You must complete each of the following 3 questions. Each question will represent 33% of the credit for the exam. Answer each question clearly and neatly. Type (wordprocess) the answers, with no more than 2 pages each, double spaced with 1” margins. If I cannot read your answer or understand your grammar, or if you provide multiple answers, the answer will be wrong.

You may have notes, books or other reference materials that you desire. However, you must do the exam alone.

This exam is due on Monday, April 2 in class.

1. J.S. Armstrong said that “Better predictions of how other parties will respond can lead to better decisions.” One way of handling such predictions is with the modeling technique called Game Theory, such as that used by Bruce Bueno de Mesquita (see interview at http://www.thedailyshow.com/watch/mon-september-28-2009/bruce-bueno-de-mesquita, or his book, The Predictioneer's Game: Using the Logic of Brazen Self-Interest to See and Shape the Future).  How might you build this into your BI system?  Consider, especially, sensitivity analyses.

2. Consider the decision making theories associated with Piaget and discuss how these theories will impact the how you will design your DSS this semester. In particular, identify a specific feature for the DSS that would be impacted by the decision making style issues discussed by Piaget. It might be an issue with the user interface, how the modeling, or the data component. Identify the feature, how you would operationalize it, and how it illustrates Piaget decision making model.

3. Discuss how you might use data mining to improve the IS program at UMSL. What kinds of data mining would you use? What kinds of data would be necessary? Be specific.