

Hints for Project 2

Last updated: 6 November 2017

- Run your simulation for 1 week (7 days) of operations.
 - Make sure you have set up the arrival of the spinners correctly.
 - What are the interarrival times of the spinners?
 - How many spinners should be generated at each arrival?
 - How should the unpacking of the spinners be modeled?
 - ◊ What is the difference between (i) EntityDelay and (ii) Queue + Server?

 - How many daily packages should you consider?
 - What performance measures do you think will be useful for Twitching Toys?

 - QueueLengthAverage for any Queue object is the time average number of objects in the Queue
 - Sometimes, it's nice to view the tradeoffs between two quantities visually, say with a scatter plot. In `ggplot2`, you can accomplish this as follows:

```
ggplot(data_frame_with_performance_measures) +  
  geom_point(aes(x = column_for_x_axis, y = column_for_y_axis))
```
- If you want to connect the points with lines, you can do the following instead:
- ```
ggplot(data_frame_with_performance_measures) +
 geom_point(aes(x = column_for_x_axis, y = column_for_y_axis)) +
 geom_line(aes(x = column_for_x_axis, y = column_for_y_axis))
```
- You should find that:
    - Fraction of unsatisfied customers ranges from about 0% to 75%
    - Time average number of spinners on display ranges from 0.75 to 50+, depending on the range of the number of daily packages you test.