**Quarter Programming Project**

Quarter Project: “Logistics Application”

Overview & Tech

*Logistics: The process of planning, implementing, and controlling the efficient, effective flow and storage of goods from the point of origin to a destination for the purpose of conforming to customer requirements.*

Project Description:

Our project is an application that will perform Order Processing & Logistics functions – it will “source” customer orders – a very time-intensive process to determine manually. This “sourcing” process is described below.

A customer order contains a list of items the customer desires (“order item”) and an order priority (Time, Cost, etc.)

For each order item in an order (an “order item” is a line-entry in an order and includes an item and a quantity):

* Find all warehouses with the item in stock
* Select the best warehouse(s) with required item
  + Sourcing priority algorithms:
    - Time – Fastest time to delivery
    - Cost – Cheapest cost to delivery
* Book the time at the selected warehouse(s)
* Allocate the necessary shipping containers
* Create order “manifests” – detailed lists of sourcing details for orders,
* Calculate the logistics costs for the order
  + Warehouse Processing Costs
  + Shipping Container Rental
  + Transportation Costs
* Generate Logistics Report for the order.

Description

Approach

End Stuff