Requirements for Code Blooded Reloaded Project.

- 1. (Platform Req.) Runs on prdile (as long as prdile has SQLite).
- 2. Commands Available in Departmental Library Search Tool.
 - 2.1. Enter any combination of 5 search terms.
 - 2.2. Modify Search
 - 2.3. New Search

Requirement 2.1.

[User Participation]

The user will input the desired search parameters in the Five labeled boxes.

[Tests]

 Several different books will be chosen at random and then searched using different combinations of search parameters to make sure the correct results are always shown [Developer Flow]

[Flow]

- GUI formatted to take in five search parameters.
- If all parameters are inputted, all five will be sent to Converter class, then to the SQL Component, then to the database and back to the SQL Component to be output.
- If some of the search parameters are left blank, the ones inputted by the user will be passed into the Converter class and correctly formatted as a SQL query and sent to the SQL Component and to the database and back to the SQL Component to be output.

[Implications]

- GUI must be set to take in the 5 set parameters.
- GUI must be able to deal with empty parameters
- ❖ In main method of GUI the first thing it does is send the SQL component the database location as a string allowing the SQL component to load the database before the queries are sent to it.
- Converter Class Must be able to correctly Format the SQL Queries based on the information give to it by the GUI.
- SQL Component must be able to correctly communicate with the database.
- SQL Component must be able to output data returned from database.

Requirement 2.2

[User Participation]

The user will input the desired search parameters in the Five labeled boxes. If they want to add search parameters or remove some of them in the current search.

[Tests]

• Several different searches will be input and then changed while still in the same search.

[Developer Flow]

[Flow]

- GUI formatted to take in five search parameters.
- If all parameters are inputted, all five will be sent to Converter class, then to the SQL Component, then to the database and back to the SQL Component to be output.

- If some of the search parameters are left blank, the ones inputted by the user will be passed into the Converter class and correctly formatted as a SQL query and sent to the SQL Component and to the database and back to the SQL Component to be output.
- When the search is completed, if the user wants to amend the search, they click "Modify Search" and all fields are left in the same state for the user to change at will. Then the process outlined in the preceding three bullets will be performed with these new search parameters.

[Implications]

- GUI must be set to take in the 5 set parameters.
- GUI must be able to deal with empty parameters
- In main method of the GUI the first thing it does is send the SQL component the database location as a string allowing the SQL component to load the database before the queries are sent to it.
- Converter Class Must be able to correctly Format the SQL Queries based on the information given to it by the GUI.
- SQL Component must be able to correctly communicate with the database.
- SQL Component must be able to output data returned from database.
- Modify Search Button in GUI must leave search parameters alone but allow the user to modify them to be put into the program in its new format.

Requirement 2.3

[User Participation]

Pushing the "New Search" button will reset all of the search parameters to empty fields to be modified by the user for the new search.

[Tests]

Several different searches will be input and then changed while still in the same search.
After each search is finished, the "New Search" Button will be pushed to reset the search parameters for each new test.

[Developer Flow]

[Flow]

- GUI formatted to take in five search parameters.
- If all parameters are inputted, all five will be sent to Converter class, then to the SQL Component, then to the database and back to the SQL Component to be output.
- If some of the search parameters are left blank, the ones inputted by the user will be passed into the Converter class and correctly formatted as a SQL query and sent to the SQL Component and to the database and back to the SQL Component to be output.
- When the search is completed, if the user wants to amend the search, they click "New Search" and all fields are reset for the user to change at will. Then the process outlined in the preceding three bullets will be performed with these new search parameters.

[Implications]

- GUI must be set to take in the 5 set parameters.
- GUI must be able to deal with empty parameters

- ❖ In main method of the GUI the first thing it does is send the SQL component the database location as a string allowing the SQL component to load the database before the queries are sent to it.
- Converter Class Must be able to correctly Format the SQL Queries based on the information give to it by the GUI.
- SQL Component must be able to correctly communicate with the database.
- SQL Component must be able to output data returned from database.
- New Search Button in GUI must reset search parameters alone but allow the user to modify them to be put into the program in its new format.