. On the right side of the navigation bar, there are links for My Projects, Gallery, Guide, Report an Issue, English, and a user email address (ecoverbes@fg.ul.es). Below the navigation bar, there is a secondary bar with buttons for 'Start new project', 'Delete Project', and 'Publish to Gallery'. The main content area is titled 'My Projects' and contains a table with columns for Name, Date Created, Date Modified, and Published. The table is currently empty. In the center of the main area, there is a green-bordered box with the title 'Welcome to App Inventor 2!'. Inside this box, there is a small MIT App Inventor logo and the following text: 'You do not have any projects in App Inventor 2. To learn how to use App Inventor, click the "Guide" link at the top of the window; or to start your first project, click the "Start New Project" button at the upper left of the window. Happy Inventing!'. At the bottom of the page, there is a small link for 'Privacy Policy and Terms of Use'.

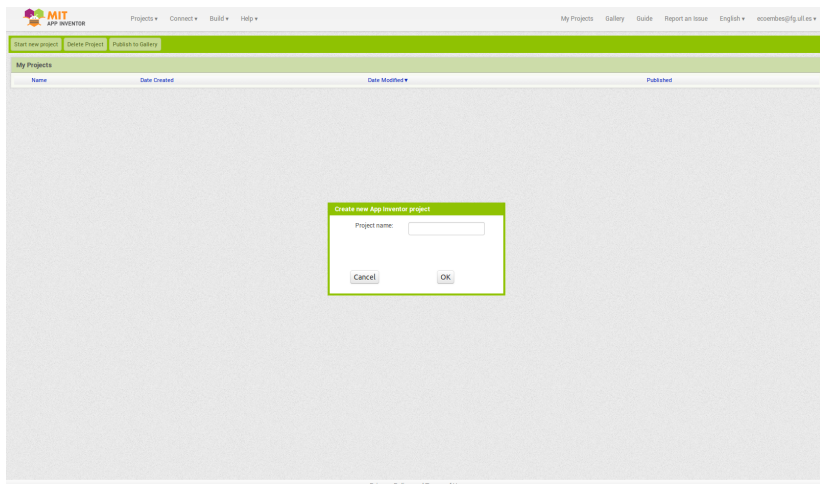
Crear un Proyecto:

- Una vez se ha accedido a la herramienta se está en disposición de comenzar a crear aplicaciones.
- Cada aplicación móvil a crear es un proyecto dentro de MIT App Inventor.
- Para crear un nuevo proyecto hay que pulsar el botón Start new project, situado en la parte superior izquierda de la pantalla.



Crear un Proyecto:

Poner un nombre al proyecto



The screenshot shows the MIT App Inventor web interface. At the top, there is a navigation bar with the MIT App Inventor logo and menu items: Projects, Connect, Build, and Help. On the right side of the navigation bar, there are links for My Projects, Gallery, Guide, Report an Issue, English, and a user profile icon. Below the navigation bar, there is a green header with buttons for Start new project, Delete Project, and Publish to Gallery. The main content area is titled "My Projects" and contains a table with columns for Name, Date Created, Date Modified, and Published. The table is currently empty. In the center of the page, a dialog box titled "Create new App Inventor project" is displayed. It has a text input field labeled "Project name:" and two buttons: "Cancel" and "OK".

MIT APP INVENTOR

Projects Connect Build Help

My Projects Gallery Guide Report an Issue English accorbes@fg.ul.es

Start new project Delete Project Publish to Gallery

My Projects

Name	Date Created	Date Modified	Published
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Create new App Inventor project

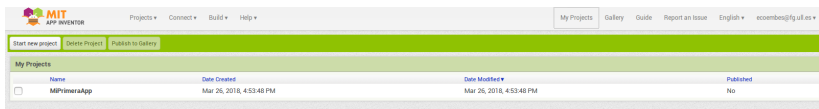
Project name:

Cancel OK

Privacy Policy and Terms of Use

Crear un Proyecto:

- Cuando se pulsa el botón OK se crea el proyecto con el nombre establecido, siempre que éste no exista previamente.
- Los proyectos de aplicaciones móviles aparecen al pulsar el botón My Projects.



- Al pulsar sobre el nombre del proyecto se despliega el editor de la aplicación móvil.

