Learning Three Js The Javascript 3d Library For Webgl Dirksen Jos

Presents practical instrucion and theory for using the features of HTML5 to create a online gaming applications.

Learn coding from scratch in a highly engaging and visual manner using the vastly popular JavaScript with the programming library p5.js. The skills you will acquire from this book are highly transferable to a myriad of industries and can be used towards building web applications, programmable robots, or generative art. You'll gain the proper context so that you can build a strong foundation for programming. This book won't hinder your momentum with irrelevant technical or theoretical points. The aim is to build a strong, but not overly excessive knowledge to get you up and running with coding. If you want to program creative visuals and bring that skill set to a field of your your choice, then Learn JavaScript with p5.js is the book for you. What You'll Learn Code from scratch and create computer graphics with JavaScript and the p5.js library Gain the necessary skills to move into your own creative projects Create graphics and interactive experiences using Processing Program using JavaScript and p5.js and secondarily in creating visuals Who This Book is For Artists or a visual designers. Also, those who want to learn the fundamentals of programming through visual examples.

This book is ideal for JavaScript developers and programmers who work with any type of user entry data and want sharpen their skills to become experts.

"Learning Three.js is a hands-on guide which provides everything you need to start working

with the powerful JavaScript library, and start creating awesome in-browser visualizations".Learning Three.js is written for anyone looking to get started with Three.js, or looking to improve their skills with the popular js library. The book assumes some knowledge of javascript, but you don't need any knowledge of Three.js itself to follow the book.

This book focuses on the importance of human factors in optimizing the learning and training process. It reports on the latest research and best practices and discusses key principles of behavioral and cognitive science, which are extremely relevant to the design of instructional content and new technologies to support mobile and multimedia learning, virtual training and web-based learning, among others, as well as performance measurements, social and adaptive learning and many other types of educational technologies, with a special emphasis on those important in the corporate, higher education, and military training contexts. Based on the AHFE 2019 Conference on Human Factors in Training, Education, and Learning Sciences, held on July 24-28, 2019, in Washington D.C., USA, the book offers a timely perspective on the role of human factors in education. It highlights important new ideas and will fosters new discussions on how to optimally design learning experiences.

Learn to use the three.js JavaScript library to create 3D graphics for the web.

Learning Three.js: The JavaScript 3D Library for WebGLPackt Publishing Ltd

The two-volume proceedings of the ACIIDS 2016 conference, LNAI 9621 + 9622, constitutes the refereed proceedings of the 8th Asian Conference on Intelligent Information and Database Systems, held in Da Nang, Vietnam, in March 2016. The total of 153 full papers accepted for publication in these proceedings was carefully reviewed and selected from 392 submissions. They were organized in topical sections named: knowledge engineering and semantic Web;

social networks and recommender systems; text processing and information retrieval; database systems and software engineering; intelligent information systems; decision support and control systems; machine learning and data mining; computer vision techniques; intelligent big data exploitation; cloud and network computing; multiple model approach to machine learning; advanced data mining techniques and applications; computational intelligence in data mining for complex problems; collective intelligence for service innovation, technology opportunity, e-learning, and fuzzy intelligent systems; analysis for image, video and motion data in life sciences; real world applications in engineering and technology; ontology-based software development; intelligent and context systems; modeling and optimization techniques in information systems, database systems and industrial systems; smart pattern processing for sports; and intelligent services for smart cities.

This text, by an award-winning [Author];, was designed to accompany his first-year seminar in the mathematics of computer graphics. Readers learn the mathematics behind the computational aspects of space, shape, transformation, color, rendering, animation, and modeling. The software required is freely available on the Internet for Mac, Windows, and Linux. The text answers questions such as these: How do artists build up realistic shapes from geometric primitives? What computations is my computer doing when it generates a realistic image of my 3D scene? What mathematical tools can I use to animate an object through space? Why do movies always look more realistic than video games? Containing the mathematics and computing needed for making their own 3D computer-generated images and animations, the text, and the course it supports, culminates in a project in which students create a short animated movie using free software. Algebra and trigonometry are prerequisites;

calculus is not, though it helps. Programming is not required. Includes optional advanced exercises for students with strong backgrounds in math or computer science. Instructors interested in exposing their liberal arts students to the beautiful mathematics behind computer graphics will find a rich resource in this text.

