

# Essence of Systems Analysis and Design

Priti Srinivas Sajja

# Essence of Systems Analysis and Design

A Workbook Approach



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# Preface

A system is a ubiquitous phenomenon. From early learning activities to the spectacular education and practices, one has to deal with systems. The subject of systems analysis and design has been taught to various streams, courses, and levels. There are many careers that require a fundamental knowledge of the subject. To name a few, software engineer, tester, systems analyst, programmer, designer, knowledge engineer, data scientists, and Big Data practitioner are the roles where systems analysis and design knowledge is a must. Rather, it can be said that in all aspects of the business, somewhere the subject is useful.

As a teacher of the systems analysis and design subject at the postgraduate level, I have observed following important things:

- The systems analysis and design subject is very lengthy and descriptive in nature, which confuse students about the applicability of answers.
- Quick revision from the reference book is challenging.
- Supporting materials such as diagrams, case studies, and objective as well as subjective questions with answers are also not available in a single book.

The book *Essence of Systems Analysis and Design – A Workbook Approach* identifies essential topics and presents cruxes of the core topics, which are mandatory and trivial. Further, the book encompasses questions and answers based on the selected topics. The main objective of the book is to provide quick and essential knowledge for the subject with the help of summary and solved questions/case studies without going into detail discussion of the content. This book will be much helpful for the students as a supplementary text-/workbook and to the noncomputer professionals, who deal with the systems analysis and design as part of their business. The problem-solving approach of the book enables learners, academicians, practitioners, and researchers to gain much practical knowledge of the subject, without going into lengthy discussions. Besides quick understanding of the core topics via practical problem solving, this book also provides guidance on how to document answers and cases related to the subject.

Though the book is conceived as the supplementary text-/workbook, the topics are selected and arranged in such a way that it can provide complete and sufficient

knowledge of the subject. Graduate courses like BSc (computer science), BCA, BE, BBA, BCom, and BA (humanities such as economics and cooperation) and post-graduate courses such as MSc/MS, MCA, M-eBusiness, ME, etc. along with some interdisciplinary and certificate courses can use this book for a quick and ready reference of systems analysis and design.

I would like to thank the Almighty for giving me strength, opportunity, and blessings for the book. I am very much thankful to students and colleagues at the Department of Computer Science, Sardar Patel University, especially Sanskruti Patel, who have encouraged me to come up with this novel book. I would like to express my sincere thanks to Suvira Srivastava, Yeshmeena Bisht, Sanchana Narayanassamy and Abha Krishnan for their continuous support during the book publication. Thanks to Srinivas and Abhignya for their continuous support and encouragement.

Vallabh Vidyanagar, India

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## About the Author

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