**Java Final Project Proposal**

**Responsibility**

**Client App UI: ShuoJia Shen**

Should include feature below:

1 Allow user to make order

2 Allow user to view pending order with order status: Submit, received, preparing, packaging, delivery

3 Notify user with message: “Order submitted successfully”, “Order is partially available”, “Order is Not available, cancelled”, and then allow user to make proper decision and response.

Furthermore:

Multi user is supported by creating “new user” in Client App. Each user should be able to view its own order status.

**Inventory Management: Wei Xu**

Should include feature below:

1 Design& Implement data structure of inventory

2 Read & Write “Inventory.txt” in forms of XML, JSON, CSV or any appropriate format.

3 Update Inventory list with latest data entry.

**Communication between Client App & Server App: Yidi Xu**

Should include feature below:

1 Set up communication between Server& Client using socket.

2 Design and implement socket message structure, which should include:

User Side

1) User ID

2) Order ID

3) Order details

4) Order Command (submit, cancel, continue) etc…

Server Side

1) User ID

2) Order ID

3) Order details

4) Order status (Submit, received, preparing, packaging, delivery)

Furthermore:

Allow multi user to server communication.

**Server Management: Yidi Xu**

Should include feature below:

1 Decision Maker for arriving order.

2 Thread management include:

1) ServerSocket thread

2) OrderProcessing thread

3 Synchronized block/ stack/FIFO communication between threads.

4 Simple UI.

**R&D Step**

Step1: Job allocation, feasibility study.

Step2: Design Pattern, Interface and Structure.

Step3: Coding and Testing

Step4: Verification and Demo preparation