KE4102: KE30 (2018) CA Project

This assignment is worth 40% of the total marks for this course. The assignment is to be completed as a group project with five or six members in each group.

OBJECTIVE

The objective of this assignment is to build a Recommender System using rule-based technique (CLIPS tool).

TASKS

(1) Discuss with your team and decide on a problem domain. It will help if you specified the **INPUT** and **OUTPUT** for the proposed system. For example, input is personality, house-type, time and budget; output is a specific pet that suits the user requirements. Make sure that you have a subject matter expert (**SME**) to conduct knowledge elicitation interviews. For example, a pet-shop owner, pet-breeder, Vet, or staff from SPCA or catwelfare.org.

(2) Acquire relevant domain knowledge from all possible sources. You are required to conduct several knowledge-acquisition interviews, and video-record at least one **interview**. Have a photo taken with the domain expert at his work place. Your domain knowledge can also come from internet sources. Provide a listing of all **references** that you have used to acquire the domain knowledge.

(3) Use the **knowledge modeling** techniques (trees, etc.) to represent the acquired knowledge. The modeling diagrams must be coherent and relevant to the problem solving task. Do not use modeling diagrams for the sake of using them.

(4) Implement the recommendation system using **CLIPS**. You must have some **user-interfaces** no matter how simple.

DELIVERABLES

Reports & System:
(1) Produce a well-written project report (10 PAGE MAX – excess will be ignored!) comprising the following: problem background; modeling diagrams/text materials organized in a logical way; the audio/video interview file and word-for-word interview transcription.

(2) A working system – softcopy, fully documented and with a User's Manual.

Presentation:
(3) Present your project

(a) Give a 20 min presentation of your project. ALL team members are required to take turns to present.

(b) Position your Recommender System as a product/service that you are "selling". Tell the class how great a system it is and why everybody should be using it. Your persuasion is important!

a. Who are your target users?
b. State clearly the benefits of your system.
c. What are the unique selling points/features
d. Provide a possible scenario of how your system can be used in real life

(c) Run a 10mins demo of your system with several cases

(d) You are expected to keep track of your own timing. I will have to stop you midway if you over-run and therefore disadvantage you in the end!

(e) Make use of your own laptops for presentation and demo. Note that ISS offers only 15pin VGA and the Apple mini display adapter. You are advised to try out the equipment before hand.

Due Dates:
5th (FT) and 10th (PT) March 2018, 09:30am punctually!
No Hardcopies please!
All reports/softcopies must be uploaded to IVLE by 9:30am.
NO LATE SUBMISSIONS – penalty marks issued at my discretion.
Uploaded the wrong version? – I treat it as late submission
No Excuses!

Presentations will start at 9:30am

MARKING SCHEME

10% knowledge acquisition (elicitation, survey, etc.)
20% problem modeling
30% Inference (i.e. system must exhibit intelligence, be convincing and appealing)
20% System design and development
10% Presentation (coherent, interesting, persuasive, NO OVERRUN!)
10% For well-written report