Dreaming in Code Questions

Overarching Themes

    Pay attention / record the various roles that software engineers have on the Chandler Project.

    Pay attention / record the many scheduling issues related to Chandler Project.

Chapter 0

1. Who wrote "software is hard?" Who is that guy?
2. Programmers start counting at what number?

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3. What was the original sense of a "hacker?"
4. According to a 2002 NIST study what % of software came in significantly late, over budget, or was canceled?
5. Who wrote the 1987 essay entitled "No Silver Bullet?"

Chapter 1

1. What roles in the Chandler project did Michael Toy, John Anderson, Ted Burgess, Mitchell Kapor, and Lou Montulli hold.
2. What is "Bugzilla?"
3. What is OSAF?
4. What is the projects name?
5. What will the software do?
6. What is Toy's keyword for "black hole" bugs?
7. What scared Toy so much about Bug 44?
8. What did Toy refer to as a "snake?"
9. In the software world, what does "slippage" mean?
10. Fredrick Brooks was a programming manager for what software project?
11. What is Brooks's Law?
12. Brooks found what % of project time was spent writing code?
13. Brooks found what % of project time was for testing and fixing bugs?
14. Brooks observed that the unit of effort named "man-month" only applied under what conditions?
15. What is the difference between source code and the program you install (.exe) on your computer?
16. What is the one "article of faith" that all "open source" or "free" software advocates share?
17. What is the difference between a "good" programmer and a "great" programmer?
18. Eric Raymond's book "The Cathedral and the Bazaar" made a distinction between two important project development ideas, briefly contrast them.
19. Has "open source" software project development refuted Brooks's "mythical man-month" concerns?
20. What was Andy Hertzfeld's input when the Chandler project appeared to have stalled?

Chapter 2

1. Linus Torvalds used a "science" and "witchcraft" analogy referring to software, explain.

2. People often refer to starting their computer as "booting" their computer. What was the origin of this term?
3. Where was the graphical user interface (GUI) developed?
4. List three software project "train wrecks."

Chapter 3
1. When introducing a new technology or design, why did Frederick Brooks advise "plan to throw one away?"
2. What is a "core" dump? Why the use of the word core?
3. Rather than writing program statements in binary code, 110101110 1001101111, programmers developed a shorthand language called what?
4. Adding layers of abstraction, new programming languages were created: Lisp, Cobol, Algol, Basic. Fortran was the first widely used. What kind of program converted Fortran to binary?

Chapter 4
1. What do "front ends" and "back ends" mean to software developers?
2. What did the Lego Hypothesis refer to?
3. Give one reason why the Lego Hypothesis seems to not work so well.

Chapter 5
1. What is the three-way trade-off that many software projects struggle to overcome.
2. What is the more recent definition of "geek?"
3. What does "refactoring" mean to programmers?
4. What is "yak-shaving?"

Chapter 6
1. What is term "edge cases" referring to in software development?
2. Summarize briefly Linus Torvalds advice about "large projects" give in 2004

Chapter 7
1. Briefly describe Hungarian notation
2. What does the author state is the "...single most challenging demand of software development."

Chapter 8
1. What does "eat your own dogfood" mean?
2. Quote: "When people ask for numbers that far out, the traditional thing that engineers do ...." When discussing the timeline for Chandler, how was the quote above completed?

Chapter 9
1. Structured programming evolved to address what programming practice?
2. Was structured programming a solution to the problem of software development?
3. Have any techniques shown to improve the software development process?
4. The "waterfall model" of programming was/is popular. What were some problems with this model?
5. What are the four tenets of Agile Software Development?

6. What did a 2004 study find about the development practices of some two hundred software team leaders?
7. What is the "Joel Test" and what did he say about Microsoft and the Joel Test.
8. What is Rosenberg's Law?

Chapter 10

1. Chapter 10 is about the notion of "Software Engineering" and the difficulty of applying this label to the development of software. The author suggests that Yertle the Turtle provides an important lesson for programmers. Describe it.

Remaining Pages

Complete the reading reflecting on the Chandler Projects **scheduling** issues and the various **project roles** that were important on the project.