Phase 3 – Problems Faced

Issues:

1. Double-clicking functionality on the *View Book* window
2. Allowing an administrator to add/delete books
3. Allowing a user/admin to view his/her password in the Login window
4. Getting JFrames from other classes to work with the JFrames in the HATTPAD class

Solutions:

1. Although a JTextArea is commonly used to display information to a user, it was clear that implementing an action listener would be tricky. To solve this issue, a JList was used to display all the books in the library. This not only made displaying books easier but also gave a nicer feel when using the program (a user could click anywhere along a row to open a specific book).
2. Since our program required that only a specific type of user could add/remove books I needed a means of tracking what user was currently using our program. To solve this, I implemented a *Login* page where a *user* and an *admin* have different accounts. If an *admin* logs in, a boolean variable named *admin* is passed by method into the HATTPAD constructor, and from there it is passed again by method into the *view\_menu()* method that is located in the *HATTPAD* class.
3. Another issue faced was that a user/admin could not view his/her password when typing it into the *Login* window. By allowing the user a means to hide his/her password, the user would likely have a more pleasant experience. To solve this, I implemented a JCheckList and the appropriate action listener. Unlike JButtons or other JComponents, a JChecklist returns a boolean value if it is checked or unchecked. Thus, when the JChecklist component is checked the user can see his/her password in clear text, and if it is unchecked the user cannot.
4. Some of the JFrames are located in other classes, namely in the *Login* class and *LibraryTemp* class. Keeping such frames in separate classes allowed our group members to work on them simultaneously as opposed to working from one file (which would likely cause issues). However, I was unable to open the JFrames from other classes because I had not instantiated the classes in the main *HATTPAD* class. After the *Login* and *LibraryTemp* classes had been instantiated, I could call their respective methods and, as a result, load JFrames that were not in the main *HATTPAD* class.