

ATSE - Background Survey

CSCI 577a Fall 2006

Due: Friday 8/25/2006 2.05 pm

(to be submitted as hard copy at the beginning of class)

For each of the following questions, please circle or check whichever one of the four answers you believe to be correct.

1. The spiral model:
 - a. was developed to overcome limitations of the waterfall development
 - b. is a method of object-oriented design
 - c. is the earliest software development process
 - d. was invented by Harlan Mills

2. Waterfall development:
 - a. applies to total system development rather than to software development
 - b. was invented by Barry Boehm
 - c. assumes that requirements can be fixed early in software development
 - d. was the earliest development method to use pair programming

3. COCOMO:
 - a. was an early high-level business-oriented programming language
 - b. is the name of an early DoD programming environment
 - c. is a configuration management tool
 - d. is
a cost estimation tool

4. RUP:
 - a. is an acronym for Relational Unification Protocol
 - b. is an international standard for quality management
 - c. is an alternative to object-oriented programming
 - d. an acronym for Rational Unified Process

5. UML:
 - a. is a static code verification tool
 - b. is a software design notation
 - c. is most useful in a non-object-oriented development environment
 - d. a latency model

6. Pair Programming:
 - a. is a technique for developing fault-tolerant software
 - b. is identified with the spiral model
 - c. is a regression testing methodology
 - d. is an aspect of extreme programming

7. PSP:
 - a. stands for Personal Software Process

- b. stands for Peer-Review Software Process
 - c. stands for Power Software Production
 - d. none of the above
8. SEI is associated with:
- a. Stanford University
 - b. The University of Southern California
 - c. Carnegie Mellon University
 - d. MIT
9. CMM:
- a. stands for Comprehensive Memory Model
 - b. was developed for the US Department of Defense
 - c. stands for Continuous Modeling Method
 - d. was developed for NATO
10. RAD stands for:
- a. Rational (Corporation) Analysis & Design Method
 - b. Rapid Application Development
 - c. Relational Analysis and Design
 - d. Raster-Aided Development

For each of the following questions, please circle or check whichever one of the four answers you agree with most strongly. There are no correct answers, and you will not be graded on which answers you choose – you get full credit for simply submitting your answers – so please choose according to your own feelings / opinions.

A5. Most software developers have to at least comment their code for others to be able to debug or modify it effectively.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A6. Most software developers don't have to document their code at all to be able to debug or modify it themselves.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A9. Developers of custom software, that is software being developed for a specific customer, should be shielded from the customer by management.

- a. strongly agree
- b. agree
- c. disagree

d. strongly disagree

A11. If I kept a log/journal of the number of hours I work on my current software assignment(s), it could help me plan my time for future projects.

a. strongly agree

b. agree

c. disagree

d. strongly disagree

A13. I enjoy designing a program as much as I do coding it.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A14. It's more important for a software development team/department to know how to get code working right than to know how to get a design right.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A15. It would be unreasonable for a software developer to be told that s/he must have other team members read his/her code.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A17. If a customer fails to specify everything they need in software being developed for them, then it's the customer's problem if the finished software doesn't work right.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A19. It would be useful for a software developer to learn about Software Economics, that is, the economics of the software business.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A21. Most of the problems given to professional software developers are very clearly defined.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A22. It would be useful for a software developer to learn something about Group Dynamics, that is, the branch of psychology with deals with working in teams.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A24. When debugging a program, the first thing a software developer should do after determining the extent of the bug is to find out what is causing the program to perform incorrectly.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A25. If a team member is not doing his or her part of the work on a team project, it's best for me to ignore the problem and do the best I can on my part of the project.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A27. When working on a team project, team members should start by coding their own modules and then figure out how to put the modules together.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A28. I would probably get my code debugged and working faster if other people read the code and provided feedback on it.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A30. I would learn a lot by reading code written by good programmers.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A31. I have no interest in spending time reading other people's code

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A32. If a 12-month software project falls seriously behind schedule at any time up to the end of the 9th month, it is usually possible to catch up by working nights and weekends.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A33. On a COTS-based software development project it's best for the project manager to assume that each COTS product will perform as specified in its documentation.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A35. Software development is a sufficiently uncertain/unscientific activity that schedule overruns of less than about 50% should be readily accepted by customers.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A36. In a software development project it's usually unproductive for the project/manager to consider problems that might conceivably arise before they actually do arise.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A38. There's no real need for a software developer to understand how sort and search routines work because they're always available as library routines.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A39. It's not very useful for a software developer to spend time learning about how to evaluate an algorithm's time and space complexity because memory is cheap these days and chips are very fast.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A40. A computer science student is better served, from a future employment point of view, by working on a large one-person software project than by working on a large team project.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A41. After holding an initial planning meeting, it's not very useful for a software development team to meet except when a serious problem arises.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A42. It's most efficient for each member of a software development team to be allowed to write code according his/her own preferred coding style/standard.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree

A43. It's important for a software developer to be able to write English well.

- a. strongly agree
- b. agree
- c. disagree
- d. strongly disagree