Crear un Proyecto:

The screenshot displays the MIT App Inventor web interface. At the top, the MIT App Inventor logo is on the left, and navigation links for 'Projects', 'Connect', 'Build', and 'Help' are in the center. On the right, there are links for 'My Projects', 'Gallery', 'Guide', 'Report an Issue', and user information for 'ecombes@fg.ul.es'. Below the navigation bar, the project name 'MiPrimeraApp' is shown, along with buttons for 'Screen1', 'Add Screen...', and 'Remove Screen'. A 'Designer' button and a 'Blocks' button are also visible.

The main workspace is divided into four panels:

- Palette:** A list of UI components such as Button, CheckBox, DatePicker, Image, Label, ListPicker, ListView, Notifier, PasswordTextBox, Slider, Spinner, TextBox, TimePicker, and WebViewer. It also includes sections for Layout, Media, Drawing and Animation, Maps, Sensors, Social, Storage, and Connectivity.
- Viewer:** A central area showing a preview of the app on a mobile device. It includes a status bar at the top with the time 9:48 and icons for Wi-Fi, signal strength, and battery. Below the status bar, the text 'Screen1' is visible. At the bottom, there are three navigation icons: back, home, and recent apps. Two checkboxes are present above the viewer: 'Display hidden components in Viewer' and 'Check to see Preview on Tablet size'.
- Components:** A panel on the right showing a list of components currently on the screen, including 'Screen1'. Below the list are 'Rename' and 'Delete' buttons.
- Properties:** A panel on the far right showing the properties for the selected component, 'Screen1'. It includes fields for 'AboutScreen', 'AccentColor' (set to Default), 'AlignHorizontal' (set to Left: 1), 'AlignVertical' (set to Top: 1), 'AppName' (set to MiPrimeraApp), 'BackgroundColor' (set to Default), 'BackgroundImage' (set to None...), 'CloseScreenAnimation' (set to Default), 'Icon' (set to None...), 'OpenScreenAnimation' (set to Default), 'PrimaryColor' (set to Default), 'PrimaryColorDark' (set to Default), 'ScreenOrientation' (set to Unspecified), 'Scrollable' (unchecked), 'ShowListsAsJson' (unchecked), and 'ShowStatusBar' (checked).

Despliegue de Aplicaciones Móviles:

- Hasta ahora se ha visto cómo crear un proyecto en MIT App Inventor. Posteriormente, se analizará en profundidad cómo diseñar las aplicaciones móviles con los requisitos que hayamos establecidos.
- Un paso fundamental que es necesario abordar en este punto es cómo podemos desplegar las aplicaciones móviles creadas en un dispositivo móvil Android.
- Para poder usar las aplicaciones móviles creadas con MIT App Inventor en un dispositivo móvil hace falta emplear AI2 Companion App.

Despliegue de Aplicaciones Móviles: AI2 Companion App

- AI2 Companion es una aplicación móvil para dispositivos Android y pensada para poder emplear las apps creadas con MIT App Inventor.
- Es una aplicación totalmente gratuita y que requiere pocos recursos para ser ejecutada en un dispositivo Android.
- AI2 Companion está disponible para su descarga desde Google Play Store.

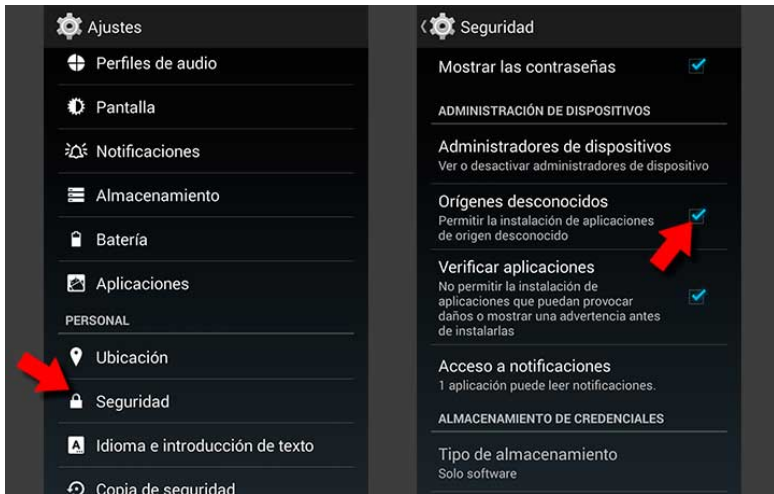
Despliegue de Aplicaciones Móviles: AI2 Companion App

<https://play.google.com/store/apps/details?id=edu.mit.appinventor.aicompanion3&hl=en>

