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Information Technology for Librarians and Information Professionals, by Jonathan M. Smith. Lan ham, Maryland, USA: Rowman & Littlefield Publishing Group, Inc., 2021. 197p. $83.71. ISBN-13: 978-1538120996.

The book provides an overview of information technology (IT) and relevant services in libraries and information centers. The book covers a broad range of topics within its twelve chapters. The first chapter starts with a historical review of the information technology that has been used in libraries since the 1960's and its impact on library services and information retrieval. Topics such as division of duties between institutional IT services and library IT department, structures of these departments, and typical IT positions are discussed. In chapter two, topics such as user support, technology documentation, assets and software management are the focus of discussion. Ethical and legal access to technologies for users of disabilities and project management are also covered.

Starting from chapter 3 to chapter 9, the book dives deep into major topics on information technology in greater detail, including computer hardware and software (chapter 3), computer management (chapter 4), networking (chapter 5), server administration (chapter 6), information security (chapter 7), web design and development (chapter 8), software and system development (chapter 9). Within each major topic, chapters also include related topics such as desktop virtualization, BYOD, IoT, cloud computing, APIs, makerspace, 3-D printing, extended reality, artificial intelligence, etc.

Chapter 3 begins with some basic technical details of hardware components of computers (e.g., CPU, motherboard, ROM, RAM, mass storage, physical ports connecting peripherals, I/O devices), and then continues with a brief intro to the computer architecture and a review of major operating systems.

Chapter 4 introduces administration interfaces, application installation, computer networking, disk image deployment in both Windows and MacOS systems. Next it compares the local backup and the cloud storage and discusses in brief the protection against viruses and malware.

Chapter 5 addresses the network architecture (network types, network typology, and geographic area) and hardware components of a network (NIC, cabling, switch, router, firewall, WAP). The chapter then discusses the key aspects of network administration (network administrator, network printing, user authentication, network security, troubleshooting). The rest of the chapter covers several topics and trends in networking, namely Internet2, IoT, net neutrality.

Chapter 6 begins by introducing infrastructure related to computer servers, from hardware components (CPU, motherboard, RAM, storage, etc.) to cloud computing (IaaS, PaaS, and SaaS).

It then addresses certain server operation issues such as operating systems, remote administration, documentation, logs, monitoring and performance analysis, and finally discusses different server types (file and storage, print, database, web, proxy, mail servers), with software designed to provide different services.

Chapter 7 discusses issues, threats, and preventive measures relating to information security, with an introduction to the major security threats to information systems and tools and tactics to protect personal computers, as well as those to enhance network security.

Chapter 8 begins with an overview of website architecture including topics such as the anatomy of a webpage, webserver architecture, programming languages, and development tools. Next, it discusses the web development practices including the roles on a development team, the web design process, and the selection of different design strategies. The final section of this chapter introduces topics of semantic web, web APIs, web analytics, and web accessibility.

Chapter 9 is separated into three sections. The first section discusses the development process from a library perspective including business analysis and project proposal, and then systems development life cycle (SDLC). The second section introduces programming, common programming languages, database design, and an introduction to structured query language. The chapter concludes with two development-related topics: application programming interfaces (APIs) and open-source software.

The last three chapters of the book address emerging technologies (digital media labs, 3-D printing, Makerspaces, Extended Reality, AI, Blockchain, IoT) that may be offered in libraries, library management system (LMS), electronic resource management system (ERMS) and digitization, as well as topics of technology acquisition, strategic technology planning, and risk-management strategies.

Although the book covers a broad range of technological topics, it was written from the perspective of a librarian with a focus on technologies used in libraries. The book introduces the fundamental concepts of information technology necessary for librarians who are responsible for IT-related work and need to communicate with their institution's IT department.

The book may also serve as a textbook for library information and science students or go-to book for librarians and information professionals on that it follows a set of pedagogical structure in each chapter beginning with a brief introduction to a major topic, specific technologies with enough detail, key technical terminology, a chapter summary, questions for discussion, and suggested activities. Chapters also provide a list of book/article citations for further reading and URLs of useful resources for reference. Certain chapters present current issues or trends of relevant technologies and practices.

The target readers of this book may include library information and science students, librarians or information professionals who are interested in systems or have IT support responsibilities.

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