Your friendly guide to getting a job in coding Getting a Coding Job For Dummies explains how a coder works in (or out of) an organization, the key skills any job requires, the basics of the technologies a coding pro will encounter, and how to find formal or informal ways to build your skills. Plus, it paints a picture of the world a coder lives in, outlines how to build a resume to land a coding job, and so much more. Coding is one of the most in–demand skills in today?s job market, yet there seems to be an ongoing deficit of candidates qualified to take these jobs. Getting a Coding Job For Dummies provides a road map for students, post–grads, career switchers, and anyone else interested in starting a career in coding. Inside this friendly guide, you?ll find the steps needed to learn the hard and soft skills of coding and the world of programming at large. Along the way, you?ll set a clear career path based on your goals and discover the resources that can best help you build your coding skills to make you a suitable job candidate. Covers the breadth of job opportunities as a coder Includes tips on educational resources for coders and ways to build a positive reputation Shows you how to research potential employers and impress interviewers Offers access to online video, articles, and sample resume templates If you?re interested in pursuing a job in coding, but don?t know the best way to get there, Getting a Coding Job For Dummies is your compass! ????????????,????,?????????????????????????,?????????????,?????????????,?????????? ??????????????.

If you are interested in creating maps for the web GIS data, this book is for you. Familiarity with D3.js will be helpful but is not necessary.

This book is ideal for anyone who already knows JavaScript and would like to get a broad understanding of Three.js quickly, or for those of you who have a basic grasp of using Three.js but want to really make an impact with your 3D visualizations by learning its advanced features. To apply the recipes in this book you don't need to know anything about WebGL; all you need is some general knowledge about JavaScript and HTML.

????:Richard Helm,Ralph Johnson,John Vlissides ????:???,??,???

Learn the art of creating scalable RESTful web services with ScalaAbout This Book• This is the only book on the market that will help you create scalable RESTful web services using five popular Scala-based REST frameworks• Quickly identify the best framework for a specific problem and select the most appropriate solution to suit your requirements• This practical guide will help you implement a complete REST-based API from scratchWho This Book Is ForIf you are a Scala developer with some Scala experience and you want to get an overview of the frameworks that are available in the Scala world, then this book is perfect for you. You need to have a general knowledge of REST and Scala. This book is great for senior Scala (or other language) developers who are looking for a good REST framework to use together with Scala.What You Will Learn• Set up a development environment to easily develop and test REST services• Discover

the different ways in which you can create REST services with Scala• See and explore the different approaches taken by popular REST frameworks• Get to know more about a variety of available Scala frameworks such as Finch, Unfiltered, Scalatra, Akka-HTTP, and Play• Discover how to create a REST service on top of each framework discussed in this book• Create HTTP clients using the frameworks in this book• Make an informed decision about which framework to use in a specific situation• Set up authentication for your REST servicesIn DetailRESTful web services are built to work best on the web. Scala provides a rich set of language constructs and advanced frameworks that you can use to create REST services. However, using Scala and these tools can be a complex task. There are many frameworks available and choosing the wrong framework or approach can cost a lot of time and lead to much frustration. By exploring the most popular Scala REST frameworks, you can make sure you choose the right tool.RESTful Web Services with Scala begins with a brief explanation of the REST architecture and its implementation in Scala, as well as the impact that REST architecture has on Scala applications. You will understand the advantages of building Scala web services and how existing Scala applications can take advantage of REST. This book will teach developers about the different programming paradigms available in the Scala world to create

RESTful services by exploring the most popular Scala-oriented REST frameworks. It discusses the various facets of RESTful web services such as building scalable APIs, working with standards like HTTP and MIME, designing the architecture, securing the web service, and more.With this book, you will be able to build RESTful web services with various Scala frameworks such as Finch, Unfiltered, Scalatra, Akka-HTTP, and Play. You will create basic REST services using frameworks and then extend the REST services with custom functionality. By the end of the book, you'll be able to decide which framework is best suited for your requirements. We finish by looking at how we can use a number of advanced features provided by these frameworks, such as security, creating HTTP clients, working with HATEOAS, and more.Style and approachThis book follows a practical approach where we implement a REST API using each of the frameworks discussed. This book is filled with rich examples and code so you can understand and implement the features of every framework.

