

E370 Fall Semester, 2009-10
Team Project – Components Three and Four:
Inference and Oral Presentation

Due Date: YOUR lab December 10th or 11th, 2009

Due Time: Beginning of YOUR Lab

Due To: Your AI

Eighteen percent of your final grade depends on a team research project which spans semester concepts. The project will ask your team to use virtually all methods learned over the semester to describe and analyze a data set chosen by your team, and to statistically describe the relationships that exist amongst and between the variables in that data set. The project has four components that are turned in over the semester. The components are 1) Proposal, 2) Description, 3) Inference and 4) Oral report. Following are the guidelines for the third and fourth components, Inference and Oral Presentation, and your team evaluations.

Goals: Specify and estimate a model of the dependent variable you have selected based on the independent variables selected. Report and discuss your results. Present your results in a brief “poster session” in your lab. Evaluate your team member’s performance.

An Important Comment: The exact specifications of font, numbering and so on are there to make reports easier to grade, because reports will be more uniform. However, the report will be graded on more than just following the rules. **Tell a good story and demonstrate your knowledge.**

Tasks: Inference (80 points)

- I. Estimate the multiple variable model you have developed using the Regression option under the Data Analysis Tool in Excel. Ask for all optional output and save your results.
- II. Using your model results and the information from the previous two components, write a final report, including the following sections in the order presented.
 - A. Title Page and Abstract
 1. Format of Title Page: Centered on the page:

<p><u>TITLE</u></p> <p>Team Number</p> <p>Member Names (Alphabetical Order)</p> <p>Date</p> <p>Abstract:</p>

2. Additional Notes:
 - a. Abstract: This is a paragraph that summarizes the entire paper. It should not be centered, but a regular paragraph, single spaced, and located in the bottom third of the page.
 - b. This page is not numbered.
- B. Introduction
 1. Begins two inches down on the next page
 2. Include:
 - a. Your objective in selecting this topic
 - b. Its importance (to you or to others)
 - c. A summary or outline of the remainder of the paper.
- C. Model
 1. Follows immediately after the introduction.
 2. Include:
 - a. A description of the model in words.
 - b. A description of how the model was developed, that is, how did you think it up, why did you think the variables you selected were important?
- D. Data
 1. Discuss the source of the sample.
 2. Describe your variables in words. Include supporting statistics in, for example, a summary table. This would be a table of all your variables and their important statistics. If you have a graph that makes an important point, include it. Do not include all the tables and graphs you created for part two. Decide what is important and include that. Support should “support” what you are saying, that is, go along with what you are saying. If you include a summary table or graphs in the body of your paper, it must be embedded in the text. If you prefer, you may have such things in an appendix and refer your reader to them.
 3. Make any comments about what is particularly interesting in your data.
 4. Discuss any data concerns such as possible bias or outliers, etc.
- E. Methods of Estimation
 1. Name and discuss the method used to estimate the model. (We have only used one model in this class. What criteria does it use?)
 2. State the model in linear form.
- F. Results
 1. Develop and present a summary table of your regression results. Include:
 - a. Regression Statistics
 - b. Parameter estimates for all regression coefficients.
 - c. Significance Tests for these coefficients.
 - d. Confidence intervals for these coefficients.
 2. Discuss the results
 - a. Interpret the coefficient of determination (R^2).
 - b. Interpret the regression coefficients.
 - c. Explain the testing method (underlying hypotheses and whether p-value or t-statistic) used, state your conclusions and their meaning.
 3. Forecast your dependent variable for independent values you have chosen. Discuss why you selected those values and the meaning of the forecast.
- G. Diagnostics
 1. Discuss possible complications in the model and suggested remedies.
- H. Application and Conclusion
 1. Summarize the meaning of your model results.
 2. Discuss explicit practical applications of the model.

