

Thomas Green
CS 597 Enterprise Web Development
Homework 1

1.)

(a) Project title?

Food Recommendation System website based on Traditional Chinese Medicine (TCM) principles.

(b) What is it going to do?

Using the principles of TCM (five element theory, the balance of Yin and Yang, etc.) the website will recommend various foods the user can choose from to help balance any adverse conditions the user may be experiencing. An artificial neural network will attempt to learn values for the recommendations it makes that best match the findings from TCM. By having the user answer various questions on their current physical condition, the system will report any imbalance it detects and suggest foods known in TCM to help return the user to balance. Namaste.

(c) Who is the target audience?

Anyone interested in an alternative approach to dietary suggestions for health benefits.

(d) What sort of data will it manage?

User responses to questions, their initial weights for an Artificial Neural Network that tracks their personal balance based on the five element theory, personal health statistics - blood pressure, etc, and a static database of various foods with properties according to TCM.

(e) What web technologies will it use?

Python, maybe Rails
MySql
FANN - an Artificial Neural Network library

(f) Stretch Goals?

Initially, the ANN will be generic and trained for everybody. Ultimately, I would like to have a personalized ANN for each user as TCM suggests that each person has a unique balance based on the five element theory and, therefore, variance in the foods that will ideally keep that person's diet balanced.