Create high-performance, visually stunning 3D applications for the Web, using HTML5 and related technologies such as CSS3 and WebGL—the emerging web graphics standard. With this book, you'll learn how to use the tools, frameworks, and libraries for building 3D models and animations, mind-blowing visual effects, and advanced user interaction in both desktop and mobile browsers. In two

parts—Foundations and Application Development Techniques—author Tony Parisi provides a thorough grounding in theory and practice for designing everything from a simple 3D product viewer to immersive games and interactive training systems. Ideal for developers with Javascript and HTML experience. Explore HTML5 APIs and related technologies for creating 3D web graphics, including WebGL, Canvas, and CSS Work with the popular JavaScript 3D rendering and animation libraries Three.js and Tween.js Delve into the 3D content creation pipeline, and the modeling and animation tools for creating killer 3D content Look into several game engines and frameworks for building 3D applications, including the author's Vizi framework Create 3D environments with multiple objects and complex interaction, using examples and supporting code Examine the issues involved in building WebGL-based 3D applications for mobile browsers Breathe life into your data by learning how to use D3.js V4 to visualize information About This Book Create complex visualizations powered by D3.js and open data. Provides an extensive set of visualizations that explore all the functionality provided by D3.js V4. Shows how to set up an easy–to-use environment to create stunning visualizations. Who This Book Is For The typical target audience of this book is JavaScript developers, designers, and visual artists who have some basic JavaScript programming knowledge and who now

want to master pro-level techniques to create interactive data visualizations using web standards which work on desktop as well as mobile devices. What You Will Learn Learn how D3.js works to declaratively define visualizations. Create charts from scratch by using SVG and the D3.js APIs See how to prepare data for easy visualization using D3.js. Visualize hierarchical data using chart types provided by D3.js Explore the different options provided by D3.js to visualize linked data such as graphs. Spice up your visualizations by adding interactivity and animations. Learn how to use D3.js to visualize and interact with Geo- and Gis-related information sources. Create visualization by streaming data over WebSockets In Detail Do you want to make sense of your data? Do you want to create interactive charts, data trees, info-graphics, geospatial charts, and maps efficiently? This book is your ideal choice to master interactive data visualization with D3.js V4. The book includes a number of extensive examples that to help you hone your skills with data visualization. Throughout nine chapters these examples will help you acquire a clear practical understanding of the various techniques, tools and functionality provided by D3.js. You will first setup your D3.JS development environment and learn the basic patterns needed to visualize your data. After that you will learn techniques to optimize different processes such as working with selections; animating data transitions; creating graps and

charts, integrating external resources (static as well as streaming); visualizing information on maps; working with colors and scales; utilizing the different D3.js APIs; and much more. The book will also guide you through creating custom graphs and visualizations, and show you how to go from the raw data to beautiful visualizations. The extensive examples will include working with complex and realtime data streams, such as seismic data, geospatial data, scientific data, and more. Towards the end of the book, you will learn to add more functionality on top of D3.js by using it with other external libraries and integrating it with Ecmascript 6 and Typescript Style and approach This book will have a real–world, case-study approach, where you will be given data sets from different domains. These data sets will have different visualization goals; some might need 2D or 3D charts, some might need automated workflows, others might require interactive maps. While you fulfill these goals, you will learn different techniques and best practices, which will enable you to perform data visualization tasks on your own

Make the most of R's dynamic capabilities and implement web applications with Shiny About This Book Present interactive data visualizations in R within the Shiny framework Construct web dashboards in a simple, intuitive, but fully flexible environment Apply your skills to create a real-world web application with this step-

