Andhra Pradesh State Skill Development Corporation

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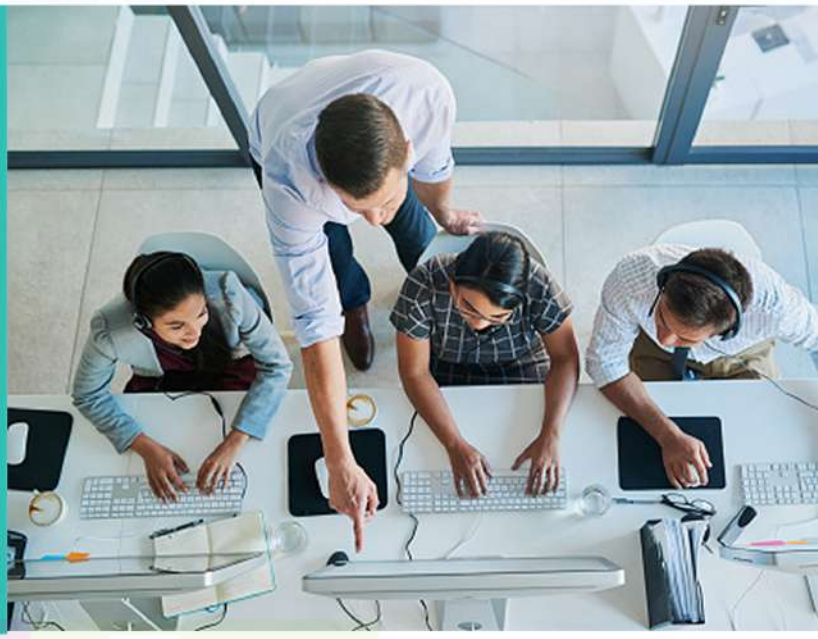

MIT App Inventor

Description Of the Components and Built-in Blocks

UNIT-2

2.1 Palette

2.1.1) User Interface

- Palette in different types in components first user interface some components they are button check box date piker image etc…
- Button :Button with the ability to detect clicks. Many aspects of its appearance can be changed, as well as whether it is clickable (Enabled). Its properties can be changed in the Designer or in the Blocks Editor.
- Checkbox :A CheckBox component raises an event when the user taps it. There are many properties affecting its appearance that can be set in the Designer or Blocks Editor.
- Date picker:A button that, when clicked on, launches a popup dialog to allow the user to select a date on the Gregorian Calendar.
- Image:displaying images and basic animations.The picture to display, and other aspects of the Image's appearance, can be specified in the Designer or in the Blocks Editor
- Notifier:The Notifier component displays alert messages and creates Android log entries through an assortment of methods.
- Slider:A Slider is a progress bar that adds a draggable thumb. You can touch the thumb and drag left or right to set the slider thumb position.
- Spinner:A Spinner component that displays a dialog with a list of elements. These elements can be set in the Designer or Blocks Editor by setting the ElementsFromString property to a comma-separated list of values (for example, choice 1, choice 2, choice 3) or by setting the Elements property to a List in the Blocks editor
- TextBox:Users enter text in a text box component.The initial or user-entered text value in a text box component is in the Text property.
- TimePicker:A button that, when clicked on, opens a dialog to allow the user to select a time.
- WebViewer:Component for viewing Web pages.The HomeUrl can be specified in the Designer or in the Blocks Editor. The view can be set to follow links when they are tapped, and users can fill in Web forms.

2.1.2) Layout

- HorizontalArrangement:Use a horizontal arrangement component to display a group of components laid out from left to right.
- HorizontalScrollArrangement:A formatting element in which to place components that should be displayed from left to right. If you wish to have components displayed one over another, use VerticalScrollArrangement instead.
- VerticalArrangement:Use a VerticalArrangement component to display a group of components laid out from top to bottom, left-aligned.
- VerticalScrollArrangement:A formatting element in which to place components that should be displayed one below another.

2.1.3) Media

- Camcorder:A component to record a video using the device's camcorder
- Camera:Use a camera component to take a picture on the phone.

- ImagePicker:A special-purpose button. When the user taps an ImagePicker, the device's image gallery appears, and the user can choose an image.
- Player:Multimedia component that plays audio and controls phone vibration
- Sound:A multimedia component that plays sound files and optionally vibrates for the number of milliseconds (thousandths of a second) specified in the Blocks Editor
- SoundRecorder:Multimedia component that records audio.
- SpeechRecognizer:Use a SpeechRecognizer component to listen to the user speaking and convert the spoken sound into text using the device's speech recognition feature.

