



App Inventor Introduction

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Hello It's Me

App that speaks your voice

Essential Questions

- What features have you seen in mobile apps that make you curious how it was made?
- Have you thought about building apps before and why/why not?

Objectives

1. Log in and out, and create, save, and retrieve projects in the MIT App Inventor programming environment.
2. Demonstrate an understanding of the Designer and what its different sections represent.
3. Code an app using the App Inventor Blocks Editor.
4. Test and debug using the MIT AI2 Companion app (or emulator).
5. Identify and use the correct components and blocks for an audio and visual app.
6. Develop computational identity by creating a mobile app.



App Inventor Introduction

An app is a set of event handlers. Each event handler has an event and a response. The response is a sequence of blocks that are executed when the event happens.

Did you know?

1. Building apps is not as hard as you might think, especially with App Inventor.
2. App Inventor is a blocks-based programming language for building mobile apps.
 - a. Inventor components work (left to right then top to bottom).
 - b. Blocks are the code that make the components “do” things.

Formal Introduction

- Introduction to App Inventor
 - Blocks-based programming
 - Quickly build apps that you use in your everyday lives
 - Apps that can have a real impact!



You are now in the Designer, where you lay out the "user interface" of your app.

The Design Window, or simply "Designer" is where you lay out the look and feel of your app, and specify what functionalities it should have. You choose things for the user interface things like Buttons, Images, and Text boxes, and functionalities like Text-to-Speech, Sensors, and GPS.

The screenshot shows the 'TalkToMe' app designer interface. At the top, there's a green header with the app name 'TalkToMe' on the left, and 'Screen1', 'Add Screen ...', and 'Remove Screen' buttons in the center, and a 'Designer' label on the right. Below the header, the interface is divided into four main panels: 'Palette', 'Viewer', 'Components', and 'Properties'.
1. **Palette:** Titled 'User Interface', it lists various UI components like Button, CheckBox, Clock, Image, Label, ListPicker, Notifier, PasswordTextBox, Slider, TextBox, and WebViewer. A blue callout box over the 'Image' item says 'Palette: Choose components'.
2. **Viewer:** Shows a mobile device screen with a status bar at the top (9:48) and a large blue button in the center labeled 'Screen1'. A blue callout box over the button says 'Viewer: Arrange components'.
3. **Components:** Shows a hierarchical view of the app's structure, currently displaying 'Screen1'. A blue callout box over this area says 'Components List (Heirarchical View)'.
4. **Properties:** Shows settings for the selected 'Screen1' component, including 'AlignHorizontal' (Left), 'AlignVertical' (Top), 'BackgroundColor' (White), and 'BackgroundImage' (None...). A blue callout box over the 'CloseScreenAnimation' property says 'Properties: Change component settings'.

The Blocks Editor

The Blocks Editor is where you program the behavior of your app. There are Built-in blocks that handle things like math, logic, and text. Below that are the blocks that go with each of the components in your app. *In order to get the blocks for a certain component to show up in the Blocks Editor, you first have to add that component to your app through the Designer.*

The screenshot shows the MIT App Inventor 2 interface. The top navigation bar includes 'MIT App Inventor 2 Beta', 'Project', 'Connect', 'Build', and 'Help' menus, along with 'My Projects', 'Guide', 'Report an Issue', and 'appinventorskilz@gmail.com'. The main workspace is titled 'TalkToMe' and shows 'Screen1' selected. The 'Blocks' panel on the left is divided into 'Built-in' (Control, Logic, Math, Text, Lists, Colors, Variables, Procedures) and 'Screen1' (Button1, TextToSpeech1), plus an 'Any component' section. The 'Viewer' area on the right contains three callout boxes: a grey box explaining that built-in blocks are always available for math, text, logic, and control; a larger grey box explaining that component blocks correspond to chosen app components; and a tan box with a trash can icon explaining that the trash is for deleting unneeded blocks. A 'Show Warnings' button is visible at the bottom of the workspace.



Lesson 1:

Complete the Two Button Game Student Guide:

Lesson 2:

Complete the Hello It's Me Student Guide:



Vocabulary Words

Designer Editor

Blocks Editor

Event (when Button1.Click)

Response (Player1.Start)

Button

Image

Player

Component