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.

References

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

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Keywords

Data Mining  Educational Data Mining (EDM)  Classification  Prediction  Decision Tree

Data repository

Student Grade