OBJECT
LESSONS
ADVANCES IN OBJECT TECHNOLOGY

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1. Object Lessons: Lessons Learned in Object-Oriented Development Projects, *Tom Love*

Additional Volumes in Preparation
OBJECT LESSONS
Lessons Learned in Object-Oriented Development Projects

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Preface

As a consultant I am often asked to review projects that are perceived by someone as being “in trouble.” Often by the time I arrive, I feel like a doctor at the scene of a major disaster site. More damage has been done than can ever be repaired, more people are injured than can be helped, and basic systems are not available to help anyone. Reviewing such software projects is a tough job for a consultant. Like the doctor in the field, one must quickly assess each situation, decide who can be helped and does not require immediate assistance and who cannot be saved. Software company triage is what I call this work. Careers are likely to be damaged, a company’s reputation may be at stake, and the business itself may be in danger of collapse. Object Lessons can’t teach one how to perform software project triage but it can help to avoid such a disaster.

This book was designed to answer questions that arise at the inception of a major project. If you are already working on such a project, read quickly and make changes to the project immediately! Time is your worst enemy. If you are not working on such a project, read quickly anyway to equip you for future projects.

One major problem is that communicating via print media, a very slow communication line, is difficult as information in this industry changes very rapidly. Therefore, described in the book are fundamental issues and trends rather than specific products or services; so, I will not provide you with a set of prescriptions for specific products or services because the information will be hopelessly out of date by the time it is read. However, described are fundamental characteristics of products that one should be aware of as selections are made. You may find more questions than answers in these chapters but not to worry, you will find plenty of specific advice and recommendations about software intensive businesses. These recommendations will be very specific and practical—most of which have never been printed before.

This book will aid technical leaders and managers responsible for building commercial software. It has two objectives: to encourage project leaders to build innovative but successful software products with higher quality and lesser risk and; to help these project leaders make interesting new mistakes on projects rather
than uninteresting old mistakes that have been made many times before. The book explains how these two objectives can be accomplished as pragmatically as I know how. References to more extensive sources are provided where possible.

While I think you should read the first chapter first and the last chapter last, the others can be read in the order that pleases you. Each chapter of the book is designed to be read independently; on a short airplane ride or on a lunch break.

The craft of system programming still has its tar pits,* yet the joys and challenges of this profession continue to attract the best and brightest the world has to offer. This book was written for these hard working professionals with the hope that concrete assistance could be provided to increase the chances of creating a software product superstar.

Acknowledgements

During the process of developing and publishing this manuscript, the efforts of some people have been exceptional. Frederick Trapnell, formerly of Amdahl Corporation, provided me with detailed comments on an earlier draft of the manuscript along with several “in person” lessons on how to improve my technical writing. What you read is surely better due to his efforts but not yet up to his high standards.

Kurt Schmucker of Apple Computer, Mel Conway, formerly of Wang Labs, and Leo Nabben of Philips Components also provided important technical critiques and elaboration of the chapters. Many people developed raw material for Chapter Four, which provides a detailed object programming example. Their capable efforts allowed that chapter to be written.

I also want to provide special thanks to the employees and the private and professional investors in the Stepstone Corporation. Without their support, many of the experiences described here would never have happened. Together we have learned that being first does not always provide the largest rewards.

The person who has read and re-read this manuscript tirelessly for at least four years is my wife, Mary Hughes. She has found and removed enough “very’s” from this manuscript to fill a small book. Thank you very, very, very much!

Our children and office staff, Emily, Claire, and Gayle have made numerous copies of this manuscript, collated photographs and even proofread parts of the manuscript. You know how special I think you are.

Tom Love
Introduction

It is a pleasure to introduce Object Lessons by Tom Love. This is the first of many books in the series Advances in Object Technology that will deal with object technology. It will be of great value to software managers, analysts, designers, and implementors who wish to learn about the challenges, opportunities, successes and failures associated with large-scale commercial software development in general and object-oriented software engineering in particular.

The author shares with us his depth of experience and wisdom concerning every aspect of modern software development and the opportunities that exist in changing to object technology. Only by learning from our past failures and errors do we have any chance of repairing them. Dr. Love provides many examples and stories of such failures. He also describes useful and important techniques and strategies for avoiding these problems in the future.

I believe the readership will obtain many important insights from Object Lessons and some inspiration as well.

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