Books

Managing Software Development Projects, Neal Whitten, John Wiley & Sons, Inc., New York, 1990. 276 pp. (ISBN 0-471-51255-9).

This book is intended for professional project leaders—both formal and informal—that have a desire to avoid errors by learning from the mistakes of others. It is an excellent introduction to project management for those interested in software engineering who wish to begin to understand the complexities of managing software development projects.

The book is structured into the following three major areas of project management: people, process, and activities. The introduction explains this structure and the purpose of each chapter. Chapter 1 is an overview of a process model. Chapters 2 and 3 concern the people aspects of project management. Chapters 4, 5, 6, and 7 detail the requirements for process control. Chapters 8, 9, 10, and 11 look at four process activities and how they can be managed for improvement. Chapter 12 examines the steps the reader may use to analyze completed projects to avoid repeating errors. Each chapter follows a similar format, introducing a problem area which is followed by one or more examples. The remainder of the chapter provides recommendations for recognizing potential problems and ways to avoid them or recover from them. Chapter 1 defines the activities of a traditional software process model. Four of these activities are discussed in detail in chapters that follow. Readers familiar with the traditional activities may choose to go directly to chapters of specific interest. Reading in any sequence is possible, because the material in each chapter stands independently.

Chapters 2 and 3 concern the people aspects of project management. The two chapters cover project discipline and communications. I found these two chapters of particular interest. This focus on people

management is fundamental to good project management and becomes the basis for implementing project control and producing a successful result. The author discusses positive discipline as a teambuilding exercise that leads to high team morale and quality products produced on time and within cost. The author describes various methods of communications that provide the glue that a project leader uses to bind the team together. Various vertical and horizontal communications techniques are emphasized to ensure a free flow of information between team members and management.

Chapters 4, 5, 6, and 7 discuss the elements of good process control. The author provides a model of a project schedule and includes a methodology for developing a sound project schedule. Processes of commitment and change as well as the timing and participants are described. Every project encounters problems. Problem focus, prioritizing, and resolution methods are addressed. Problem resolution and schedule integrity require some mechanism for tracking progress. The elements to be tracked and by whom and at what level of detail they are tracked are provided. The quality plan is included at this point to emphasis its close relationship to schedules and problem resolution.

Chapters 8, 9, 10, and 11 address three specific process activities and ease-of-use. A process for developing project objectives and their content and what questions they should answer is described. The management of project specifications, their relationship to objectives and design, and the topics to address are covered in Chapter 9. The book next examines the dangers and impact on component and system testing when informal unit and function tests are improperly planned and controlled. Ease-of-use, like quality, is an activity that spans many phases of

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the process cycle. Ease-of-use starts with objectives, and consideration for it must be made for testing and measuring results.

It is unlikely that a project plan will succeed in all areas as anticipated. Chapter 12 examines the steps project leaders might follow to conduct a project review. The purpose, procedure to follow, participant selection, and recommendation follow-up are covered in the last chapter.

The book is well written and easy to understand. It is a good starting point for those undertaking their first project leadership role. For those experienced in project management, it may serve as a quick review and checklist for self evaluation.

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