21/11/2019 project

Individual Project 1:

Weblog Mining

Due Date: 21 December, 2019

Marks: 20%

Objectives

 Learn to build a data mining application using a tool, e.g. PASW Modeler, <u>Weka 3</u>, or <u>SciKit</u>, or by programming using a familiar programming language, e.g., Python/Java/Visual C++/Visual Basic

- Explore the beauty of sequential association analysis and other data mining methods
- Understand and implement essential data mining techniques for a particular application
- Practice your ANALYTICS!

Brief Description

Based on a selected dataset, e.g. Microsoft Anonymous Web Data (publicly available from http://kdd.ics.uci.edu/databases/msweb/msweb.html), implement a data mining algorithm from ARM, Classification and Clustering (e.g. sequential ARM or ID3) and report the interesting patterns mined. The marking criteria are as follows.

Implementation	40%
Innovation (New Formulation, Idea, Algorithm, etc.)	30%
Report and Analysis	30%

Note:

If you don't want to write programs on your own, you may choose to use PASW Modeler (Clementine) or other public domain software like <u>Weka 3</u> to carry out the mining task.

What to hand in

- A video demo (no longer than 3 minutes) of your achievement.
- A short (<=8 pages) written report summarizing the work you have done and the **ANALYSIS** you have made.
- The source codes (if any) or the design (if using tools) of your system.

References

- 1. R. Agrawal and R. Srikant. <u>Fast Algorithms for Mining Association Rules</u>, Proc. of Very Large Databases (VLDB'94), pp.487-499, Santiago, Chile, 1994.
- 2. R. Agrawal and R. Srikant. <u>Mining Sequential Patterns</u>, Proc. of IEEE Int. Conf. on Data Engineering (ICDE'95), pp.3-14, Taipei, 1995.

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