Data Design Document - Team Barrie

Once the program has been executed it begins to parse the data from the crime data file given on the command line, from here the data from the file is collected and parsed via the CSV module, then aggregated accordingly to its value type (E.g. Ref Date, GEO, Value). The decision was made to eliminate city locations from the file, in doing so reduced a significant amount of work from the parser, allowing the program to start up more quickly and taking less time away from the user. This decision also reduced the complexity of the overall program, lowering the risk of potential errors. Once the program has finished parsing the data, the user would be faced with 3 categories containing 3 questions within each one. The user may choose any of the 9 possible questions, while entering a year, location, or both to customize the question to their liking. Since these questions are hard-coded into the program, each question uses its own algorithm to find the answer to the users chosen question. Based on the context of the question chosen and the user's input (year or location), the algorithm begins to search through the file until a match is found, then returning the necessary value as the answer. These hard-coded questions allowed for a simplified user experience by allowing an easy to use interface and quickly letting the user know the sole purpose of the program they are using, along with requiring limited instructions on how to use the program.