I. Client-side web applications:

1. Front page with search box and department column (1)

2. Customer login page (1), Customer registration page (vip or not) (1)

3. Customer account page (shows personal information and VIP status) with order histories (1), Basket page (1), Order page (2, one is shipping information page and the other one is order confirmation page)

4. Manager & staff login page from company site (1), account page (1), inventory page with editable text boxes to change the quantity of any component (1), order-processing page (including shipping information) (1); manager’s sales promotion page (1), sales statistics page (1)

5. Items’ pages (several)

(Optional: VIP mini-stores)

6. VIP account page with auction and regular sales information

7. Customer auction summary page

8. Item’s bidding pages, similar to item’s page, but with bidding information (several)

II. Server-side database:

1. Creating tables

2. For front page: search queries and departmental queries

3. For registration pages (both customer’s and staff’s): insert tuples into customer and employee table. Login pages: query emails and passwords in the customer table and set up connection with the database.

4. For customer account page: query customer info from customer table. Query orders of this customer.

5. For basket page: insert or delete tuples into the table, may edit quantities.

6. For customer order page: verify or edit address information and order information. Confirmation page: show order status: pending.

7. For staff login page: query emails and passwords in the customer table and set up connection with the database.

8. For staff account page: show personal info from employee table.

9. For inventory page: list all tuples from item table. Can edit quantity.

10: For order-processing page: list all tuples from order table with pending status. Can edit status to shipped.

11: For manager promotion page: query and edit promotion table.

12: For sales statistics page: View the list of all items and sales history in the previous (week, month, or year). Apply all kinds of aggregation functions.

13: For items page: query item table and give a picture of the item.

(Optional: VIP mini-stores)

14: For VIP account page: query customer table with VIP = 1; show mini-store info; show VIP inventory page and order-processing page (similar to staff’s requirement)

15: For VIP auction page: query up-for-auction table for on going auctions, list summary of all auctions from auction table

16. For customer auction page: query bid table

17. For item page with bidding info: query auction table to show starting price, etc