Study Tasks

*Codeblue
IS480, 2014-15 T1*

**Tasks List**

There is no time limit for the tasks. Please feel free to navigate the application even if they do not serve the purpose of completing any of the tasks. If you have any difficulties during the testing, please ask the test facilitator for assistance.

**Note: This is not a test on your abilities! You are free to discontinue the testing at any point.**

You are a data analyst working at the hospital to improve queuing time for patients entering the Emergency Department. To simulate the queue management handling, you open up the Dynamic Queue Management Application.

**Task 1: Login to the application**

Please use the credentials provided.

|  |  |
| --- | --- |
| **Username:** | guest@smu.edu.sg |
| **Password:** | guest$1 |

Upon successful login, you landed at the settings page with some common investigation tests that inpatients at the emergency department undergo.

**Task 2: Set the percentage probability and modify the settings table by adding new investigation tests or changing the percentage values of the test results.**

**\****Seek assistance from a test facilitator if it is not clear what the column values in the table represent.*

Change the “**Percentage (%) of patients to undergo diagnostic/treatment/investigation test” to “75%”**

Fill in the settings table with (only) the changes you have made:

|  |  |  |  |  |  |  |  |
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 | **Treatment/ Investigation Test** | **Average Time Required (Minutes)** | **Clear (%)** | **Mild (%)** | **Serious (%)** | **Type** |
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 | Blood Test  | 25 | 20 | 20 | 60 | Parallel |
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 | Bedside Ultrasound | 15 | 15 | 50 | 35 | Parallel |
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 | Standard X-Ray | 20 | 30 | 40 | 30 | Sequential |
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 | CT Scan  | 10 | 50 | 20 | 30 | Sequential |

**Rate (1-least and 5-best) how well you understood what the each parameter means (i.e how they would affect your simulation results). Please elaborate more in the box below.**

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| --- | --- |
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**Was the additional information** **for the parameters was useful for you? Please give a reason.**

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Move on to the Arrival Rates tab and explore the data table.

**Task 3: Make the following changes to the data table according to the following specifications;**

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| Change No. | Day | Hour | Arrival Rate | No. of Doctors |
| 1 | Sunday | 0400 | 3.53461 | 3 |
| 2 | Wednesday | 1200 | 10.86911 | 3 |
| 3 | Saturday | 2300 | 2.98765 | 3 |

Move on to the Run Parameters tab to finalize simulation run customization.

**Task 4: Fill in the following parameters before running the simulation.**

**Simulation Run name: <<***Your preferred choice>>*

|  |  |
| --- | --- |
| **Start Day:** Sunday**Start Time:** 0800hrs**Target Service level:** 120 mins | **No. of days to run:** 7 days**No. of reps to run:** 1**Patient Prioritization Strategy:** SCON**No. of Patients served in an hour:** 5 |

**Task 5: Enter “yourname\_run\_UserTest” as the “Run name” and “Save As Favourite”.**

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| Observations |
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Proceed to ‘Simulate’

**Task 6: View the “Playback”( i.e. animation). Drag the playback to 1500hrs of Day 0. How many people are in the queue? How many people are “Happy”, “Satisfied”, “Disappointed”?**

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| Observations |
| Number of people in the queue - Number of people that are “Happy” - Number of people that are “Satisfied” - Number of people that are “Disappointed” -  |

Go back to the ‘Simulation’ Page.

**Task 7: Run a new simulation with similar parameters but choose a “Run all strategies”. State which strategies is the best in terms of shortest ‘LOS’ and ‘Door to Doctor’**

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| Observations |
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**Task 8: Please answer the following questions (Rating: 1- least and 5- most)**

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| Did you find the application easy to use? | Were the terms used too technical for a non-SME to understand? |
| Does the system make you want to learn more about the effects of Patient Prioritization Strategies? |

-END-

**Further Comments**

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| **Basic Setting:** |
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| **Arrival Rates:** |
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| **Run Parameters:** |
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| **Simulation Results Page:** |
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| **Simulation Animation Page:** |
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