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| Data Structures and Algorithms | Spring 2023 |

Data Structures and Algorithms

Project Phase1 Report

Team Name: 1 Number of Members : 3

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Members Info:

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| List Name | Chosen DS | Justification |
| NEW | Queue | Since the processes are already sorted by arrival time |
| BLK | Queue | Because it is applying the FIFO technique |
| TRM | Queue | To put them according to termination time  (also, we don’t need random access) |
| KILLSIG | Queue<Pair<int, int>> | Because the signals are sorted ascendingly |
| FCFS RDY | General List | Because we need to traverse on the list given the ID |
| SJF RDY | PriorityQueue | To sort them by shortest CPU time |
| RR RDY | Queue | Because it is a preemptive version on FCFS  and we don’t need random access |
| IO | Queue<Pair<int, int>> | Assuming that they are sorted in the input file |
| Processors | Dynamic array of pointers | -We don’t need to remove an element  -We only need traversal  -The size is already known |

Selected Data Structures