

<<面向对象系统分析与设计>>

图书基本信息

书名：<<面向对象系统分析与设计>>

13位ISBN编号：9787302029441

10位ISBN编号：730202944X

出版时间：1998-06

出版时间：清华大学出版社

作者：诺曼

页数：430

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：<http://www.tushu007.com>

<<面向对象系统分析与设计>>

内容概要

本书分三大部分：I.介绍系统分析与设计，进而讨论系统的开发过程，包括可行性分析，需求确定活动，面向对象方法学及面向对象模型；II.讨论物理设计及其实现，包括输出设计，输入设计，文件与数据库设计，软件的构造及测试概念，最后涉及技术与组织行为的关系；III.各种相辅相成的专题介绍，这些专题起着对前两部分内容的补充作用，或可作为系统分析和设计的工具，其内容都很重要。本书强调实用性，是作者多年教学经验的总结，尽量少用学生难于接受的概念及理论，而以丰富的实践经验材料来充实内容，因而更适用作大学生学习信息系统开发或软件工程的教材，也可作研究生学习的参考资料。

<<面向对象系统分析与设计>>

作者简介

作者简介

RONALDJ.NORMAN

作者是圣地亚哥州立大学从事信息与决策系统方面的教授。

1987年在阿利桑那大学以“管理信息系统及组织行为”方面获博士学位。

已有25年以上的工业信息管理系统方面的经验

包括软件开发，顾问咨询及管理。

出版著作颇丰。

在国际

学术交流活动中较为活跃。

<<面向对象系统分析与设计>>

书籍目录

| | | |
|--|--|---|
| PREFACE XIX | Part I Systems Analysis and Conceptual Design | 1. INTRODUCTION 1 |
| Chapter Objectives 1 | Systems Analysis and Design Has Many Other Names 2 | What is a System? 4 |
| What is an Information System? 5 | What is an Automated Information System? 7 | What are the Basic Characteristics of an Information System? 8 |
| What is Systems Analysis and Design? 10 | What Makes Systems Analysis and Design such a Difficult Human Endeavor? 10 | Stakeholders of an Information System 12 |
| Systems Analysis and Design as a Career 13 | What does a Systems Analyst Responsible For? 14 | Systems Analysis and Design Skills and Activities 15 |
| General Model of Systems Analysis and Design 17 | The Detailed Activities of Analysis and Design 18 | Systems Analysis and Design Projects 21 |
| Where do Information Systems Analysis and Design Projects Come From? 22 | Information Systems Requirements Specification 23 | Information Systems Life Cycle and Information Systems Development Life Cycle (SDLG) 24 |
| Principles to Guide Information Systems Analysis and Design 26 | Summary 27 | Questions 27 |
| References 28 | AND REQUIREMENTS DETERMINATION 29 | Chapter Objectives 29 |
| Feasibility Analysis 30 | Feasibility Types, 30 | Requirements Determination 33 |
| Frameworks for Understanding and Doing Requirements Determination 37 | Determination sub - Activities,38 | The Pieces Framework 38 |
| Kozar s Requirements Model 40 | Object - Oriented Requirements Determination Modeling Activities 44 | Information System's Requirements 45 |
| Feedback to the User,48 | Requirements Ambiguity 49 | Summary 51 |
| Questions 52 | References 53 | METHODOLOGY AND MODEL 55 |
| Chapter Objectives 55 | Traditional Methodology 56 | Structured Analysis and Design Methodology,56 |
| Information Modeling Methodology 58 | Object-Oriented Methodology 59 | Key Characteristics of an Object-Oriented Methodology 60 |
| Two Classic Problems Resolved with Object-Oriented Analysis and Design 66 | Classification Theory 67 | Coad's Object-Oriented Methodology 68 |
| Coad's Object-Oriented Analysis and Design Methodology and Notation 68 | Coad's Object Model Components,72 | An Object-Oriented Model 73 |
| Summary 82 | Questions 82 | References 83 |
| 4. OBJECTS AND CLASSES 86 | Chapter Objectives 86 | Objects and Classes 87 |
| Object and Class Rules and Guidelines 88 | Class Attributes and Services Defined 89 | Comment on Object-Oriented Problem Solving Strategy 91 |
| Finding Objects 92 | Wirfs-brock Noun Phrase Strategy 92 | Wirfs-brock CRC Strategy 94 |
| Conglomeration strategy 94 | the Video Store Example-finding Objects 96 | A Future Enhancements Strategy 98 |
| Summary 99 | Questions 100 | References 101 |
| 5. OBJECT RESPONSIBILITIES:ATTRIBUTES 102 | Chapter Objectives 102 | Attributes 103 |
| Determining Attributes 106 | Attribute Types 107 | Object-Oriented Methodology strategy for Different Attribute Types 109 |
| Object-oriented Strategy for Multivalue Attributes 110 | The Video Store Example-Identifying attributes 112 | Summary 113 |
| Questions 114 | References 115 | 6. OBJECT RESPONSIBILITIES:CLASS AND OBJECT CONNECTIONS 116 |
| Chapter Objectives 116 | "Who I Know"Responsibility of an Object 117 | Object Patterns 118 |
| Generalization-Specialization Pattern 118 | Generalization-Specialization Inheritance 125 | Pattern 128 |
| Heuristics for Finding Whole-Part Patterns 134 | Object Connection Patterns 136 | Video Store Example 144 |
| Summary 147 | Questions 147 | References 148 |
| 7. OBJECT RESPONSIBILITIES:SERVICES AND SCENARIOS 149 | Chapter Objectives 149 | "What I Do"Responsibility of an Object 150 |
| Business Objectives & Tactics, Information Systems Objectives and Tactics, and Policies and Procedures 150 | | |

