

USER INSTRUCTIONS

There are 2 modes in the database. They are **Admin** and **Client/End User**. The command line interface is pretty straight-forward.

To access **Admin** functionalities, do the following:

- Go to the directory by typing '**cd /usa/aashishm/Database**'
- Compile the file using '**javac Admin.java**'
- Run the jar file by '**java -classpath ./usr/share/java/mysql-connector-java-5.1.28.jar**'
- There are 8 actions. Pick a number from 1-8 to select any one. The list of actions are:
 1. **Insert a new book entry:** To insert a new book entry in the library, enter the details of the book i.e. 'ISBN', 'Title', 'Language', 'Status' (Available / Not Available) and 'Year of publishing'.
 2. **Insert a new Member entry:** To add a new member, enter the 'member id', 'name', 'type' (Student / Faculty/ Employee), 'contact number', 'email' and 'address'.
 3. **Delete a Member:** To delete a member when they retrieve their membership or when student's term is over , enter their respective 'member id'.
 4. **Delete a Book:** To delete a book from the database, when the book is no longer published and is not in the library. enter its 'ISBN' to delete it.
 5. **Search for Books:** There are 5 ways you can search for an existing book in a database, They are:
 - a) By ISBN
 - b) By Title
 - c) By Author
 - d) By Language
 - e) List all the books from the database

Here we don't need to give the exact name of the author, or an exact ISBN or exact title to retrieve a book, few letters of the word is enough, The database takes care and return the data we need.

For example: Selecting 'Author' and searching for 'Mark' will give you the book 'Classical Mythology'. The author name of the Book Classical Mythology is Mark P. O. Morford. But we don't need to mention the whole name.

6. **Check the Members who have balance due fine:** They can be searched by
 - a) Member id
 - b) Member name
 - c) Members whose fine is greater than a certain value. Example: by entering the fine as '10', you'll get the list of all the members whose fine is greater than that.

7. **Checkout Students book:** When a student checks out a book, just by entering their id and ISBN the book is updated to not available and Book is entered into the Borrows table, A book checked out once cannot be checked out again until returned. To checkout a book, enter its 'ISBN' and the member id' of the member.

8. **Book Returned:** To return a book, enter its 'ISBN' and the 'member id' The books status will turn to available, and the book entry is deleted from Borrows table.

To access **Client/End User** functionalities, do the following:

- Go to the directory by typing '**cd /usa/aashishm/Database**'
- Compile the java file using '**javac SqlConnect.java**'
- Run the command '**java -classpath ./usr/share/java/mysql-connector-java-5.1.28.jar SqlConnect**' to access the queries
- There are 3 actions. Pick a number from 1-3 to select any one. The list of actions are:
 1. **Search books:** A user can search for the books in 5 ways. They are:
 - a) By ISBN
 - b) By Title
 - c) By Author
 - d) By Language
 - e) List all the books from the database
 2. **Get Fine:** User can check the fine using:
 - a) Member id
 - b) Member name
 3. **Your Books:** User can get a list of all the books that they checkedout or that they haven't returned (borrowed) by entering their member id.

For example: Enter your member id: m02 (press enter).This shows all the books borrowed by m02. Note that member_id we created are m01,m02,m03.....m10;

Your Books are

Member ID	Title	ISBN	Borrow Date	Fine	ReturnDate
m02	Classical Mythology	0195153448	2017-12-08	null	null
m02	The Middle Stories	0887841740	2017-12-08	null	null