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CSET 3600
Homework 1
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1. Summarize the key points:

Basically the same as previous classes I have taken of yours. Welcome, course outline, grading scales, do your homework and do it on time, don't cheat cite opensource code used etc. A few of the deets made me wonder if these videos are new or reused.

2. Explain four guiding principles that form the essence of software engineering practice:

1. Understand the problem:

Often when I have been asked to code something for a customer the customer does not fully understand exactly what they want so it can be difficult. I typically have had to do this step for them otherwise I will give them exactly what they asked for **but not** what they actually wanted.

The book further elaborates "Who has a stake in the solution?, What are the unknowns?, Can the problem be compartmentalized?, Can the problem be represented graphically?"

2. Plan the solution:

Planning my program **before** I write it is crucial if I do not want to start over when I start writing the code. This helps ensure my planned method of solving is going to work. I don't want to get to a crucial point and realize I can only utilize int/string when all I wanted was a float.

The book elaborates: Have I seen a similar problem before?, Has a similar problem been solved (lol yes but were not utilizing others code haha), Can subproblems be defined?, Can you represent a solution in a manner than leads to effective implementation?

3. Carry out the plan:

Do the thing. Code it. Mostly feels like carrying out the plan with the previous steps in mind. Be aware if you stray from the planned path and compensate for it.

The book elaborates: Does the solution conform to the plan?, Is each component part of the solution provably correct?

4. Examine the results:

Use the functioning alpha program we have created. Ensure everything functions how we would like them to. Plan updates.

The book elaborates: Is it possible to test each component part of the solution? And does the solution produce results that conform to the data, functions, and features that are required?

3. Explain how I will dev a pass/fail program:

I have done something like this before. I refreshed on some of my basic Java stuff and knocked it out. I want a user input letting me know their final grade. I want to accept floats. I want all floats that are greater than or equal to 80 to pass else fail.

If $x \geq 80$ pass, else fail.