**Criterion B: Design**

This section should be done BEFORE you start coding. The idea is to do the design first, then code based on the design. Also include changes in design that happened both during the design phase (i.e., why you chose one design over another), and during implementation (why you modified the design based on coding). Discuss in this section, and include old/iterations of your design in the appendix.

### Flowchart(s)

Include relevant flowcharts for your main app and any critical algorithms. Including a brief discussion helps.

### Algorithms

Discuss the design of your main/complicated algorithms that you use

### Data structures

Discuss why you chose to store data in the ways you did (files, arraylists vs. arrays, etc.)

### Objects / UML diagram

Include UML class diagram (is a) if you're creating your own classes, or extending other classes with variables and getters/setters/other methods. Include a UML instance diagram (has-a) as well if you have multiple classes that use other classes in the field lists. Including a discussion of why you chose this design helps, listing the classes and what they are used for (a table of with class name and description won't count against your word count), and why you chose this organization of objects over something else..

If you're not using OOP, you should. If you're still not, you should include info on how you did your procedural decomposition.

### UI flows

Show screenshots of how UI screens connect to each other, if appropriate, and reference the appendix for your early UI designs. Show/include multiple iterations of your UI designs in the appendix, along with client feedback that helped you revise/improve the designs.

### Test Plan

Include a detailed test plan in table form (item to test in column 1, and details/how tested in column 2). Include both positive (the app works as expected when good data is used), and negative (the app handles bad data/errors) test cases

**If you're missing any of these items, or if items are very brief, you'll likely lose a whole point for each (out of 6 total).**