1. Record Nr. UNINA9910791199103321

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Titolo	3D printing with SketchUp : real-world case studies to help you design models in SketchUp for 3D printing on anything ranging from the smallest desktop machines to the largest industrial 3D printers / / Marcus Ritland ; cover image by Marcus Ritland
Pubbl/distr/stampa	Birmingham, [England] : , : Packt Publishing, , 2014 ©2014
ISBN	1-78328-457-9 1-78328-458-7
Descrizione fisica	1 online resource (136 p.)
Collana	Community Experience Distilled
Disciplina	620.00420285
Soggetti	Computer-aided design Three-dimensional printing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover; Copyright; Credits; About the Author; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Concepts Every 3D Printing Designer Needs to Know; A short background of 3D printing; The 3D printing process; Printing support material; Own a printer or use a print service?; Making the most of 3D printing; Designing for prototypes versus finished products; Avoiding the pitfalls of 3D printing; Choosing a 3D modeling program; Summary; Chapter 2: Setting Up SketchUp for 3D Printing; Downloading and installing SketchUp; The SketchUp interface Setting up a template for fast modeling and troubleshootingUsing the 3D printer build volume component; Model units of measurement; Saving as the default template; Using other styles; Setting up toolbars; Minimizing dialog boxes; Installing and using extensions; Installing more extensions; A quick exercise; Importing .STL files; Summary; Chapter 3: From 2D Drawing to 3D Model; Starting from a quick sketch; Designing for ease of printing; Modeling in SketchUp from a sketch; Keeping a historical timeline of changes speeds iteration; Exporting the model and printing; Importing vector artwork

Changing the scale of the partThe bonus tip - the 45-degree overhang rule for filament printers; Making the design your own; Summary; Chapter 4: Understanding Model Resolution; Wall thickness; Modeling a vase; Creating a profile; Avoiding missing faces by scaling up your model; Creating wall thickness; Understanding noncircular circles; Making the magic happen with the Follow Me tool; A Bonus tip for desktop extrusion printers; Combining solids with the Outer Shell tool; Bonus - more methods for creating wall thickness; Summary; Chapter 5: Using Existing Models
Leveraging SketchUp components to save timeSaving a model as a Component; Online 3D model repositories; Thingiverse; 3D Warehouse; GrabCAD; Case study - modifying a GoPro wrench; Summary; Chapter 6: Designing a Phone Cradle; Getting started with a 2D sketch; Getting to the third dimension; Adding details to make the model interesting; Using the 3D Text tool; Mirroring symmetrical models; Combining groups with the Outer Shell tool; Cutting a slot for the cord; Orienting faces for a perfect model; Exporting the model for printing; Testing the printed model; Developing an improved design
Copying and scaling groups to create a complex shapeFinishing up and printing the new model; Testing the second iteration; Summary; Chapter 7: Importing Terrain and Printing in Color; Working with Google Earth terrain; Printing models with color; Textures versus solid colors; Working with solid colors in SketchUp; Working with textures in SketchUp; Exporting the model for color printing; Summary; Chapter 8: Modeling Architecture for 3D Printing; Using SketchUp for 3D printing versus rendering; Case study - 3D printing a model designed for rendering; Examining the original model
Planning the model

Sommario/riassunto

This book is a practical tutorial, packed with real-world case studies to help you design models that print right the first time.If you are familiar with SketchUp and want to print the models you've designed, then this book is ideal for you. You don't need any experience in 3D printing; however, SketchUp beginners will require a companion book or video training series to teach them the basic SketchUp skills.