Objective of the Game: Is to satisfy the demand of the customer, while keeping the cost low. There is a cost for holding inventory and a cost for not satisfying demand (backorder). The demand for the product remains until it is satisfied i.e. backorder persists until it is fulfilled.

Each player would be given an information card as shown below,

```
465-Spring06
Game number : 1
Position : RETAILER
Password : 7z3m
```

The information card contains details regarding the group (e.g. 465-Spring06), game (e.g. 1), position (e.g. Retailer) and password. Using this information a player could start/login into his game.

When a player clicks on the link to play the game, he would see the entire list of groups registered to play this game. The player would be directed to click on his group (e.g. 465-Spring06), which would direct him to the list of games. Each player would be assigned to a position in a game. When the player clicks on the game button, he would see a snapshot of the supply chain as shown below,

```
Downstream

1 week  2 weeks  2 weeks  2 weeks
FACTORY DISTRIBUTOR WHOLESALER RETAILER

Upstream
```

This picture would vary according to the game settings. The traditional supply chain partner positions include factory, distributor, wholesaler and retailer. Sometimes there might less than 4 supply chain partners in a game. The two types of flows in this supply chain include product and information. There may be delay in these flows, which could be 1 or 2 weeks or in some cases no delay. Shipment (product flow) is made downstream and information is transmitted upstream in this supply chain.
As soon as a player clicks on his position, he/she would be asked to login using the password given to them. After validating the login, the player is transferred to their game screen. The game screen consists of 4 regions, namely order input screen, past information (10 weeks) about their position, status information of the supply chain partners and plot and settings screen.

1. Order input screen
   This screen provides information regarding the current demand (from downstream partner) and current incoming shipment (from upstream partner). For a player:
   - Total demand = Current demand + Backorder
   - Available to ship in a week = Incoming shipment + on hand inventory
   - If Available to ship > Total demand,
     Ending inventory balance = Available to ship – Total demand
   - If Available to ship < Total demand,
     Backorder (unsatisfied demand) = Total demand – Available to ship

   All these calculations are done automatically. The player just has to decide how much to order from his upstream partner. This decision affects the cost of his system, which depends on the inventory/backorder he carries. He can use the data in the other screens namely, past information and plots to aid his decision.

2. Information for the Last ten weeks
   This screen displays the information for the last 10 weeks (if available), it includes data regarding inventory/backorder, incoming shipment, outgoing shipment, order placed and current cost (cumulative).

3. Status of the other supply chain channel partners
   This is a unique feature of this game, which displays the status of the other Supply chain partners for the current week. This part of the screen gets refreshed automatically every 30 seconds. As soon as all the partners complete the order processing for the current week, the player would see a button appear in this part of the screen. By clicking the button, a player could proceed to fulfill his order for the next week. This helps in controlling the flows in
the game without the intervention of an external authority.

4. Plots and supply chain settings
Using the buttons in this screen, a player could view the demand, inventory/backorder and order plots for the "entire duration of the game". The supply chain settings for the player is also displayed in this screen, which includes the holding cost/unit/week, backorder cost/unit/week, information regarding the upstream and downstream partners along with their delay (shipping and information) information.

Demand Plot

The demand plot shows the order pattern of the next upstream member in the supply chain.
Inv/Back Order Plot

The Inv/Back Order plot shows the graph of the player and the variations in inventory with time.

Order Plot

Order plot shows the order pattern of the player.

Plot All for all players

The ‘plot all for all players’ shows all the details of every player in the supply chain including Inv/backorder plots, demand plots, order plots. This plot helps the player to make decisions and also analyze the status of the game.
Summary of Results

After the game is over, all players will be able to view the results of all the teams in the class.

If you have any concerns or questions regarding this game, please contact your Instructor or Chalam (chalam@tamu.edu).