UNIVERSITY OF TECHNOLOGY JAMAICA
Event Scheduling System Project

Group Size: 4-5

Given: January 2025

Event Scheduling System

Java Entertainment is a stage equipment business that offers the rental of equipment for events requiring staging, lighting, power and sound. The managers of the company are currently facing an issue scheduling the equipment for all the events for the upcoming Jamaican Spring Break season. You are hired to write a software that will assist the company in the management and scheduling of their assets.

Asset Management Module:

The company should be able to keep track of all assets they have acquired and stored in their inventory.

Scheduling Module:

The company should be able to schedule their equipment for upcoming events. Bear in mind that a piece of equipment cannot be scheduled for two events simultaneously.

Billing Module

The company should be able to create invoices for quotations and generate receipts for bookings and rentals.

Reporting Module (OPTIONAL)

The manager should be able to pull up the report for all bookings for a particular day or between user-specified periods. It should also be able to generate a report of the revenue from current and future bookings.

Entity Design

Design your database diagram and class diagram that you will use to model your database which is due week 2 for approval. NB. Resolve all foreign keys and relationships. Pay close attention to many to many relationships and 3rd normal form normalization before building your classes.

Software Architecture

Design a JAVA application that will meet the requirements. Your application should be built using the Client/Server architecture. Your Database should be located on the server machine where the client will make requests to the server over the network. The server will grant the

corresponding request from the client. Your application should be developed with a graphical user interface that will aid the users in the system for their respective data entry and processing. Please include a GUI to interact with the data for all database tables.

Extra Credit 1 (5%)
In order to accommodate multiple users at the same time, the server thus needs to be threaded to accommodate multiple clients that will connect to it to interact with the database. Users need their own accounts (username and password).

Extra Credit 2 (5%)
Your application should be able to print the reports in a presentable format. For this you may export the report to a PDF document. The marks for this section may be awarded at the discretion and satisfaction of you lab tutor. This does not entail a screenshot of your Java GUI application form.
Assessment

This project is a team effort and should be done in groups consisting of no less than 4 persons, a maximum of 5 persons.
Please stick to programming conventions such as proper indentation.

Include comments (one to briefly describe the function and any other special/important lines). This is important for generating docs

Classes begin with capital letters (ex: **PascalCase**), functions begin with common letters followed by initial caps (ex: **camelCase**( ))

Variables should have meaningful names. Refrain from using 'x' or any other single letter variables. Variables also begin with common letters followed by initial caps (**camelCase**). Underscores are also permitted in all lower case. (ex: **registration_status**)

This project is valued at 25% of your final grade. 10% of this grade will be assessed in a continuous manner each week. Failure to meet the required milestones each week will result in a loss of the continuous grade.

NO INDIVIDUAL PROJECTS WILL BE ACCEPTED

/110

Entity Design	/20
User Experience	/15
Client / Server Architecture	/15
Exception Handling, Logging	/10
Database Connectivity	/15
Generics and Collections	/5
Documentation	/5

Core Functions as described	/15
Threading	/5
Report Module	/5