

Criterion A

Defining the Problem

After spending months crafting a detailed project like National History Day or Science Fair, students need to spend hours crafting an annotated bibliography to demonstrate how their sources helped them. Formatting a bibliography or works cited page takes up an unnecessary amount of time which could better be spent doing extra research or polishing the final project. As seen in **Appendix A**, my client suffers from this same problem and wishes for a faster way to get a correctly formatted bibliography. It was from this problem that I decided to write a program that would do all of the formattings of a bibliography page for the user and save them the time of doing it themselves.

Rationale for Solution

The main rationale for developing this solution is that a bibliography is necessary for almost any project, but the time that is taken to correctly format it is an ineffective use of time. By using this solution, the user is able to spend more time on the critical aspects of a project and less on the relatively insignificant part that is formatting a bibliography.

Describing the Solution

- ❖ User will import file with bibliography
- ❖ Code will format bibliography correctly
- ❖ Code will output a bibliography that is now correctly formatted

This solution will solve my client's problem of wasting her time formatting her bibliographies herself because this will quickly format her bibliography for her and save her the time of doing it herself.

Client/Advisor

Due to my sister's need to consistently turn in projects with bibliographies, but spending too much time formatting the bibliographies, my **sister** will be my **client** and **advisor**.

Rationale for IDE

I am using Java for this project because I have the most experience with this programming language and I know it will work in creating my solution.

I am also using NetBeans in order to make this program user-friendly and easy to use for anyone (coding experience is not necessary to use).

Success Criteria

1. User can import .txt file (bibliography) into program
2. Alphabetizes bibliography
3. Adds hanging indent to each source
4. Alphabetizes and adds hanging indents to annotated bibliography without editing the annotations
5. Does not consider quotation marks when alphabetizing if it is the first character in the source name
6. Outputs window with bibliography with changes
 - a. Can be put into a word document and keep new formatting
7. GUI to make usage simple

WORD COUNT: 293

TOTAL WORD COUNT: 1811