Cody Nace Lecture 2 Class 115 09/05/23

1. What is software? Is your favorite computer game also software? Is Facebook also a software?

Software is computer programs that when excecuted provide desired features, functions, and performance.

2. Describe the 7 types of software applications. Give examples.

- Embedded software
- Product-line software
- AI software
- Web Applications
- System software
- Application software
- Engineering/Scientific software

3. “If hardware is the body of an organism, then software is its life.” Do you agree? Discuss.

Yes, I agree. Without software the hardware would be just a piece of metal with no use.

4. Once a software is built for a customer and launched, our duties as a software engineer are done and we can move on to other projects.” Do you agree? Discuss

No, we must maintain the software if the customer has use for it.

5. What are the attributes of good software? Describe each attribute.

Good software works with little error and makes the customer happy.

6. Pick any software of your choice. Argue whether and to what extent the software owns the attributes of a good software.

I picked CAD. It owns the attributes of good software. It does exactly what the user needs with little to no error and makes the customer happy in the end.

7. What is a software process model? Why are models needed?

A software process model is a set of guidelines which help you build high quality software. They are needed so when you build software it is organized and well planned and designed.

8. Do you think that strictly every software needs a well-defined process model? Why or why not?

Big projects need a well-defined process model to stay organized and not lose their way and help everyone working on the project to stay on the same page. Small projects may have loose guidelines, but it is better to have a well-defined process model.

9. Let us say your college wants you to develop student attendance management software for them. Describe how you would follow the prescriptive model for this job.

I would first communicate with the college to see what they want in their software. I would then write a list of all the features and requirements they want in their software. Next, I would create a map to understand better. Also, I would sketch out a model to see the whole picture. I would refine the model until I get it where I want before construction of the software. By now I should understand the full picture and what it is I want to design for my customer. I then will begin to build the software based off the model and the map and the communication from the beginning of the process. While building I will test for errors. Once the software is ready, I will show it to the customer who will then evaluate and give feedback on the software. It is important that I keep communication open during this process.

10. Coding is the most important aspect of software development. Because without it, how will your software even exist?" Do you agree? Explain your answer.

I agree that without coding your software would not exist, but without a good software model you cannot stay on track to make high quality software. You need to communicate and plan because without it you will not understand the big picture.