

TJHSST Senior Research Project Proposal: Computer User Communication 2006-2007

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Abstract

I intend on creating a program to first communicate effectively with the user, then to, through psychological methods, determine something about the user:

- Project area 1: Actual communication program
- Project area 2: Information learning/storing
- Project area 3: Psychological interpretation

1 Introduction: program versions

1.1 1st Quarter

1.1.1 Program area 1

First version of my program area 1 will consist of writing a basic conversational program that will be able to converse with the user about a few generic topics with perfect english.

1.1.2 Program area 2

Hopefully by the end of the first quarter my program will be able to store basic user information in a file, to be accessed and added to as needed.

1.2 2nd Quarter

1.2.1 Program area 1

2nd version of my program area 1 will consist of higher communication skill between the computer and the user, gathering topics and knowlege like a child might, so that the more the program is used, the better it can emulate human converstaional patterns.

1.2.2 Program area 2

Second version of my program area 2 will consist of working on efficient ways to file information in order to be processed faster as well as the above mentioned learning.

1.3 Program area 3

In the second quarter I will research psychological methods of deciphering user text and determining a prognosis. This will require extensive online and library research. The reseach will include psychological diseases, classes, and techniques for interperitation from text.

1.4 3rd Quarter

1.4.1 Program area 1,2

During the 3rd quarter, my program should be able to effectivly converse with a user in a manner which will appear human and draw answers to questions that will lead to a psychological prognosis. I will store user information in a seperate files from the main information file, and even attempt to create a "personality" for the program.

1.4.2 Program area 3

I intend to have implimented the research found during the second quarter into the program. In addtion, I will look into other forms of information gathering from text, such as interrogation or legal proceedings.

2 Background

1. Computer Science

- I have written a conversational program in c++ before, as well as taking Compsci, AP Compsci, AI, Comp Arch.

2. Psychology

- I took AP Psychology last year.