by-step guide Who This Book Is For If you are a data scientist who needs a
platform to show your results to a broader audience in an attractive and visual
way, or a web developer with no prior experience in R or Shiny, this is the book
for you. What You Will Learn Comprehend many useful functions, such as lapply
and apply, to process data in R Write and structure different files to create a
basic dashboard Develop graphics in R using popular graphical libraries such as
ggplot2 and GoogleVis Mount a dashboard on a Linux Server Integrate Shiny
with non-R-native visualization, such as D3.js Design and build a web application
In Detail R is nowadays one of the most used tools in data science. However,
along with Shiny, it is also gaining territory in the web application world, due to its
simplicity and flexibility. Shiny is a framework that enables the creation of
interactive visualizations written entirely in R and can be displayed in almost any
ordinary web browser. It is a package from RStudio, which is an IDE for R. From
the fundamentals of R to the administration of multi-concurrent, fully customized
web applications, this book explains how to achieve your desired web application
in an easy and gradual way. You will start by learning about the fundamentals of
R, and will move on to looking at simple and practical examples. These examples
will enable you to grasp many useful tools that will assist you in solving the usual
problems that can be faced when developing data visualizations. You will then

walk through the integration of Shiny with R in general and view the different visualization possibilities out there. Finally, you will put your skills to the test and create your first web application! Style and approach This is a comprehensive, step-by-step guide that will allow you to learn and make full use of R and Shiny's capabilities in a gradual way, together with clear, applied examples.

Get a quick introduction to WebGL, the new standard for 3D rendering on the Web and a member of HTML5's family of technologies. With this hands-on guide, you'll learn essential WebGL development and production concepts, using the JavaScript 3D engine Three.js. At the end of the book, you'll put everything together and build a full 3D application with WebGL. You don't have to be a game development wizard or have 3D graphics experience to get started. If you use HTML, CSS, and JavaScript—and have familiarity with JQuery and Ajax—this book will help you gain a working knowledge of WebGL through clear and simple examples. Understand core 3D graphics concepts and how to implement them in WebGL Create WebGL sample pages as you learn, and build a racing game application in the final chapter Get to know the Three.js open source library in detail Develop working knowledge of graphics rendering, texturing, animation, interaction, and behaviors Seamlessly integrate 3D graphics with other content on the page Learn the tools, file formats, and techniques for

developing robust and secure applications in a production environment "WebGL: Up and Running is an ideal introduction to the world of 3D programming on the web. It's well-written, clear, and fun. I wish it had been around when I started learning!" —Giles Thomas, LearningWebGL.com

Given the demand for AI and the ubiquity of JavaScript, TensorFlow.js was inevitable. With this Google framework, seasoned AI veterans and web developers alike can help propel the future of AI-driven websites. In this guide, author Gant Laborde--Google Developer Expert in machine learningand the web--provides a hands-on end-to-end approach to TensorFlow.js fundamentals for a broad technical audience that includes data scientists, engineers, web developers, students, and researchers. You'll begin by working through some basic examples in TensorFlow.js before diving deeper into neural network architectures, DataFrames, TensorFlow Hub, model conversion, transfer learning, and more. Once you finish this book, you'll know how to build and deploy production-readydeep learning systems with TensorFlow.js. Explore tensors, the most fundamental structure of machine learning Convert data into tensors and back with a real-world example Combine AI with the web using TensorFlow.js Use resources to convert, train, and manage machine learning data Build and train your own training models from scratch

If you know JavaScript and want to start creating 3D graphics that run in any browser, this book is a great choice for you. You don't need to know anything about math or WebGL; all that you need is general knowledge of JavaScript and HTML.

A step-by-step, example-based guide to building immersive 3D games on the Web using the Three.js graphics library.This book is for people interested in programming 3D games for the Web. Readers are expected to have basic knowledge of JavaScript syntax and a basic understanding of HTML and CSS. This book will be useful regardless of prior experience with game programming, whether you intend to build casual side projects or large-scale professional titles.

???????????????,???????????????????????,?????????3D?????????????,????Three.js??? ?????????3D?????????.

Get a quick introduction to WebGL, the new standard for 3D rendering on the Web and a member of HTML5{u2019}s family of technologies. With this hands-on guide, you{u2019}ll learn essential WebGL development and production concepts, using the JavaScript 3D engine Three.js. At the end of the book, you{u2019}ll put everything together and build a full 3D application with WebGL. You don{u2019}t have to be a game development wizard or have 3D graphics experience to get started. If you use HTML, CSS, and JavaScript{u2014}and have familiarity with JQuery and Ajax{u2014}this book will help you gain a working knowledge of WebGL through clear and simple examples. Understand core 3D graphics concepts and how to implement them in WebGL Create WebGL sample pages as you learn, and build a racing

game application in the final chapter Get to know the Three.js open source library in detail Develop working knowledge of graphics rendering, texturing, animation, interaction, and behaviors Seamlessly integrate 3D graphics with other content on the page Learn the tools, file formats, and techniques for developing robust and secure applications in a production environment "WebGL: Up and Running is an ideal introduction to the world of 3D programming on the web. It{u2019}s well-written, clear, and fun. I wish it had been around when I started learning!" {u2014}Giles Thomas, LearningWebGL.com.

