Abstract

Every educational institution around the globe maintain student result repository which contain information about student marks, grade in different subjects and examinations. This repository contains important hidden pattern/knowledge which can be uncovered through data mining. A decision tree classifier based on divide and conquer rules is widely used for data exploration in such repository. In this paper J48 decision tree algorithm is applied on student previous result data to build a model in the form of decision tree. This model can then predict the student final grade. This will be helpful for teacher, student and their parents to know in advance about student final predicted grade and will enable them to take preventive measure.
assess Evolutionary Algorithms to Data Mining problems. Soft comput, 10.
1007/s00500-008-0323y.
underperformer using classification. International Journal of Computer Science and information
technology, 2(2), pp. 686-690.
application, journal of marmara for pure and applied science, 18, pp. 159-174.
Kaufmann.
- Deshpande, S. P., & Thakare, V. M. (2010), Data mining system and applications: A
review, international journal of distributed and parallel system, 1(1), pp. 22-44.
- Kabachieva, D. (2013), Predicting Student Performance by Using Data Mining Methods
for Classification, Cybernetics and information technologies, 13(1), PP. 61-72
- Bhardwaj, B. K., & Pal, S. (2011), Data mining: A prediction for performance
improvement using classification, International journal of computer science and information
security, 9 (4), pp. 86-91
Data Mining, Proceedings of the 4th International Conference on Educational Data Mining,
Eindhoven, The Netherlands, PP. 271-276
- Ramaswami, M., & Bhaskaran, R. (2010), A Chaid based performance prediction model
in educational data mining, international journal of computer science issue, 7(1), pp. 10-18
of engineering students using classification, World of computer science and information
technology journal, 2(2), pp. 51-56.
performance in the introductory management science course, Academy of Educational
Leadership Journal, 15, PP. 69-80
Decision Trees in Weka Environment, Proceeding of the ITI 2007 29th international conference
on information technology interfaces, June 25-28, Cavatt, Croutia. pp. 51-56
35-43.
- Prasad, G. N. R., & Babu, A. V. (2013), Mining previous marks data to predict students
performance in their final year examination, international journal of engineering research &
technology, 2(2), pp. 1-4.
technique, San Francisco, Elsevier & Morgan Kaufmann.

Index Terms

Computer Science

Information Science
Final Grade Prediction of Secondary School Student using Decision Tree

Keywords
- Data Mining
- Educational Data Mining (EDM)
- Classification
- Prediction
- Decision
- J48

Data repository

Student Grade