<<面向对象系统分析与设计>>

| | | |
|---|---|---|
| Types of Services 151 | Basic services 151 | Problem Domain Specific Services 154 |
| Finding and Identifying Services 159 | The Video Store Example-Identifying Services,161 | Other |
| Techniques for Identifying Services 162 | Service Details 164 | Techniques for Documenting and |
| Describing Service Details 164 | Scenarios 165 | Structured English of Pseudocode 166 |
| Decision Tables and Decision Trees 168 | A Decision Table Example 171 | A Decision Tree |
| Example 174 | State-Transition Diagrams 176 | The Video Store Example-Assigning Services to |
| Classes and Message Connections 177 | Transition From Systems Analysis to Systems Analysis to Systems | |
| Design 180 | Summary 181 | Questions 182 |
| Physical Design & Implementation | 8. SYSTEMS DESIGN 184 | References 183 |
| Information Systems Design 185 | Historical Information Systems Design 185 | Chapter Objectives 184 |
| Object-Oriented Analysis and Design Methodology 187 | Information Systems Design strategy Choices | An |
| 187 | Object-Oriented Design 193 | Alternative Object-Oriented Information Systems |
| Development Strategies 202 | Summary 203 | Questions 204 |
| 9. OUTPUT DESIGN 206 | Chapter Objectives 206 | References 205 |
| Information 207 | Output types 209 | Output: High Quality, Usable |
| Static and Dynamic Outputs 211 | Output Devices and Media 212 | Internal, External, and Turnaround Outputs 209 |
| Output: Report Types 214 | Output: Graphs 221 | Output Formats 214 |
| Future of Output Design 227 | Summary 227 | Output: Internal Controls 225 |
| 10. INPUT DESIGN 229 | Chapter Objectives 229 | Questions 228 |
| Many Facets of Input Data 231 | Data Validation and Verification 231 | References 228 |
| Input Devices 235 | General Guidelines for Inputing Data 235 | Introduction 229 |
| Interface(GUI)design for Input 242 | Summary 247 | Chapter Objectives 249 |
| 11. FILE AND DATABASE DESIGN 249 | Questions 247 | Files and |
| Databases 250 | Data Structures 252 | Attribute Classifications 254 |
| File Access and Organization 262 | Normalization 265 | Object-Oriented Database 279 |
| Evolution of Object-Oriented Database 279 | Characteristics of an Object-Oriented Data Model 280 | File Types 258 |
| Strengths of an Object-Oriented Database 282 | Weaknesses of an Object-Oriented Database 284 | |
| Summary 284 | Questions 285 | References 285 |
| CONSTRUCTION AND TESTING 286 | Chapter Objectives 286 | 12. SOFTWARE |
| General Software Design Principles 288 | Software Construction Framework 291 | Introduction 286 |
| Object-Oriented software Construction Framework 293 | Software construction Strategies 293 | |
| Cohesion and Coupling 295 | Object-oriented Cohesion and Coupling 299 | Software Testing |
| 299 | Software Testing Strategies 300 | Methodology 303 |
| Application and Code Generators 308 | A Generic Software Testing | Summary 308 |
| References 309 | Summary 308 | Questions 309 |
| Introduction 310 | 13. IMPLEMENTATION 310 | Chapter Objectives 310 |
| Implementation 314 | Install: The First Phase of Implementation 311 | Activate: The Second Phase of |
| Organizational (Planned) Change for Information Systems 318 | Institutionalization: The Final Phase of Implementation 316 | The stages of Organizational Change 319 |
| Action Research and Force Field Analysis 322 | Implementation Critical success Factors 325 | |
| Summary 326 | Questions 326 | References 327 |
| Modules-Miscellaneous Systems Analysis and Design Topics | Part III | |
| PLANNING 329 | Module Objectives 329 | A. INFORMATION SYSTEMS |
| Systems Planning Methodology 331 | Introduction 329 | A Generic Information |
| Information Systems Planning Techniques and Methodologies 335 | Why Engage in Information Systems Planning? 334 | Summary 335 |
| 335 | References 336 | Questions |
| Prototyping's Placement within a Systems Development Life Cycle 338 | B. PROTOTYPING 337 | Module Objectives 337 |
| Systems Prototyping Differences 338 | Prototyping Benefits 339 | Product versus Information |
| | | Prototyping's Risk 340 |

