eTeam Student Registraion Program - File Formats

The Student Registration Program will store data in 3 separate files:

1. accounts.dat
2. courses.dat
3. registrations.dat

accounts.dat

The **accounts.dat** file will store all of the Account objects from the system. The format of the file will be a single serialized **HashMap<String, Account>** object, where **String** is the unique username of the account and **Account** is the Account object defined in Account.java which will implement **java.io.Serializable**.

courses.dat

The **accounts.dat** file will store all of the **Course** and **CourseSession** objects from the system. The format of the file will be a single serialized **TreeMap<String, Course>** object, where **String** is the unique Course ID of the course and **Course** is the Course object defined in **java.io.Serializable** which will implement **java.io.Serializable** and has it's own serializable **List<CourseSession>**, which is a list of all the **CourseSessions** belonging to the **Course**. The **CourseSession**, defined in **CourseSession.java**, will also implement **java.io.Serializable**.

registrations.dat

The **registrations.dat** file will store the registration information - which students are registered for which Coruse Sessions. The format of the file be two serialized **TreeMap** objects. The first will be a **TreeMap<String, HashSet<String>>** object, where each **String** is a unique Account **username**, and each **HashSet** is a list of unique **Course Sessions** associated with that username. The second will be a **TreeMap<String, HashSet<String>>** object, where each **String** is a unique **Course Session**, and the **HashSet** is a list of unique Student **Usernames** signed up for the course.