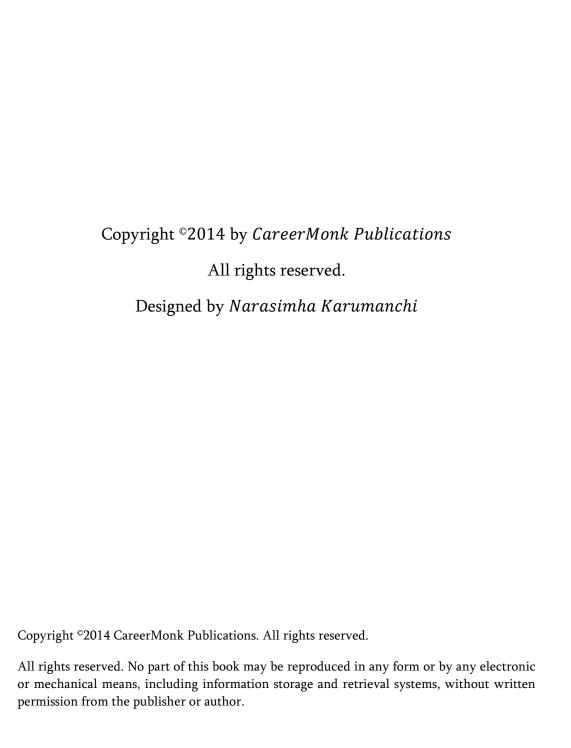
Peeling Design Patterns

For Beginners and Interviews

By
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Preface

Dear Reader,

Please Hold on! I know many people do not read the preface. But I would strongly recommend that you go through the preface of this book at least. The reason for this is that this preface has something different to offer.

This book assumes you have basic knowledge about computer science. Main objective of the book is *not* to provide you the *catalog* of design patterns and *design interview* questions. Before writing the book, we set the following *goals*:

- The book be written in *such* a *way* that readers without any background in software design should be able to understand it *easily* and *completely*.
- The book should present the concepts of design patterns in *simple* and straightforward manner with a clear cut explanation.
- After reading the book, they should be in a position to come up with better designs
 than before and participate in design discussions which happen in their daily office
 work.
- The book should provide enough *realtime* examples so that readers get better understanding of the design patterns and also useful for the interviews. We mean, the book should cover *design interview* questions.
- After reading the book, the programmers should be in a position to try for software architect positions.

Design patterns were introduced to programming practices at the end of 1980s as a result of dissatisfaction with software's state of affairs. In those days, few means of abstraction (algorithms and data structures) suited well for procedural/functional programming. They were *not* well connected with object-oriented programming.

The introduction of design patterns marks a turning point in the history of software design. In 1995 we have seen the publication of a catalogue (*Gamma*, *Helm*, *Johnson* & *Vlissides*, 1995) with *twenty-three* design patterns written by four experienced object-oriented designers. The catalogue, which came to be known as the *Gang of Four* (*GoF*) catalogue, was a super success.

Design patterns *help* novices (and *beginners*) to avoid common *mistakes* and encourage experienced programmers to build better software.

This book is an enthusiastic celebration of design patterns, especially those which are given by GoF. In the recept past, most of the object-oriented architectures are built with full of design patterns.

In this book, we explained the design patterns with simple examples which helps students and instructors in understanding them easily. At the end of book, he gave common design interview questions which helps job seekers to perform better in their interviews.

A thorough understanding of the design patterns, processes, and methods in this book will likewise help you develop better software applications and infrastructure. If you want thorough coverage of the key patterns then read this book. We have learned much from it and I am confident that you will too.

As a job seeker if you read complete book with good understanding, we are sure you will challenge the interviewers and that is the objective of this book.

This book is very much useful for the students of engineering degree and masters during their academic preparations. All the chapters of this book contain theory and their related problems. If you read as a student preparing for competition exams, content of this book covers all the required topics in full details.

It is *recommended* that, at least *one complete* reading of this book is required to get full understanding of all the topics. In the *subsequent* readings, you can directly go to any chapter and refer. Even though, enough readings were given for correcting the errors, due to human tendency there could be some minor typos in the book. If any such typos found, they will be updated at www.*CareerMonk.*com. We request you to constantly monitor this site for any corrections, new problems and solutions. Also, please provide your valuable suggestions at: *Info@CareerMonk.com*.

Wish you all the best. We are sure that you will find this book useful.

-Prof. Sreenivasa Rao Meda Ph. D., Director, School of IT, JNTU, Hyderabad -Narasimha Karumanchi M. Tech, IIT Bombay Founder of CareerMonk.com

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(FOR BEGINNERS AND INTERVIEWS)

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