Sequence Diagram

Participants: Student · User Service · Course Service · JsonDatabaseManager

Student → User Service: login(userName,password)
User Service → User Service: LoadAllUSers()
User Service → JsonDatabaseManager: loadData(filename)
JsonDatabaseManager ⇠ User Service: Users

alt

[valid credentials]
User Service ⇠ Student: loginSuccessful

else
User Service ⇠ Student: Try again

Student → Course Service: browseCourses()
Course Service → JsonDatabaseManager: loadData(fileName)
JsonDatabaseManager ⇠ Course Service: courses
Student → Course Service: EnrollCourse(courseID,studentID)
Course Service → Course Service: checkPrerequesities()
Course Service → JsonDatabaseManager: save enrollment in json dataBase

alt

[not already enrolled]
Course Service ⇠ Student: enrollment successful

else
Course Service ⇠ Student: already enrolled

My sequence diagram shows what happens when a student uses the SkillForge system to log in and enroll in a course.
First, the student enters their username and password. The system checks the information if it's correct, the student can move on; if not, an error message appears.
After logging in successfully, the student views the available courses, chooses one, and sends an enrollment request.
The system then saves the enrollment data in the database and sends back a confirmation message saying the student is now enrolled.