The final project is about developing an auction Web site. The details are as follows:

BA is an online auction Web site. People can buy and sell items in this Web site. Buyers are people who like to buy items, and sellers are people who like to sell items.

* Each seller can sell items.
* Each item has a bidding start time, an end time, and an owner. Sellers are owners of their item. The start time and end time include the date as well. As an example, a start time or end time could be “5/8/2014 1:35 PM”.
* Each seller has a name, contact information, and credit card information. They also have a user name and a password.
* Contact information consists of an address, an email, and a telephone.
* An address consists of a street number and name, city, state, and zip code.
* Credit card information consists of owner name, card number, and expiration date.
* Each item has a name, condition, an initial price, a description, quantity, one or more pictures, and an owner.
* The condition could be New, Refurbished, or Explained. If the condition of an item is set to Explained, the seller should explain about the item condition in the item description.
* Each buyer has a name, contact information, and credit card information. They also have a user name and a password.
* When buyers login to Web site, they can go to the list of all available items and then go to the item detail page. Buyers can also search for an item. The application will search through item names for the search phrase.
* Buyers can bid on items. Once a bid is made, buyers are accountable for their bid. In other words, buyers cannot simply remove their bid. If they change their mind, all they can do is to update their bid with the price of zero. Of course, they can do that before the auction expires.
* After an auction expires, the buyer with the highest bid is the winner.
* BA likes to have a set of statistics about the system as follows:
  + The most active seller (the one who has offered the most number of items)
  + The most active buyer (the one who has bought the most number of items)
  + The most popular seller (the one who has been sold the most number of items)
  + The most expensive item sold ever
  + The most expensive item available
  + The cheapest item sold ever
  + The cheapest item available
  + The largest auction ever (the one with the most number of items offered)
  + The largest auction available
  + The best auction ever (the one with the most items sold)
  + The worst auction ever

Regarding Web site, we like to have the following:

* A Welcome Page: You decide if you want to register or log in.
* A Login Page: This is where you enter your user name and password. The user name and password should exist in system.
* A Registration Page: This is where you register. The user name should NOT exist in system.
* A Home Page: It includes links as “Add An Item to Sell”, “List of Items”, “Search for an Item”.
* When users click on an item, the Item page opens where it shows the item details including the highest bid for the item, and expiration date of the sale. Users can enter their bid for each item and click on “Save” button.
* When users click on “Add An Item to Sell” they will go to the Item Setup page where the application asks for item details including initial price, and the expiration date of the auction. There should be a button as “Add Item”, so when user clicks on it, the item will be added to DB.