# 《系统分析与设计》

## 图书基本信息

书名：《系统分析与设计》

13位ISBN编号：9787115151544

10位ISBN编号：7115151547

出版时间：2006-10

出版社：人民邮电

作者：[美]JosephS.Vala

页数：450

版权说明：本站所提供下载的PDF图书仅提供预览和简介以及在线试读，请支持正版图书。

更多资源请访问：www.tushu111.com

# 《系统分析与设计》

## 内容概要

《系统分析与设计(英文版·第3版)》是系统分析与设计的经典教材之一。《系统分析与设计(英文版·第3版)》由五个部分组成：第一部分给出系统开发的概貌，并简要介绍全书内容；第二部分讨论怎样评估项目可行性，建立基线项目；第三部分介绍系统需求的确定、过程建模、概念建模和最佳设计；第四部分介绍如何设计人机界面和数据库；第五部分介绍系统实现、操作和维护。此外书后还包括“面向对象分析与设计”和“敏捷方法”两个附录。全书按照系统开发生命周期进行组织，并且反应了SAD中的最新趋势，包括敏捷方法学、极限编程等新一代开发方法。此外，书中配有大量的习题和丰富的案例。
《系统分析与设计(英文版·第3版)》适合作为信息管理、计算机科学、软件工程以及MBA等相关专业“系统分析与设计”课程的教材，同时也适合相关领域技术人员参考。

# 《系统分析与设计》

## 作者简介

Joseph S.Valacich是华盛顿州立大学普尔曼分校商务与经济院院长和教授。他教授过系统分析与设计、集成计算、项目管理和管理信息系统等课程。他是美国信息系统教学改革的主要人物之一，曾是CSAB（计算机科学评估委员会，代表信息系统协会）的执行委员，现为CSAB理事。

# 《系统分析与设计》

## 书籍目录

ContentsPART I FOUNDATIONS FOR SYSTEMS DEVELOPMENT 2Chapter 1 The Systems Development Environment 2What Is Information Systems Analysis and Design? 4Systems Analysis and Design: Core Concepts 4Systems 6 Definition of a System and Its Parts 6 Important System Concepts 7A Modern Approach to Systems Analysis and Design 10 Your Role in Systems Development 11 Outsourcing 12 Sources of Software 13Types of Information Systems and Systems Development 17 Transaction Processing Systems 18 Management Information Systems 18 Decision Support Systems 19 Information Systems: An Overview 19Developing Information Systems and the Systems Development Life Cycle 20 Phase 1: Systems Planning and Selection 22 Phase 2: Systems Analysis 22 Phase 3: Systems Design 23 Phase 4: Systems Implementation and Operation 23Approaches to Development 26 Prototyping 26 Computer-Assisted Software Engineering (CASE) Tools 26 Joint Application Design 27 Rapid Application Development 27 Participatory Design 29 Agile Methodologies 29Key Points Review 30Key Terms Checkpoint 31Review Questions 32Problems and Exercises 32Discussion Questions 33Case Problems 33Chapter 2 Managing the Information Systems Project 36Pine Valley Furniture Company Background 38Managing the Information Systems Project 39 Initiating the Project 43 Planning the Project 46 Executing the Project 52 Closing Down the Project 54Representing and Scheduling Project Plans 56 Representing Project Plans 57 Calculating Expected Time Durations Using PERT 58 Constructing a Gantt Chart and Network Diagram at Pine Valley Furniture 59Using Project Management Software 62 Establishing a Project Starting Date 63 Entering Tasks and Assigning Task Relationships 63 Selecting a Scheduling Method to Review Project Reports 64Key Points Review 65Key Terms Checkpoint 66Review Questions 67Problems and Exercises 67Discussion Questions 69Case Problems 69Case: Broadway Entertainment Company, Inc. Company Background 71PART II SYSTEMS PLANNING AND SELECTION 78Chapter 3 Systems Planning and Selection 78Identifying and Selecting Projects 80 The Process of Identifying and Selecting Information Systems Development Projects 80 Deliverables and Outcomes 83Initiating and Planning Systems Development Projects 84 The Process of Initiating and Planning Systems Development Projects 84 Deliverables and Outcomes 85Assessing Project Feasibility 86 Assessing Economic Feasibility 89 Assessing Other Feasibility Concerns 95 Building the Baseline Project Plan 96Reviewing the Baseline Project Plan 100PVF WebStore: Systems Planning and Selection 104 Internet Basics 104 Pine Valley Furniture WebStore 105Key Points Review 108Key Terms Checkpoint 109Review Questions 110Problems and Exercises 110Discussion Questions 111Case Problems 111Case: Broadway Entertainment Company, Inc. Initiating and Planning a Web-Based Customer Relationship Management System 113PART III SYSTEMS ANALYSIS 118Chapter 4 Determining System Requirements 118Performing Requirements Determination 120 The Process of Determining Requirements 120 Deliverables and Outcomes 121 Requirements Structuring 122Traditional Methods for Determining Requirements 122 Interviewing and Listening 122 Directly Observing Users 127 Analyzing Procedures and Other Documents 128Modern Methods for Determining System Requirements 133 Joint Application Design 133 Using Prototyping during Requirements Determination 136Radical Methods for Determining System Requirements 137 Identifying Processes to Reengineer 138 Disruptive Technologies 139PVF WebStore: Determining System Requirements 139 System Layout and Navigation Characteristics 140 WebStore and Site Management System Capabilities 140 Customer and Inventory Information 141 System Prototype Evolution 142Key Points Review 143Key Terms Checkpoint 143Review Questions 144Problems and Exercises 144Discussion Questions 145Case Problems 145Case: Broadway Entertainment Company, Inc. Determining Requirements for the Web-Based Customer Relationship Management System 146Chapter 5 Structuring System Requirements: Process Modeling 150Process Modeling 152 Modeling a System's Process 152 Deliverables and Outcomes 152Data-Flow Diagramming Mechanics 153 Definitions and Symbols 154 Developing DFDs: An Example 156 Data-Flow Diagramming Rules 159 Decomposition of DFDs 160 Balancing DFDs 162Using Data-Flow Diagramming in the Analysis Process 164 Guidelines for Drawing DFDs 164 Using DFDs as

