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**Cloud Computing for Data Analysis**

**VIDEO CASE 08 : Action Rules**

Watch following videos:

**Video 1:** <https://youtu.be/3ZdhhuqypDM>

**Video Case Questions:**

1. What are differences between Classification Rules and Action Rules?
2. How the attribute set in a dataset should be divided for Action Rules?
3. In what other application action rules can be applied?

**Answers:**

1. Difference between Classification Rules and Action Rules are as follows:
   1. Classification rules have one attribute in then part i.e. their consequent part. But association rule as it can have as many attributes in its consequent part.
   2. Classification attribute are non-deterministic tasks i.e. no high predictive accuracy on the test set. But action rules are deterministic in nature i.e. high predictive accuracy.
   3. Under fitting or overfitting avoidance a concern for the classification rules, whereas it is not such a case for action rules.
2. The attribute set in a dataset should be divided into two parts
   1. Stable attributes:
      1. Stable attributes are a mostly a function of time. They can undergo deterministic changes and can be assumed as a division of conditional attributes. The attributes like height, age etc. can be taken as examples for stable attributes. They are thought of as attributes which can’t perform an action.
   2. Flexible attributes:
      1. Flexible attributes on the other hand can perform actions i.e. the values in these attributes are capable of performing actions. By providing a strategy, we can also lower the costs.
3. Action rules can be applied in the following fields:
   1. Business: To gain more profit
   2. E-commerce
   3. Social Media
   4. Engineering
   5. Medical
   6. Finance