- 3. Discuss how the model could be improved.
- I. References: List only those referenced in the body of the paper.
- J. Appendices: any statistics, charts or other tables that are referred to in the paper.
- III. General Guidelines
 - A. Length: No more than 8 pages of text. (appendices are not included in the 8 pages.)
 - B. Double Space the body of the text.
 - C. Use Times New Roman Font, 12 pt.
 - D. Number all pages, with the exception of the title page. The page with the Introduction should be numbered 1.

Tasks: Oral Presentation (20 points)

- I. Prepare a 5-minute summary of your model and its results with visual aids.
 - A. Visuals aids might be
 - 1. a "poster" of your model and its results
 - 2. a powerpoint slide(s)
 - 3. a brief play.
 - 4. an advertisement.
 - 5. something else you think up.
 - B. Go over the main points.
 - 1. Why your model is interesting.
 - 2. What your results were.
 - 3. How they can be or will be used.
 - 4. How your model might be improved.
- II. Present the summary to your lab-mates in your regular lab time.
 - A. As many or as few of your team may be involved in the presentation as you wish.
 - B. Expect questions from your peers and coach.
 - C. Speak clearly and with sufficient volume that all can hear you.
 - D. Do try to have fun with the presentation.

Tasks: Team Evaluation

Each Team Member must submit an evaluation. Evaluations turned in late or in a dramatically different form will not be counted.

- I. The Team Project Evaluation Form with instructions is on the following pages. The evaluations will be used to determine each team members total number of points from the team project.
 - A. The percentage scores assigned to team members will be averaged.
 - B. Total points from the Team Project will be pro-rated according to each individual's average.
 - C. For example, if the mean percentage score awarded to Sleepy is 87%, Sleepy will receive 87% of the total number of points awarded your team. If your team project received 150 points, Sleepy would receive 87% of 150 or 130.5 points total.

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Team Evaluation Instructions

Instructions:

1. The Team Evaluation Form is on the next page. **Print it.**
2. Thoughtfully and carefully fill it out.
 - a. Write your team number in the designated space.
 - b. Write the name of your project in the designated space.
 - c. List each team member's full name, including your own.
 - d. **For each category**, assign each person a percentage score that falls between **50% and 105%**. Some items to consider are:
 - i. **Attendance and Punctuality:** Consider if member responded to email, attended meetings, responded to phone calls, arrived on time, stayed til the end of the meeting.
 - ii. **Preparation and Reliability:** Consider if member came prepared, helped with tasks, produced what was promised, could be counted on, sought answers when necessary outside the team.
 - iii. **Participation and Contribution:** Consider if member made an effort to participate, asked those that are "quiet" to become involved, did not monopolize the situation, could provide leadership (keep team on task), contributed ideas.
 - iv. **Attitude and Cooperation:** Consider if member was available, didn't balk at assignments, did minimal complaining.
 - v. **Share in Tasks:** Consider if member did fair share, volunteered for tasks, shared knowledge, didn't offer to do it for others.
 - e. Under special circumstances, a score of 0% may be given to a team member. Special circumstances require that at least two members of the team have notified their coach about a free-loading team member **in writing** prior to turning in the second part of the project. The free-loading member must be kept notified of all team meetings through the end of the semester, and evidence of having done so will be requested at the end of the semester should the situation not improve.
 - f. For each team member, average the percentage scores you have awarded.
3. Print your name, then sign and date the evaluation in the designated space.
4. Place the evaluation in an envelope and seal it.
5. Sign your name across the flap.
6. Give the evaluation to your coach at the time of your Oral Presentation.

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Team Evaluation**

Team Number:	Project Name:						
Team Member's Name	Attendance and Punctuality	Preparation and Reliability	Participation and Contribution	Attitude and Cooperation	Share in Tasks	Average Percent	For Coach's use only
Special Comments							

I, _____, assert that the assessments given above are my most accurate estimates of my team
(Please Print Your Full Legal Name)

members' performances in the Team Project, and that they are in no way based on any consideration of gender, race, or religious preference.

X _____
(Signature)

Date _____