

## **Presentation Script**

**Olivier:** *Comment on linked list, data object class, and the data text file itself.*

**Emilio:** *Control the keyboard and mouse. Navigate to features when group members are to comment on features. Comment on user interface, input validation.*

**Hiren:** *Comment on Hash Table, why it is more efficient than Linked List for finding Items by UID.*

**Yue:** *Comment on AVL Tree, why building a list of sorted items by price using inorder traversal is faster than doing it by sorting a linked list.*

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### **0 minutes**

**Emilio:** *Launch the .exe. Right click the top of the window and click "Properties>>Layout". Set "Screen Buffer Size" to 1000, so that scrolling is enabled.*

*If the window is too large, "Properties>>Font" and set the size to a smaller value.*

*Open items.txt.*

**Olivier:** Hello everyone, we are Group 3, and today we are going to show you our Inventory Management program, Instaventory.

First, we would like to show you our data file, and how it is structured.

### **1 minute**

**Emilio:** *Switch to items.txt.*

**Olivier:** We formatted our data file using angle bracket tags, with tokens in between, similar to XML or HTML. Our code gathers information in between the tags and converts it into a form usable by our program. Also, all tags except UID and name are optional, and tokens may also be blank.

**Emilio:** *Switch to program. Demonstrate Add / Delete Data, also showing input validation.*

### **2.5 minutes**

**Emilio:** *Find Data By UID - Hiren will explain.*

**Hiren:** *Explain that finding data records works using a hash table, and why doing it this way is faster than traversing a linked list searching for the right UID. Explain separate chaining.*

### **4 minutes**

**Emilio:** *Print AVL by inorder traversal - Yue will explain.*

**Yue:** *Explain that we display items sorted by prices using an AVL tree, and why doing it this way is faster than sorting a linked list. (This is because by using time to insert/balance the tree now, printing it later is faster. Nothing comes without a price)*

### **5.5 minutes**

**Emilio:** *Show efficiency functions. Exit program.*

**Olivier:** *And now, with our remaining time, we will take any questions from the audience.*