2.1.4) Drawing and Animation

- Ball:A round 'sprite' that can be placed on a Canvas, where it can react to touches and drags, interact with other sprites (ImageSprites and other Balls) and the edge of the Canvas, and move according to its property values.
- Canvas:A two-dimensional touch-sensitive rectangular panel on which drawing can be done and sprites can be moved.
- ImageSprite:A 'sprite' that can be placed on a Canvas, where it can react to touches and drags, interact with other sprites (Balls and other ImageSprites) and the edge of the Canvas, and move according to its property values. Its appearance is that of the image specified in its Picture property (unless its Visible property is false.

2.1.5) Sensors

- AccelerometerSensor:Non-visible component that can detect shaking and measure acceleration approximately in three dimensions using SI units (m/s2).
- Clock:Non-visible component that provides the instant in time using the internal clock on the phone. It can fire a timer at regularly set intervals and perform time calculations, manipulations, and conversions.
- LocationSensor:Non-visible component providing location information, including Latitude, Longitude, Altitude (if supported by the device), speed (if supported by the device), and address.
- OrientationSensor:Use an orientation sensor component to determine the phone's spatial orientation.An orientation sensor is a non-visible component
- Pedometer:This component keeps count of steps using the accelerometer.
- ProximitySensor:A sensor component that can measure the proximity of an object (in cm) relative to the view screen of a device

2.1.6) Social

- ContactPicker:A button that, when clicked on, displays a list of the contacts to choose among. After the user has made a selection, the following properties will be set to information about the chosen contact
- EmailPicker:An EmailPicker is a kind of text box. If the user begins entering the name or email address of a contact, the phone will show a dropdown menu of choices that complete the entry.
- PhoneCall :A non-visible component that makes a phone call to the number specified in the PhoneNumber
- PhoneNumberPicker:A button that, when clicked on, displays a list of the contacts' phone numbers to choose among
- Sharing:Sharing is a non-visible component that enables sharing files and/or messages between your app and other apps installed on a device
- Texting:A component that will, when the SendMessage method is called, launch the device's preferred texting app to send the text message specified in the SendMessage property to the phone number specified in the PhoneNumber property.

2.1.7) Storage

- CloudDB:The CloudDB component is a Non-visible component that allows you to store data on a Internet connected database server (using Redis software). This allows the users of your App to share data with each other
- File:Non-visible component for storing and retrieving files. Use this component to write or read files on the device. The default behavior is to write files to the private data directory associated with the app.
- TinyWebDB:The TinyWebDB component communicates with a Web service to store and retrieve information. Although this component is usable, it is very limited and meant primarily as a demonstration for people who would like to create their own components that talk to the Web
- TinyDB: non-visible component that stores data for an app.Apps created with App Inventor are initialized each time they run. This means that if an app sets the value of a variable and the user then quits the app, the value of that variable will not be remembered the next time the app is run

2.1.8) Connectivity

- ActivityStarter:A component that can launch an activity using the StartActivity method.
- Activities that can be launched include:
- Starting another App Inventor for Android app. Starting the camera application.Performing web search.
- BluetoothClient:Use BluetoothClient to connect your device to other devices using Bluetooth. This component uses the Serial Port Profile (SPP) for communication
- BluetoothServer:Use the BluetoothServer component to turn your device into a server that receive connections from other apps that use the BluetoothClient component.
- Web:Non-visible component that provides functions for HTTP GET, POST, PUT, and DELETE requests.

2.2) Blocks

- In blocks some built in functions is present in mit
- Control functions:in control functions in shown loop functions, condition functions and next screen operations
- Login functions:login operations it means and or equal operations
- Math functions:math operations is present in function it means +,-,*
- Text functions: you can display any text in output you can write in blocks
- List functions: you add any elements in blocks also you add list function
- Colors functions:you add any colors to screen or output functions
- Variables functions: Variables are the names you give to computer memory locations which are used to store values in a computer program
- Procedures functions:you add any functions in bloks part you can used this function it means it work like function in prog part


Blocks
Viewer
Built-in
Control
Logic
Math
Text
Lists
Dictionaries
Colors
Variables
Procedures
Screen1
Any component