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## Extraction of association rules based on genetic algorithm and data mining techniques

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In this project we intend to design and implement a tool dedicated to the automatic generation of association rules from a database. In order to generate the most relevant rules, we considered in this work, three different approaches: (1) extraction of rules from three data mining algorithms (Apriori, Close and CHARM); (2) enrichment of approach 1 by the application of the genetic algorithm; and (3) use of the genetic algorithm before applying one of the data mining algorithms. Moreover, we proposed two measures of relevance: weighted dominance and medium support. UML modeling was done before developing the extraction tool that supports our three approaches. Several experiments were carried out with a base related to the purchase of products. The results show that the third approach generated the most relevant rules.

### Biography

Lyliya Betit holds a Degree in Computer Science from USTHB: Houari Boumediene University of Science and Technology, Algeria. She is now admitted to continue her studies (Master 1 and 2) in Artificial Intelligence.

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