

Data Mining Assignment—Part II

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Deadline: 15 December 2017

1 Practical information

Deadline: 15 December 2017
Group size: Up to four students
How to submit: Upload solution at `uv.ulb.ac.be`

2 Objectives

As a Data Analyst, you are asked by an Information Technology (IT) department to process and analyse satisfaction of customers using the the association rules approach.

3 IT Help Desk data set

The data set is an IBM Watson Analytics Data set from an Information Technology (IT) department interested in examining how quickly issues are resolved and improving satisfaction of customers. To start their analysis, they have this data set of 100,000 closed tickets that were filed at their help desk. The number of attributes is 9:

1. employee who submitted the ticket
2. employees seniority within the company
3. IT employee who serviced the ticket
4. functional area against which the ticket was filed (systems, software, hardware, access)
5. whether the ticket was a request for new services or an issue with existing services
6. submitter-assigned severity of the ticket
7. IT-assigned priority of the ticket
8. number of days the ticket was open
9. satisfaction with the resolution of the ticket (reported by the submitter)

4 Deliverables

You should deliver the Rapidminer solution(s) and a report (as a.pdf) containing the following elements:

1. A **cover page** with the list of group members, including student ID,
2. Your **data set preprocessing** step including your Rapidminer solution(s) with an explanation. You can use screenshots to explain your solution(s) (5 points),
3. Your **data mining process(es)** step including your Rapidminer solution(s) with an explanation. You can use screenshots to explain your solution(s) (5 points),
4. Your **model(s) evaluation** step with an explanation. You can use tables and graphics (5 points),
5. Your **analysis and discussion**: you provide your results analysis and discussion(5 points).

Submit files as a single .zip-file on the université virtuel course website.