

# **ASSIGNMENT TWO (25 marks)**

Submission Deadline: 5 pm Wednesday 23 October 2019

## **Main Objectives**

- Critically evaluate one online auction site in terms of its functional and technical design.
- Design and create an Electrical Appliance Auction website or application of your own using Java.

## The Requirements

- Students may form a group of no more than 3 people to undertake the assignment together, and may also choose to work entirely on their own if they wish. The grades will in general be the same for all members of the same group.
- Each group of students should search the Internet to locate a reasonably designed online auction site for critical assessment (1-2 pages). The evaluation should include at least the overall design, functionality, and potential drawbacks. You may compare certain pertinent features or functionalities of the chosen site with those implemented by your own auction site.
- Technically, you may choose to implement your auction site largely through the use of Java Server Pages (JSP). Alternatively, you may write this auction site entirely as client/server application, and each bidding participant plays the role of a client. You may use plain text file/s or MYSQL databases for registration or auction items. No any other programming languages are acceptable.
- The user interface should be logical, convenient and reasonably pleasing, although the artistic impression is not an important part of this assignment.
- The designed system should do some reasonable error checking.

### **Auction Functions**

#### 1 Registration

The auction site or application should contain a registration component. While everyone can watch an auction take place, only a registered person can actually place a bid. In this simplified auction site, anyone can register for a *unique* nickname, as long as it has not been registered by anyone else before. Client/customer details are expected to be entered during the registration procedure. The details should contain at least customer name, telephone number, mobile, email, and address etc.

#### 2 List of auction items

An auction site or application should provide a list of electrical appliances to be auctioned, including appliance ID, name, description, vendor, auction starting time and/or closing time etc.

#### 3 Valid bidding

Each valid new bidding must exceed the current highest bidding for the item.

#### 4 Auction time control

Bidders can place their bids on an auction item between its auction starting time and closing time. Once an auction is completed, no new biddings will be accepted.

#### 5 Creation of auction items

Each registered person can create new auction items.

#### 6 Other pertinent features in an auction

There are other pertinent concepts in an auction, such as reserved prices, organizing auction electrical appliances into categories, and bidding history etc.

It is up to each individual group to decide what features they choose to implement, and to what extent. The assignment will be assessed according to its overall achievement. For top grades, students should be able to demonstrate their own creativity in terms of their design and in terms of the use of the technologies.

## **Documentation**

- 1. A **case study** about the evaluation of an online auction site.
- 2. You should write a text file readme.txt which contains:
  - (a) student ID and name for each group member

- (b) overall technical design (e.g. program structures, purpose of each jsp file, the database design etc)
- (c) instructions about how to compile and run your program
- (d) which of those listed in the auction functions have, or have not, been implemented
- 3. Your code should contain necessary comments to explain what the code is accomplishing and how. Your code should be well organised and easy to read.

### **Submission**

- a. A complete submission should include
  - An **assessment** file for the case study
  - A readme.txt file
  - Full program source code, images etc
- b. *ALL* related files should be zipped into a single file **StudentID**(**s**).**zip** and submitted via vUWS. Only one submission is needed for each group.
- c. You are required to demonstrate your program in front of your tutor during the last scheduled lab session (week 14). Fail to demonstrate your program will result zero marks for the assignment.

### **Note**

- It is students' responsibility to ensure that they can upload their submissions successfully before the deadline.
- It is students' responsibility to ensure that their programs are runnable during the demonstration time.
- It is students' responsibility to ensure that they keep a copy of their submission.
- No email submissions will be accepted.