Gain an in-depth knowledge in immersive web development to create augmented reality (AR) and virtual reality (VR) applications inside web browsers using WebXR API, WebGL, Three.js, and A-Frame. This project-based book will provide the practice and portfolio content to make the most of what the futures of spatial computing and immersive technology have to offer. Beginning with technical analysis of how web browsers function, the book covers programming languages such as WebGL, JavaScript, and HTML, with an eye on a complete understanding of the WebXR lifecycle. You'll then explore how contemporary web browsers work at the code level and see how to set up a local development server and use it with the Visual Studio Code IDE to create 3D animation in the WebGL programming language. With a familiarity of the web-rendering pipeline in place, you'll venture on to WebGL abstractions such as the Three.js JavaScript library and Mozilla's A-Frame XR Framework, which use WebXR to create high-end visual effects. In the final projects of the book, you'll create an augmented reality web session for an Android phone device, and create a VR scene in A-Frame (built on Three.js) to demo essential components of the WebXR API pertaining to user positioning and interaction. Game engines have become common-place for the creation of mixed reality content. However,

developers not interested in learning entirely new workflows may be better suited to work within a medium almost universally open to all—the web; AR and VR Using the WebXR API will show you the way. What You'll Learn Master the creation of virtual reality and augmented reality features for web page Prepare to work as an immersive web developer with a portfolio of projects in sought-after technologies Review the fundamentals of writing shaders in WebGL Experience the unity between client, server, and cloud architecture as it applies to location-based AR Who This Book Is For Aspiring immersive web developers and developers already familiar with the fundamentals of web development who want to further explore topics such as spatial computing, computer vision, spatial anchors, and cloud-computing for multi-user social experiences.

Create and animate stunning 3D browser based graphics with Three.js JavaScript library Key Features Enhance your 3D graphics with light sources, shadows, advanced materials, and textures Load models from external sources, and visualize and animate them directly from JavaScript Create your own custom WebGL shader and explore the postprocessing feature of Three.js Book Description WebGL makes it possible to create 3D graphics in the browser without having to use plugins such as Flash and Java. Programming WebGL, however, is difficult and complex. With Three.js, it is possible to create stunning 3D graphics in an intuitive manner using JavaScript, without having to learn WebGL. With this book, you'll learn how to create and animate beautiful looking 3D scenes directly in your browser-utilizing the full potential of WebGL and modern browsers. It starts with the basic concepts and building blocks used in Three.js. From there on, it will expand on these subjects using extensive examples and code samples. You will learn to create, or load, from externally created models, realistic

looking 3D objects using materials and textures. You'll find out how to easily control the camera using the Three.js built-in in camera controls, which will enable you to fly or walk around the 3D scene you created. You will then use the HTML5 video and canvas elements as a material for your 3D objects and to animate your models. Finally, you will learn to use morph and skeleton-based animation, and even how to add physics, such as gravity and collision detection, to your scene. After reading this book, you'll know everything that is required to create 3D animated graphics using Three.js. What you will learn Work with the different types of materials in Three.js and see how they interact with your 3D objects and the rest of the environment Implement the different camera controls provided by Three.js to effortlessly navigate around your 3D scene Work with vertices directly to create snow, rain, and galaxy-like effects Import and animate models from external formats, such as OBJ, STL, and COLLADA Create and run animations using morph targets and bones animations Explore advanced textures on materials to create realistic looking 3D objects by using bump maps, normal maps, specular maps, and light maps Interact directly with WebGL by creating custom vertex and fragment shaders Who this book is for The ideal target audience for this book would be JavaScript developers who who want to learn how to use the Three.js library

In this book the authors present an HCI principle-based approach to develop applications to assist children with disabilities. Design knowledge related to developing complex solution for this audience is explained from an interaction design point of view. Different methodologies, models and cases studies are covered with the aim of helping practitioners to adopt any of the proposed techniques presented in this book. HCI methodologies that adopt an agile strategy are presented, including novel techniques at different development steps, such as: board

games, agile planning, agile implementation, method engineering. As this is a huge research field the authors do not just focus on a specific disability but test their methods in different contexts with excellent results. Readers of this book will find both a well-organized and structured set of methodologies and also material that has been tested and refined throughout years of research. Using detailed case studies the reader is guided towards specific solutions which will also provide insights into how to address related problems.

