

1. Record Nr.	UNINA9910788049903321
Autore	Schwartz Marco
Titolo	Arduino android blueprints : get the best out of Arduino by interfacing it with android to create engaging interactive projects // Marco Schwartz, Stefan Buttigieg
Pubbl/distr/stampa	Birmingham, England : , : Packt Publishing Ltd., , 2014 ©2014
ISBN	1-78439-168-9
Descrizione fisica	1 online resource (250 p.)
Collana	Community experience distilled
Disciplina	629.89551
Soggetti	Arduino (Programmable controller) - Programming Microcontrollers - Programming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Community Experience Distilled"--Cover. Includes index.
Nota di contenuto	Cover; Copyright; Credits; About the Authors; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Setting Up Your Workspace; Hardware and software requirements; Installing Java Developer Kit; Checking the JDK version; Mac; Windows; Installing Java; Installing Android Studio; Mac; Windows; Setting up the Android Software Development Kit; Setting up your physical Android device for development; Enabling developer options; Enabling USB debugging; Entrusting the computer with the installed IDE using secure USB debugging (devices with Android 4.4.2) Hardware configurationLearning to use the aREST library; Creating your first Android project; Setting up your first Hello Arduino project; Installing your app on your physical device; Summary; Chapter 2: Controlling an Arduino Board via Bluetooth; Hardware and software requirements; Configuring the hardware; Writing the Arduino sketch; How to create a simple Android app to connect to the BLE module; Modifying the Android layout file; Connecting the modified layout to the corresponding activity; How to go further; Summary; Chapter 3: Bluetooth Weather Station Hardware and software requirementsHardware configuration; Testing the sensors; Writing the Arduino sketch; Wireframing our Android

application and modifying the layout files; Implementing Android layouts in the main activity; Enhancing the user interface; Creating and adding our very own app icon; Centering and enlarging the data output text; Modifying the buttons and adding some color to our text; How to go further; Summary; Chapter 4: Wi-Fi Smart Power Plug; Hardware and software requirements; Configuring the hardware; Testing the relay; Writing the Arduino sketch

Wireframing our Android application; Implementing our layouts into the code; Polishing the user interface and experience; Adding a new app icon; Centering and enlarging the data output text; Aligning and styling the buttons; Changing the application name within the action bar; How to go further; Summary; Chapter 5: Wi-Fi Remote Security Camera; Hardware and software requirements; Hardware configuration; Setting up video streaming; Implementing a fullscreen stream player on Android; How to go further; Summary; Chapter 6: Android Phone Sensor; Hardware and software requirements

Configuring the hardware; Testing the servo; Writing the Arduino sketch; Setting up the Android app project; Laying out the Android user interface and permissions; Setting up the app's internals; How to go further; Summary; Chapter 7: Voice-activated Arduino; Hardware and software requirements; Configuring the hardware; Writing the Arduino sketch; Setting up the Android app; Laying out the Android user interface and permissions; Coding the app's internals; How to go further; Summary; Chapter 8: Control an Arduino Board via NFC; Hardware and software requirements; Configuring the hardware; Testing the NFC shield

Sommario/riassunto

This book is for those who want to learn how to build exciting Arduino projects by interfacing it with Android. You will need to have some basic experience in electronics and programming. However, you don't need to have any previous experience with the Arduino or Android platforms.
