Final Project Proposal
Mini-Library and Reader

Our project stores an inventory of books in a three-dimensional ArrayList sorted alphabetically, where the three layers are book genres (columns), subgenres (rows), and book titles. The user navigates the library by going from the most general to specific criteria describing the book--once inside a genre, the user can view all of the subgenres within it, and upon selecting a subgenre, can view all book titles in the subgenre. In a subgenre, they can choose a book by entering the name of the title, its index+1, or by prompting the computer to choose a random book from that subgenre. The random selection feature is also available before selecting a genre or subgenre. Once a book is chosen, the user can read the book, page by page, with their command line input allowing them to turn to the next page, go to a particular page, or exit the book. We plan on storing books as text files in the directory of the code, and reading the files to present them to the user. As an example, a person could enter the Fiction category, then the Sci-Fi category, and could then read the book Futuria Fantasia by Ray Bradbury.

There is also going to be a feature that allows for the user to save their place in a given book, which they will be asked upon exiting. At this time, they will also be asked if they would like to delete the page number stored by a previous user, if there is one. A file will store the last-saved page numbers for each book in the library, and when a user opens up a book, they will be given the choice of resuming reading from that page (if there is a page number saved).