This book constitutes the refereed proceedings of the Second International Conference on Technologies and Innovation, CITI 2016, held in Guayaquil, Ecuador, in November 2016. The 21 revised full papers presented were carefully reviewed and selected from 65 submissions. The papers are organized in topical sections on knowledge representation and natural language processing; Cloud and mobile computing; software engineering; expert systems and soft computing.

The book is written in a Cookbook format with practical recipes aimed at helping you extend BPEL capabilities with Java.This book is aimed at Java developers who use BPEL programming to develop web services in SOA development. It is assumed that the readers are experienced with Java programming and SOA, but knowledge of BPEL is not necessarily required.

Effortlessly ensure your application's code quality from day 1 About This Book Customize your Moodle 3.x app. Leverage the new features of Moodle 3.x by diving deep into the Moodle development eco-system. Cater to heavy user traffic,

customize learning requirements and create custom third party plugins. Who This Book Is For This book is for Moodle developers who are familiar with the basic Moodle functionality and have an understanding of the types of scenarios in which the Moodle platform can be usefully employed. You must have medium-level PHP programming knowledge. You should be familiar with HTML and XML protocols. You do not need to have prior knowledge of Moodle-specific terminology What You Will Learn Work with the different types of custom modules that can be written for Moodle 3.x Understand how to author custom modules so they conform to the agreed Moodle 3.x development guidelines Get familiar with the Moodle 3.x architecture—its internal and external APIs Customize Moodle 3.x so it can integrate seamlessly with third-party applications of any kind Build a new course format to specify the layout of a course Implement third-party graphics libraries in your plugins Build plugins that can be themed easily Provide custom APIs that will provide the means to automate Moodle 3 in real time In Detail The new and revamped Moodle is the top choice for developers to create cutting edge e-learning apps that cater to different user's segments and are visually appealing as well. This book explains how the Moodle 3.x platform provides a framework that allows developers to create a customized e-learning solution. It begins with an exploration of the different types of plugin.. We then

continue with an investigation of creating new courses. You will create a custom plugin that pulls in resources from a third-party repository. Then you'll learn how users can be assigned to courses and granted the necessary permissions. Furthermore, you will develop a custom user home. At the end of the book, we'll discuss the Web Services API to fully automate Moodle 3.x in real time. Style and approach This book takes a step-by-step practical approach with every step explained in great detail using practical examples. You will create custom plugins from scratch with the examples shown and create new modules as well as extensions with the examples presented.

JavaScript is the programming language of the Internet, the secret sauce that makes the Web awesome, your favorite sites interactive, and online games fun! JavaScript for Kids is a lighthearted introduction that teaches programming essentials through patient, step-by-step examples paired with funny illustrations. You'll begin with the basics, like working with strings, arrays, and loops, and then move on to more advanced topics, like building interactivity with jQuery and drawing graphics with Canvas. Along the way, you'll write games such as Find the Buried Treasure, Hangman, and Snake. You'll also learn how to: –Create functions to organize and reuse your code –Write and modify HTML to create dynamic web pages –Use the DOM and jQuery to make your web pages react to

user input –Use the Canvas element to draw and animate graphics –Program real user-controlled games with collision detection and score keeping With visual examples like bouncing balls, animated bees, and racing cars, you can really see what you're programming. Each chapter builds on the last, and programming challenges at the end of each chapter will stretch your brain and inspire your own amazing programs. Make something cool with JavaScript today! Ages 10+ (and their parents!)