Analysis Tools 167 Using DFDs in Business Process Reengineering 167Logic Modeling 169 Modeling Logic with Structured English 170 Modeling Logic with Decision Tables 172PVF WebStore: Process Modeling 176 Process Modeling for Pine Valley Furniture's WebStore 176 Logic Modeling for Pine Valley Furniture's WebStore 177Key Points Review 180Key Terms Checkpoint 180Review Questions 181Problems and Exercises 182Discussion Questions 187Case Problems 187Case: Broadway Entertainment Company, Inc. Process Modeling for the Web-Based Customer Relationship Management System 189Chapter 6 Structuring System Requirements: Conceptual Data Modeling 194Conceptual Data Modeling 196 The Process of Conceptual Data Modeling 197 Deliverables and Outcomes 198Gathering Information for Conceptual Data Modeling 201Introduction to Entity-Relationship Modeling 202 Entities 203 Attributes 204 Candidate Keys and Identifiers 205 Multivalued Attributes 206 Relationships 207Conceptual Data Modeling and the E-R Model 208 Degree of a Relationship 208 Cardinalities in Relationships 209An Example of Conceptual Data Modeling at Hoosier Burger 212PVF WebStore: Conceptual Data Modeling 216 Conceptual Data Modeling for Pine Valley Furniture's WebStore 216Key Points Review 220Key Terms Checkpoint 221Review Questions 222Problems and Exercises 222Discussion Questions 225Case Problems 225Case: Broadway Entertainment Company, Inc.Conceptual Data Modeling for the Web-Based Customer Relationship Management System 226Chapter 7 Selecting the Best Alternative Design Strategy 230Selecting the Best Alternative Design Strategy 232 The Process of Selecting the Best Alternative Design Strategy 233 Deliverables and Outcomes 233Generating Alternative Design Strategies 234Issues to Consider in Generating Alternatives 236 Choosing Off-the-Shelf Software 236 Hardware and System Software Issues 238 Implementation Issues 239Developing Design Strategies for Hoosier Burger's New Inventory Control System 240Selecting the Most Likely Alternative 242Updating the Baseline Project Plan 243 Before and After Baseline Project Plans for Hoosier Burger 245PVF WebStore: Selecting the Best Alternative Design Strategy 249 Selecting the Best Alternative Design Strategy for Pine Valley Furniture's WebStore 249Key Points Review 252Key Terms Checkpoint 252Review Questions 253Problems and Exercises 253Discussion Questions 254Case Problems 254Case: Broadway Entertainment Company, Inc. Formulating a Design Strategy for the Web-Based Customer Relationship Management System 258PART IV SYSTEMS DESIGN 262Chapter 8 Designing the Human Interface 262Designing Forms and Reports 264 The Process of Designing Forms and Reports 264 Deliverables and Outcomes 266 Formatting Forms and Reports 267Designing Interfaces and Dialogues 276 The Process of Designing Interfaces and Dialogues 276 Deliverables and Outcomes 276 Designing Interfaces 277 Providing Feedback 284 Designing Dialogues 287PVF WebStore: Designing the Human Interface 290 General Guidelines for Designing Web Interfaces 290 General Guidelines for Web Layouts 292 Designing the Human Interface at Pine Valley Furniture 293 Menu-Driven Navigation with Cookie Crumbs 294 Lightweight Graphics 294 Forms and Data Integrity 295 Template-Based HTML 295Key Points Review 295Key Terms Checkpoint 296Review Questions 297Problems and Exercises 297Discussion Questions 298Case Problems 298Case: Broadway Entertainment Company, Inc. Designing the Human Interface for the Customer Relationship Management System 300Chapter 9 Designing Databases 304Database Design 306 The Process of Database Design 306 Deliverables and Outcomes 309Relational Database Model 312 Well-Structured Relations 313Normalization 313 Rules of Normalization 314 Functional Dependence and Primary Keys 314 Second Normal Form 315 Third Normal Form 315Transforming E-R Diagrams into Relations 316 Represent Entities 317 Represent Relationships 318 Summary of Transforming E-R Diagrams to Relations 321Merging Relations 321 An Example of Merging Relations 321 View Integration Problems 322Logical Database Design for Hoosier Burger 323Physical File and Database Design 326Designing Fields 327 Choosing Data Types 327 Controlling Data Integrity 329Designing Physical Tables 330 Arranging Table Rows 333 Designing Controls for Files 337Physical Database Design for Hoosier Burger 337PVF WebStore: Designing Databases 339 Designing Databases for Pine Valley Furniture's WebStore 340Key Points Review 342Key Terms Checkpoint 344Review Questions 345Problems and Exercises 345Discussion Questions 347Case Problems 348Case: Broadway Entertainment Company, Inc. Designing the Relational Database for the Customer Relationship Management

