Jordan University of Science and Technology
Faculty of Computer Information Technology
Software Engineering Department
Client Server System (SE371)
High School Library System

A high school has decided to create a library system to allow its students and teachers to borrow library items like books and CDs.
The system shall keep a complete list of all items and their details including number, category, availability, and expected return date. Students and teachers can request an unavailable item by going into that item waiting list. Once an item is returned, the system shall send the first student/teacher on that item waiting list a text message to indicate this item availability. The system should keep this reserved item for one day (24x60 minutes) by default to allow the person that reserve that item to check it out. If this item is not checked out, the system can then send text message to the next person in the waiting list or make the item available.
Each student can borrow up to three items (by default) at the same times while teachers can borrow up to six items (by default). If an item is not returned on time (5x24x60 minutes = 5 days by default), the system sends a text message to the item holder. If the item is not returned by two days (2x24x60 minutes) by default, the item holder will be charged three times (by default) the book actual price and a text message is sent to the item holder.
The librarian can at any time view the list of all of the late items, view a specific teacher borrowed items, or view a specific student borrowed items.
The system shall keep all previous transactions history for each item, student, and teacher. The system should also allow the librarian to add more items to the system (and to remove damaged or not returned items from the system).

Assume the following:
1. The system is the server and have the main function in the system
2. The librarian, the student and teacher is Clients.