

Project 1: INVESTIGATING CATEGORIZATION

INFO 300 Intellectual Foundations of Informatics

Due: Tuesday, November 12 at the beginning of class.

GENERAL PROJECT GUIDELINES

Individual vs. Group Projects

You will be assigned a total of three projects in this course. At least one of these projects must be done individually. For the other two projects, you may choose to work in a small group (of up to three people) if you would like or by yourself. Moreover, you may choose which projects you wish to do with others. In the case of group projects, all members of the group will receive the same grade for the project. In addition, you must inform me in writing (email is fine), if you will be working in a group with a list of group members at least one week before the project is officially due.

Project 3

I have one goal for your third project: To extend your knowledge about informatics in an area we have explored in class or to investigate a new area related to informatics. The topic of your Project 3 is up to you. However, you must discuss the topic for your third project with me (email is fine) well in advance so that we mutually agree on the topic and scope of the work. In terms of size, Project 3 should be slightly bigger in scope than Project 1 or Project 2. You must commit to a final project topic by Nov. 26.

Late Policy

To receive full credit, projects must be turned in at the beginning of the class meeting on the day they are due. Unless arranged with me before the due date, late projects will be marked down 10% and not be accepted beyond one week after the due date. The third project is due at the beginning of class at the last class meeting on Tuesday, December 10. In the case of the third project, no late projects will be accepted.

Assignment and Due Dates

	<u>Date Assigned</u>	<u>Topic Due</u>	<u>Date Due</u>
Project 1	Oct. 29	N/A	Nov. 12
Project 2	Nov. 12	N/A	Nov. 26
Project 3	Oct. 29	Nov. 26	Dec. 10

Note: The Midterm is November 14.

PROJECT 1: A CHRISTMAS CAROL – USER CATEGORIZATION OF WORKS

Do people really categorize the same material in the same set of systematized ways? Allyson Carlyle's research -- in which she asked individuals to sort documents related to the Charles Dickens' *A Christmas Carol* -- suggests this is the case. This project will give you the opportunity to collect some of your own empirical data and to test out Carlyle's results. In brief, you will replicate Carlyle's study and compare your results with hers.

What To Do

1. Read Allyson Carlyle's article on user categorization of works (ref. below). As you read, think about how you would collect and analyze comparable data -- what you would say, what you would record, and how you would analyze your results.

Carlyle, A. (1999). User categorization of works: Toward improved organization of online catalogue displays. *Journal of Documentation*, 55(2), 184-208.

2. On Thursday, Oct. 31, Allyson Carlyle will be giving a guest lecture in our class. During this lecture she will discuss her research methods and her results. This will be a great opportunity to ask what she exactly she did, how it worked, and so forth.

3. When you're ready to collect your own data, borrow a photocopy of the stimuli Carlyle used from Dowell at the Student Services reception desk (MGH 450). This is a hefty set of materials. Dowell will have a "check-out" system in place. It's fine to borrow the materials for an afternoon or over night, but please try not to hang on to them for too long and be sure to specify when you will return them so that others can plan to use them as well.

4. Administer the task yourself to two individuals. Be sure to follow the same methods that Carlyle did (e.g., what you tell participants about the task, give them the materials to sort, have the participants write down a name and description of each category, and so forth). You may also wish to note any interesting behaviors your participants engage in (e.g., first creating two categories and then sub-dividing them; first creating a set of categories on one set of criteria and then abandoning them, etc.). Note: Based on past experience, I recommend that you don't ask family members to participate in the study. Sometimes, given family dynamics, family members may provide more of a challenge when it comes to following the methods of the study.

5. Describe and characterize the results from your two participants. Report the results from your two participants (e.g., what categories did they come up with, what attributes of the items defined those categories, what items went into each category). A table or two may be a useful way to convey some of this data. Also, please include a copy of the raw data in an appendix. Discuss how you would characterize their categories (e.g., a participant who had a category labeled "movies" could be characterized as categorizing based on the attribute "media"). Note: When you do this analysis, try to forget that you've ever read Carlyle's work or have any idea what categories she came up with – you want categories that really represent your two participants.

6. Then compare your results with those of Carlyle, paying particular attention to the types of attributes that your participants used to categorize the items. Explain how you mapped your participants' categories onto those of Carlyle. Did your participants rely on any attributes that cannot be accounted for by the categories described by Carlyle? If so, what new categories would you add to Carlyle's set? Were there some categories of attributes that Carlyle found which your participants' did not use? Or did not use as frequently? If so, what explanations could you suggest for these differences. Overall, how well do your data support Carlyle's findings? One way to think about this question is: If an information system was built based on Carlyle's findings (i.e., the categories she reports), how well could your participants use this system?

What To Turn In

This project falls into the category of empirical research. As such, I would like you to write up the project in the tone and style of academic research (along the lines of Carlyle's article). (Note: Project 2 will be a design project and in that case I'll ask you to write up your project in the tone and style appropriate for a project manager in an industry setting.) With that in mind, write a 4-5 page paper that (a) introduces the importance of this type of investigation (you may want to draw on some of the articles we've discussed in class to motivate this investigation) (i.e., introduction), (b) describes what you did (i.e., methods), (c) reports the results from your two participants (i.e., results), (d) discusses how you characterized the data from your two participants, (e) compares your results with those of Carlyle, (f) draws any general conclusions that you think are appropriate (i.e., conclusion), (g) lists any works cited in the paper (i.e., references), and (h) in an appendix, includes a copy of your raw data (e.g., appendices).

If You Work in a Small Group

If you work in a group, you *must* send me an email no later than Tuesday, November 5 stating that you will be working in a group and listing your group members. If you choose to do this project as a group, each person in the group should collect data from two individuals. Then have the group pool the results. Your write up should incorporate the data from all of the individuals. A single write-up for the group should be turned in.

SCRIPT TO READ TO STUDY PARTICIPANTS

***** TO BEGIN *****

Here are photocopies of items that are related to *A Christmas Carol*, by Charles Dickens. Please look at each copy carefully and put the copies into groups based on how alike the items are to each other. That is, things that are similar should go into the same group. Each group may be as large or as small as you want it to be.

The purpose of the groups is to help you find the items later; so, the characteristics you use to create the groups should help you remember how to find the items at a later time.

When you are finished, I'm going to ask you to write down the name of each group and a brief description of it that includes the characteristics that you thought were similar for that group.

If you have any questions, feel free to ask at any time.
Please start your grouping.

***** SUBJECTS COMPLETE GROUPING TASK *****

Here is the form for you to write down your group names and descriptions. Again, please give each group a name or a label describing that group, and then write a brief description of that group that includes the characteristics that are similar about those items. The group name and the description can be the same, if you want.

Don't worry about the "Letter of items..." section; I'll fill that out.

GROUP NAME: _____

GROUP DESCRIPTION: _____

GROUP NAME: _____

GROUP DESCRIPTION: _____

GROUP NAME: _____

GROUP DESCRIPTION: _____

GROUP NAME: _____

GROUP DESCRIPTION: _____