Explore the power of D3.js 5 and its integration with web technologies for building rich and interactive data visualization solutions Key Features Explore the latest D3.js 5 for creating charts, plots, and force-directed graphics Practical guide for creating interactive graphics and data-driven apps with JavaScript Build Real-time visualization and transition on web using SVG with D3.js Book Description This book is a practical hands-on introduction to D3 (Data-driven Documents): the most popular open-source JavaScript library for creating interactive web-based data visualizations. Based entirely on open web standards, D3 provides an integrated collection of tools for efficiently binding data to graphical elements. If you have basic knowledge of HTML, CSS and JavaScript you can use D3.js to create beautiful interactive web-based data visualizations. D3 is not a charting library. It doesn't contain any pre-defined chart types, but can be used to create

whatever visual representations of data you can imagine. The goal of this book is to introduce D3 and provide a learning path so that you obtain a solid understanding of its fundamental concepts, learn to use most of its modules and functions, and gain enough experience to create your own D3 visualizations. You will learn how to create bar, line, pie and scatter charts, trees, dendograms, treemaps, circle packs, chord/ribbon diagrams, sankey diagrams, animated network diagrams, and maps using different geographical projections. Fundamental concepts are explained in each chapter and then applied to a larger example in step-by-step tutorials, complete with full code, from hundreds of examples you can download and run. This book covers D3 version 5 and is based on ES2015 JavaScript. What you will learn Learn to use D3.js version 5 and web standards to create beautiful interactive data-driven visualizations for the web Bind data to DOM elements, applying different scales, color schemes and configuring smooth animated transitions for data updates Generate data structures and layouts for many popular chart formats Apply interactive behaviors to any chart Create thematic maps based on GIS data using different geographical projections with interactive behaviors Load, parse and transform data from JSON and CSV formats Who this book is for The book is intended for web developers, web designers, data scientists, artists, and any developer who

wish to create interactive data visualization for the Web using D3. The book assumes basic knowledge of HTML, CSs, and JavaScript.

Learn computing fundamentals in Microsoft Excel, Access, Visual Studio and Webmatrix is ideal for mainly anyone interested in computing and for those students studying a business/computer related course with ambitions of becoming an Administrator, Software Developer or Web Developer.The book is packed full of knowledge, and is designed to springboard your computer studies dramatically, by teaching you 'How to' concisely and effectively.The topics covered have been selectively chosen. You will learn what can be done dynamically in these packages, from Excel and the use of data forms and macros to creating your own professional web site in Webmatrix. You will learn a greater understanding of these packages and how they can work together.The methodical way that this book explains the fundamentals in these core software packages will provide the learner with a solid platform to further explore computer sciences and achieve his or her potential.

Crisp and concise guide on building impressive maps as well as visualizations with D3 a JavaScript library About This Book Dive into D3.js and apply its powerful data binding ability in order to create stunning visualizations Learn the key concepts of SVG, JavaScript, CSS and the DOM to bring data and shapes to

live in the browser Solve common problems faced while building interactive maps Acquire key web development skills from the creating your interactive to testing and finally publishing it. Who This Book Is For This book is for people with at least a basic knowledge of of web development (basic HTML/CSS/JavaScript). You don't need to have worked with D3.js before. What You Will Learn Work with SVG geometric shapes Learn to manage map data and plot it with D3.js Add interactivity and points of interest to your maps Compress and manipulate geoJSON files with the use of topoJSON Learn how to write testable D3.js visualizations Build a globe with D3.js and Canvas and add interactivity to it. Create a hexbin map with D3.js In Detail D3.js is a visualization library used for the creation and control of dynamic and interactive graphical forms. It is a library used to manipulate HTML and SVG documents as well as the Canvas element based on data. Using D3.js, developers can create interactive maps for the web, that look and feel beautiful. This book will show you how build and design maps with D3.js and gives you great insight into projections, colors, and the most appropriate types of map. The book begins by helping you set up all the tools necessary to build visualizations and maps. Then it covers obtaining geographic data, modifying it to your specific needs, visualizing it with augmented data using D3.js. It will further show you how to draw and map with the Canvas API and how

to publish your visualization. By the end of this book, you'll be creating maps like the election maps and the kind of infographics you'll find on sites like the New York Times. Style and approach This step by step guide with pragmatic examples will help you create maps and amazing visualizations.

Copyright: 855c14a52142dc00e971261e2e9d14f1