<<面向对象系统分析与设计>>

| | | | | | |
|---|---|---|---|--|---|
| Prototyping Synonyms 341 | Enabling Technologies for Prototyping 342 | Does Prototyping Work? 343 | How to Initiate Prototyping 344 | Summary 345 | Questions 345 |
| References 345 | C. COMPUTER-AIDED SOFTWARE ENGINEERING(CASE) 346 | | Introduction 346 | CASE Architecture 347 | The Stages of CASE Usage 349 |
| Module Objectives 346 | The Benefits of CASE 349 | The Issues of CASE 349 | References 351 | D. SOFTWARE PROCESS | |
| IMPROVEMENT 353 | Module Objectives 353 | Introduction 353 | Immature and Mature Systems Development Organizations 354 | | The five Maturity Levels of the SEI Capability Maturity Model 355 |
| Process Improvement Methodology 359 | A Generic Systems Development Process Improvement Model 359 | Summary 359 | Questions 360 | The ISO 9000 Process Improvement Methodology 360 | |
| 361 | E. THE SYSTEMS DEVELOPMENT CHALLENGE 361 | | Module Objectives | | |
| Information Technology Management Issues 364 | Introduction 361 | Software Development's Quadruple Constraint 363 | Systems development Risks 364 | | |
| Analysis and Design versus Software Engineering 365 | SDLC, Methodology, Technique, and Tool 369 | Summary 371 | Systems development Architecture for the 1990s | | |
| 366 | References 372 | F. PROJECT MANAGEMENT 373 | | Questions 371 | |
| Network 376 | Introduction 373 | Two Tools: PERT Network and Gantt Chart 375 | | Module Objectives 373 | |
| The Gantt Chart 383 | A PERT Network Example 377 | PERT Network Strengths and Weaknesses 381 | | The PERT Network 376 | |
| 385 | References 386 | Summary 384 | | Questions 385 | |
| 387 | Module Objectives 387 | G. COMMUNICATION AND ELECTRONIC MEETINGS | | | |
| Project 388 | Systems Development Project Communication Opportunities 389 | | Communication within an Information Systems development Problem | | |
| Solving session Strategy 392 | Electronic Meetings to Support Group Work 393 | | Summary 395 | | |
| Questions 395 | References 395 | H. BUSINES PROCESS REENGINEERING | | | |
| 396 | Module Objectives 396 | Introduction 396 | Lessons Learned from Organizations that Have Done It 397 | | |
| Reengineering is Organizational Change 399 | The Core of Business Process Reengineering 398 | | Business Process Reengineering Strategy 399 | | |
| Summary 399 | Questions 400 | References 400 | A Business Process Reengineering Strategy 399 | | |
| RECOMMENDED READING TO GET STARTED-AUGUST 1995 410 | GLOSSARY 401 | | INDEX 421 | | |
| BIBLIOGRAPHY-OBJECT-ORIENTED TECHNOLOGY 411 | | | | | |

<<面向对象系统分析与设计>>

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:<http://www.tushu007.com>