System 349PART V SYSTEMS IMPLEMENTATION AND OPERATION 352Chapter 10 Systems Implementation and Operation 352Systems Implementation and Operation 354 The Processes of Coding, Testing, and Installation 355 Deliverables and Outcomes from Coding, Testing, and Installation 355 The Processes of Documenting the System, Training Users, and Supporting Users 356 Deliverables and Outcomes from Documenting the System, Training Users, and Supporting Users 357 The Process of Maintaining Information Systems 357 Deliverables and Outcomes from Maintaining Information Systems 358Software Application Testing 359 Seven Different Types of Tests 359 The Testing Process 361 Acceptance Testing by Users 363Installation 363 Planning Installation 364Documenting the System 367 User Documentation 367 Preparing User Documentation 369Training and Supporting Users 370 Training Information System Users 370 Supporting Information System Users 373 Support Issues for the Analyst to Consider 374Why Implementation Sometimes Fails 374Project Closedown 376Conducting Systems Maintenance 377 Types of Maintenance 377 The Cost of Maintenance 378 Measuring Maintenance Effectiveness 379 Controlling Maintenance Requests 380 Configuration Management 381 Role of CASE and Automated Development Tools in Maintenance 382 Web Site Maintenance 382Maintaining an Information System at Pine Valley Furniture 383PVF WebStore: Systems Implementation and Operation 384 Systems Implementation and Operation for Pine Valley Furniture's WebStore 384Key Points Review 387Key Terms Checkpoint 388Review Questions 390Problems and Exercises 390Discussion Questions 391Case Problems 391Case: Broadway Entertainment Company, Inc. Designing a Testing Plan for the Customer Relationship Management System 392Appendix A Object-Oriented Analysis and Design 397The Object-Oriented Modeling Approach 397Use-Case Modeling 398Object Modeling: Class Diagrams 401 Representing Associations 402Representing Generalization 405Representing Aggregation 406Dynamic Modeling: State Diagrams 407Dynamic Modeling: Sequence Diagrams 408Designing a Use Case with a Sequence Diagram 410Moving to Design 411Key Points Review 413Key Terms Checkpoint 414Review Questions 415Problems and Exercises 415Appendix B Agile Methodologies 417The Trend to Agile Methodologies 417Agile Methodologies 418eXtreme Programming 420The Heart of the Systems Development Process 421 Requirements Determination 422 Design Specifications 425 Implementation 427Key Points Review 427Key Terms Checkpoint 428Review Questions 428Problems and Exercises 428References 429Glossary of Acronyms 435Glossary of Terms 437Index 443

# 《系统分析与设计》

## 精彩短评

1、我觉得这本书还不错！

# 《系统分析与设计》


## 版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:www.tushu111.com