STAT 201: Notes for the EWA (Lab 5)

The extended writing assignment (EWA) is assigned for Lab Session 5. This lab takes place on February 10 and the EWA is due on February 19 in class. A 25% penalty will be imposed if it is late and late papers will only be accepted through February 26. If you are absent on the due date with a valid excuse, the paper must be turned into my mail box by 5 PM on that day to be accepted without a late penalty. The text of the EWA must be typed and printed. Some neat, hand-written labels and/or numbers on figures are permitted. This paper should be written individually **in your own words** – no two students should have the same paragraphs. No page limitation exists, however, a decent report usually contains at least 3 pages using the default Microsoft Word page setting with appropriate tables/figures/graphs, etc. If you have no experience of writing a technical report before, please read the "Guidelines to Writing a Technical Report" in the course website to get a flavor before you start writing.

Save and keep all materials and graphs before leaving the lab room. Save your original data in case you need to reproduce your graphs in StatCrunch.

Below is a rough outline of the sections to include along with guidelines for the main sections of the paper specific to Lab 5. You will need to add details showing your understanding of the concepts based the lab. See me before the due date for advice if you need help in writing. Your EWA must have cover page, title, abstract, materials and methods, results, and discussions.

Cover Page

You must place EWA Grading Sheet as your cover page of the report, where you indicate your name and lab session number.

Title

Give an appropriate title – not the same title as the one in the lab manual

Abstract

Give the purpose of the experiment.

Briefly describe how the data was collected.

What's your guess of insurance company's profitability?

Materials and Methods

Give the purpose of the experiment.

Assume you're a customer, what are your concerns of the trip?

Assume you're an employee in the insurance company, what are your concerns about this insurance product?

How to understand this problem with tree diagram? How to make a contingency table with the tree diagram?

What is the experiment? What materials were used? What software was used? Why does it work?

Discuss with detail how the data was collected. How were the number of bead being decided? Why do we simulate each customer twice with two different buckets?

What's the sample do you collect by your own? What's the sample do we get in the entire section? Any difference between them? Why?

Results

What's the main result concluded from your own samples?

What's the main result concluded from entire section's samples?

Are the experimental results close to the theoretical results that we derived using tree diagram and contingency table?

Discussion

Do you have a correct guess of the profit of insurance company?

What's the reason do you believe that the world we are living in needs insurance company when they are earning money from people?

Give ideas for further experiments related to what you learned in this lab.