



# Data Structures and Algorithms

## Project Phase 1 Report

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### Project Data Structures:

List Name	Chosen DS	Justification
Event Waiting Cargo CS Trucks Moving Cargo Delivered Cargo	Queue	<b>Peek = O (1)</b> <b>Dequeue = O (1)</b> <b>Enqueue = O (1)</b> <b>Print = O(N)</b> <b>IsEmpty = O(1)</b>
Waiting Cargo CN	Linked List	<b>Add = O(N)</b> <b>IsEmpty = O(1)</b> <b>RemoveID = O(N)</b> <b>RemoveBeg = O(1)</b> <b>Print = O(N)</b>
Waiting Cargo CV	Priority Queue	<b>Peek = O (1)</b> <b>Dequeue = O (1)</b> <b>Enqueue = O (N)</b> <b>Print = O(N)</b> <b>IsEmpty = O(1)</b>

