DEPARTMENT OF COMPUTER SCIENCE
UNIVERSITY OF TORONTO

CSC 318S

THE DESIGN OF INTERACTIVE COMPUTATIONAL MEDIA

Winter Term, 1997-8

Assignment 1

BRAINSTORMING IDEAS FOR TERM PROJECT

HANDED OUT: Monday, January 5, 1:10 p.m.
DUE BACK IN: Sunday, January 11, **4 p.m. to CSC318S Computer Conference**
WORTH IN MARKING SCHEME: 2 points

This term all students will work in multidisciplinary 4-5 people teams on a semester-long course project to carry out the user-centred, iterative design of prototypes of computational tools or systems appropriate to the needs of the elderly.

The job of each project team is to conceive, design, prototype, and evaluate a novel approach to this design problem.

THE PURPOSE OF THIS ASSIGNMENT

The purpose of this assignment is to help you conceive ideas for your term project and help you form the teams of 4-5 people that will be required for carrying it out.

THE TASK FOR THIS ASSIGNMENT

Conceive of **two (2)** applications of computer and communications technologies that fit the problem statement given above, that leverage the capabilities of new media technologies, and that could contribute significantly to the quality of life of the elderly.

BRAINSTORMING HEURISTICS

If you have trouble coming up with ideas, you might use any or all of the following approaches to stimulate idea development.

1) Think about the most critical problems facing the elderly, e.g., declining health, deteriorating physical capabilities, failing memory, increased need for security, loneliness, lack of meaningful work, increased leisure time, and worries about all of the above.

2) Think about typical tasks carried out by the elderly, e.g., grooming, dressing, eating, taking medications, walking, exercising, shopping, conversation, communication, recreation, financial management, and learning.

3) For various needs and tasks, think about relevant technologies and applications, e.g.,
• health — monitors for specific conditions, treatment advisors and reminders
• loneliness — email, computer conferencing, video conferencing
• learning — large-print electronic books.

4) Focus on the spaces within which the elderly typically are found, e.g., homes or apartments, senior citizen's homes or centers, doctor's offices, and specially-equipped vehicles.

5) Focus on instruments or aids used by the elderly, e.g., canes, glasses, hearing aids, wheel chairs, and cardiac monitors.

6) Focus on sensory modalities, e.g., sight, sound, touch, and mobility.

NOTE ON THE BRAINSTORMING HEURISTICS

Do not take these ideas as prescriptions for what you should do. They are only one collection of ideas. You can come up with different and better ideas. There is room for many approaches and a great deal of freedom in devising a plan for your project.

WHAT YOU SHOULD HAND IN

In one brief paragraph for each idea, describe your two ideas. Include your name, email address, and phone number so that others may contact you to link up with you in a team.

Also describe any relevant special skills and background. For example:
1) Knowledge of some subject domain or work area other than computer science, such as medicine or psychology, could be helpful in defining and working on the project.
2) Experience in behavioural or design disciplines could be helpful in developing and executing your project concept.

Post your ideas to the newsgroup by next Sunday afternoon January 11th. Everyone should scan the newsgroup Sunday night or Monday so you can begin the process of team formation. This will happen in Assignment 2 (to be distributed on Monday, January 12th).