**Decision table/tree**

**INLS 582, Systems Analysis**

**Monday, 2/27/12**

**Reading** none

**Assignments:** information gathering plans due

**Slides:**

decision-comp.ppt, includes zoo example

decision-exercise.ppt how will barry get to school

**Exercises**

decision tree – weather/transportation (old homework)

**Decision Tables**

This is a good model of a process that is based on lots of conditions, or variables; several pieces of information at once. For example, you may use this to provide more details for a complex decision that is part of an activity or sequence model. The table structures all possible combinations of conditions, and the correct action(s) are given for each combination. It’s important to make an effort to cover all possible conditions, but also to realize that the users may come across novel situations that haven’t been foreseen. Strategies should exist for handling the unique instances.

Phrase conditions so the situation can be categorized values or t/f. For conditions that can have several values, rather than being present or not, break it up into ranges so that each possibility falls into a range.

This model gives a structure for discussion with the users about every possible condition. This is easier than asking them to come up with the possibilities on their own. There may be combinations that never occur.

Building the table:

1. Identify all variables that apply

2. Identify all the values they can take.

3. Identify all the actions that can be taken.

4. Make up a blank table, listing 2 and 3 as the rows. You need space for columns for all the possible combinations.

5. Fill in the values for each condition to give each combination. Each combination gets its own column. Use an ordered strategy for this.

6. For each column, decide on the appropriate action(s), (through discussions with the users).

7. Extraordinary situations should also be discussed; e.g., conditions for no action, conditions that have never occurred, actions with no conditions.

8. To use the table, find the column with the correct combination of condition values, go to the bottom, and read off the correct actions. (Note that this model is also useful in user procedure documentation.