The screenshot shows the Google Play Store interface. At the top, the Google Play logo and a search bar are visible. Below the search bar, there are navigation options: 'Apps', 'Categories', 'Home', 'Top Charts', and 'New Releases'. On the left side, there is a sidebar menu with options: 'My apps', 'Shop', 'Games', 'Family', 'Editors' Choice', 'Account', 'My subscriptions', 'Redeem', 'Buy gift card', 'My wishlist', 'My Play activity', and 'Parent Guide'. The main content area displays the app 'MIT AI2 Companion' by 'MIT Center for Mobile Learning Education'. The app has a rating of 4.5 stars from 17,814 reviews and is marked as 'Installed'. The app icon is a stylized bee with a hexagonal body. Below the app title, there are three preview images showing the app's interface: a QR code scanner, a cat image with the text 'Pet the Kitty!', and a QR code scanner. To the right of the app details, there is a 'Similar' section with a 'See more' button. The similar apps listed are 'CREATE YOUR OWN SKETCHWARE', 'App Builder by App Pie LLC', 'APP Maker, Build Prime App Builder, Make...', and 'C Programming'. At the bottom of the app details, there is a short description: 'Use the MIT AI2 Companion to help Develop your very own Android Applications using MIT App Inventor. You can learn more at <http://ai2.appinventor.mit.edu>.'

Despliegue de Aplicaciones Móviles: AI2 Companion App

Hay que permitir la instalación de aplicaciones desde dispositivos desconocidos. Para ello hay que ir a Ajustes → Seguridad → Orígenes desconocidos.



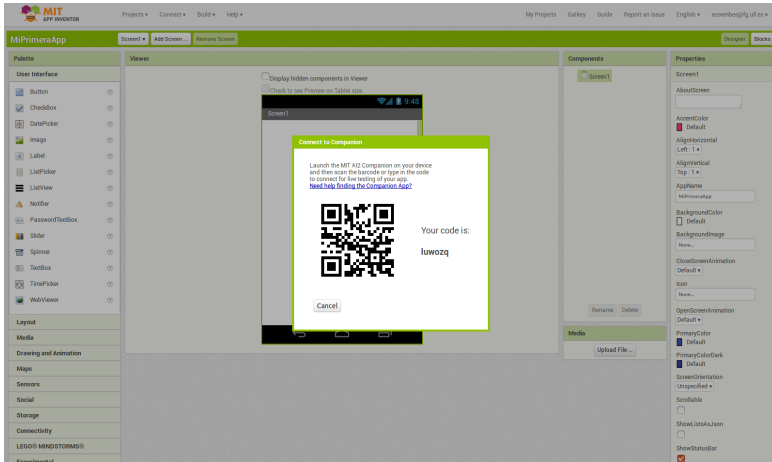
Despliegue de Aplicaciones Móviles: Conexión a Red Wi-Fi

- Cuando se está diseñando una aplicación móvil, su funcionamiento puede ser comprobado al mismo tiempo en el dispositivo móvil.
- Los cambios que se hagan en la aplicación móvil son reflejados en el dispositivo móvil sin tener que reiniciar la conexión.

Es importante comprobar que el ordenador donde se está ejecutando el MIT App Inventor y el dispositivo Android están conectados a la misma red Wi-Fi.

Despliegue de Aplicaciones Móviles: Conexión a Red Wi-Fi

Para poder ejecutar una aplicación móvil en el dispositivo físico hay que pulsar Connect y luego AI Companion.






La ventana emergente muestra un código QR y un código de 6 caracteres. Ambos elementos permiten conectar MIT App Inventor con AI2 Companion.

- Una vez está disponible el código QR (o el código de 6 caracteres) se puede probar la aplicación móvil en el dispositivo físico.
- El primer paso es abrir AI2 Companion haciendo click en su icono.

Despliegue de Aplicaciones Móviles: Conexión a Red Wi-Fi

Connect to Companion

Launch the MIT AI2 Companion on your device and then scan the barcode or type in the code to connect for live testing of your app.
[Need help finding the Companion App?](#)



Cancel

Your code is:

qktpmz

9:45

MIT App Inventor 2 Companion

MIT App Inventor 2

type in the 6-character code
-OR-
scan the QR code

Six Character Code

connect with code

scan QR code

Your IP Address is: 192.168.1.105
Version: 2.27



Después de unos pocos segundos se muestra la primera pantalla de la aplicación creada.

Introducción a App Inventor

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