**Gwinnett Technical College**

**CIST 1305 Program Design and Development**

# PROGRAM ANALYSIS WORKSHEET

**NAME: Rosemol Thanjappan DATE: 2/15/2019**

**PROGRAM DESCRIPTION:**

**Restaurant Simulation**

**SOFTWARE (PROGRAM) REQUIREMENTS:**

1)Get the restaurant configuration

2) get the parties coming to the restaurant

3)calculate the parties leaving the restaurant

4)display the activities in the restaurant

4)display the final report

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| --- | --- | --- |
| INPUT | PROCESS | OUTPUT |
| name, level, type, numTable , partSize,numNewbies,newbiesTime,numSeasoned,seasonedTime,numProfessional, professionalTime, restaurantOpenTime | Prompt/input  NumWaiting=0;  TimeArrived==clockTime  If(table is available)    Allocate the table to the party  Table=”Occupied”  Allocate staff  Staff=”not available”  Else  Add the customer to the waiting list  If timeSeated==clockTime  Serve the customer  If party is leaving  TimeLeaving=clockTime  Staff=”Available”  Table=”unOccupied”  Allocate From Waiting List  Average waiting time for parties:  TotalWaitingTime=0  Count=0  For each customer  If(seatedTime is not equal to arrivalTime)  TotalWaitingTime = TotalWaitingTime+( seatedTime – arrivalTime)  Count=count+1  AveWaitingTime= TotalWaitingTime/count  Average Turn around time:  TotalTurnAroundTime=0  For each customer  TurnAroundTime=TimeLeaving-TimeArrived  TotalTurnAroundTime= TotalTurnAroundTime+TurnAroundTime  AveTrunAroundTime=(TotalTurnAroundTime /total customers )  For each hour:  AveNumWaiting=numWaiting/numTable  Display the result | name, level, type, numTable, AveTrunAroundTime, AveWaitingTime, AveNumWaiting |

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