1. What is the software lifecycle?

2. Distinguish an instance from a class (in the context of object-orientation).

3. What is a design pattern? (Indicate level of familiarity from 0-10, with 10 being extremely proficient and 0 being no knowledge.) If applicable, please briefly describe your experience (e.g., which patterns? How large of a system did you design?).

4. With which software architecture styles are you familiar? How did you use them?

5. Have you worked with aspect-oriented programming? (Indicate level of familiarity from 0-10, with 10 being extremely proficient and 0 being no knowledge.) If applicable, please briefly describe your experience.

6. Have you written reusable code? Explain (Who used it? Was it modified?)
7. Have you used reusable code? Explain (Who wrote it? Did you have to modify it?)

8. What is testing? How do you know when you have a successful test? (Indicate level of familiarity from 0-10, with 10 being extremely proficient and 0 being no knowledge.) If applicable, please briefly describe your experience (e.g., what kind of testing did you perform? Unit? Integration? System?); what kind of tools, if any, did you use? Did you test your software or someone else’s?

9. Are you familiar with C++ (what is the largest or most complicated program you have ever developed with C++)?

10. Are you familiar with Java (what is the largest or most complicated program you have ever developed with Java)?

11. What kind of web-based programming have you performed? Which languages? What kind of application?
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11. Draw a simple sequence diagram that describes how a student would use the BECS to buy a used textbook for a course using a student discount coupon. Be sure to show traceability back to the above class diagram.