**Core Features**

*Classes*

1. LibraryApp.java – the main application is here to run the app
2. Abstract Class Media.java
   1. Data members:
      1. title (String) - private
      2. author (String) - private
      3. status (enum) – private, e.g. “ON\_SHELF, CHECKED\_OUT, OVERDUE” etc.
      4. checkoutDate (Date type) - private
      5. dueDate (Datetype) - private 2 week from checkout (String or is there a “date” type?)
   2. Methods:
      1. setTitle(String title)
      2. getTitle()
      3. SetAuthor(String author)
      4. getAuthor()
      5. setStatus(enum status)
      6. getStatus()
      7. setCheckoutDate(String date)
      8. getCheckoutDate()
      9. setdueDate(String date)
      10. getdueDate()

Book.java extends Media.java

* 1. Data members:
     1. Type (String) – i.e. “book” should this be an enum like “BOOK, CD, DVD” etc?

1. \*\*\*Stretch\*\*\*CD.java extends Media.java
2. \*\*\*Stretch\*\*\*DVD.java extends Media.java
3. \*\*\*Stretch\*\*\*AudioBook.java extends Media.java
4. \*\*\*Stretch\*\*\*Periodicals.java extends Media.java
5. \*\*\*Stretch\*\*\*Reference.java extends Media.java
6. LibraryDB – This class is used for holding the Media objects, must read from txt file to initialize the database. After each add, or delete, update the txt file.
   1. Methods:
      1. LibraryDB() – Constructor, reads from the txt file to populate data
      2. getAllMedia() – Looks up all media, returns ArrayList?
      3. getAll(String author) – Looks up all media with that author, returns ArrayList?
      4. getAllCheckedOut() -
      5. getAllAvailable() –
7. Librarian – The application will interact with this object to access items from Library DB
   1. Methods:
      1. checkOutMedia(Media media)
      2. checkInMedia(Media media)
      3. lookUpMediaInfo(Media media)
      4. lookUpMediaInfo(Media media)
      5. addNewMedia(String title, String author)
8. MediaType
   1. Data Members
      1. Enum for media type i.e. book, cd, dvd, enum

*Files*

* A .csv (Comma Separated Values) file is used to keep track of all media items. .csv is preferred because titles and authors may have space in between, so using a comma to split each “column” is a better idea.

*Sample Screen*

|  |
| --- |
| Welcome to the Team1 Library Management System!  What would you like to do?   1. Look up all library medias 2. Look up all checked out medias 3. Look up all available media 4. Check out media 5. Check in media   Choose (1-5): *5* |

**Responsibilities**

Mike

* IntelliJ Project setup, including .gitignore setup
* LibraryDB class

Vicki

* GitHub host (https://github.com/NewWorldCoder/Team1Midterm.git)
* Create Excel/csv file for initial database creation
* Librarian class

Yosuke

* Trello management
* Media and Book class

**Stretch Features**

* Borrower class to keep borrower information
  + Borrow limits
* ETA for checked out books.