



APPENDIX D:

Individual Project Report

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1. Personal contribution

Contribution	Percentage
Project Video	100%
Project Audio	100%
Project Report	100%
Project Proposal	100%
User Guide	100%
Project vs. Course Knowledge Mapping	100%
Project Management	5%
Knowledge Acquisition & Representation	30%
Market Research	10%

2. Learnt useful

This is my first time to hands on a rule based system. The concept is quite different from a traditional system and I think the key is the knowledge base.

Thus the most useful part to me is Knowledge Acquisition & Representation, which is to extract rules out of various sources and put them in a systematic way.

Below table shows a small sample of the rules I extracted from natural language.

1	WHEN 'Deposit' < 5000 THEN 'Basic Interest' = 0.25%
2	WHEN 'Deposit' >= 5000 AND 'Deposit' < 20000 THEN 'Basic Interest' = 0.275%
3	WHEN 'Deposit' >= 20000 AND 'Deposit' < 50000 THEN 'Basic Interest' = 0.35%
4	WHEN 'Deposit' >= 50000 AND 'Deposit' < 100000 THEN 'Basic Interest' = 0.4%
5	WHEN 'Deposit' >= 100000 THEN 'Basic Interest' = 0.475%
6	WHEN 'Deposit' <= 60000 AND 'Card Spend' >= 1500 THEN 'Bonus Interest' = 1.6%
7	WHEN 'Deposit' <= 60000 AND 'Card Spend' >= 500 AND 'Card Spend' < 1500 THEN 'Bonus Interest' = 0.8%
8	WHEN 'Deposit' <= 60000 AND 'Salary Credit' >= 6000 THEN 'Bonus Interest' = 1.2%
...	...

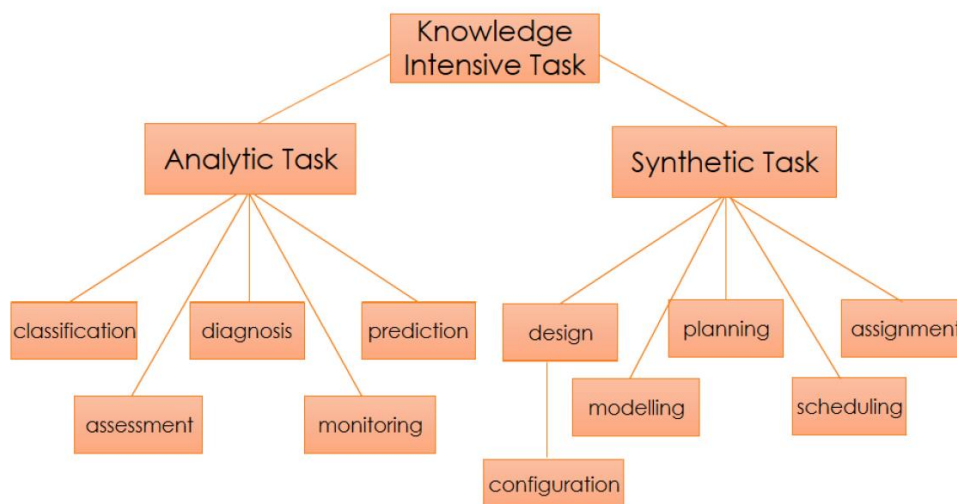


We have hundreds of rules. Thus we also need to apply the knowledge learnt in Machine Reasoning to decide which rules are with more weight than others so that they can be execute first. It is the knowledge acquisition & representation provides the system a foundation.

3. Apply to other situations

Actually, the rule based concept can be used in many situations.

Our project is handling synthetic task which is finding the most suitable account combination. Besides, as below view shows, the rule based concept is also capable to handle analytic task.



System may also use customers' consuming history to analyze & categorize customers into different groups. There might also be trends eg. Some kind of consuming/investing habits may easier lead to bankrupt or customers within same categorization may have higher chance sharing same consuming or investing habit.

These analytic results may help banks and customers themselves as well.

