

# Credit Application Rule Modeling Challenge – Corticon Solution 1

## Mike Parish

Determine Private Suitability.ers					
Conditions	1	2	3	4	5
a Is the applicant an existing customer?	F	T	T	T	T
b What is the customer annual income?	-	>= 100000	-	-	other
c What is the customer outstanding mortgage?	-	-	>= 300000	-	other
d What is the customer savings and investments balance?	-	-	-	>= 100000	other
<b>Actions</b>					
Post Message(s)					
A Suitable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B Not Suitable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Determine Student Suitability.ers			
Conditions	1	2	3
a Is the applicant an existing customer?	F	T	T
b What is the customer current account type?	-	'Student'	other
<b>Actions</b>			
Post Message(s)			
A Student Suitability is	'Unsuitable'	'Suitable'	'Unsuitable'

Determine Demographic Suitability.ers						
Conditions	0	1	2	3	4	5
a What is the applicant's age?		< 18	>= 18	>= 18	>= 18	>= 18
b What type of card are they applying for?		-	{'Student', 'Private'}	'Private'	'Student'	other
c Are they an existing customer?		-	F	T	T	-
d						
<b>Actions</b>						
Post Message(s)						
A Age is determined as of today's date	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B Unsuitable	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C Suitable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D Suitability is private suitability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E Suitability is student suitability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Determine Applicant Credit Score.ers															
Conditions	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
a How many defaults in the past 12 months?		1..3	4..6	> 6	0	-	-	-	-	-	-	-	-	-	-
b Declared bankruptcy?		-	-	-	-	T	F	-	-	-	-	-	-	-	-
c Years with current account?		-	-	-	-	-	-	< 1	1..3	> 3	-	-	-	-	-
d Credit used percent?		-	-	-	-	-	-	-	-	-	0..24	25..49	50..74	75..100	> 100
Actions															
Post Message(s)															
A Credit score starts at zero	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B Add this to the credit score		100	50	0	250	0	250	50	150	350	200	249	150	100	0

Determine Balance Transfer Eligibility.ers					
Conditions	1	2	3	4	5
a What is the applicant annual income?	> 10000	<= 10000	-	-	-
b What is the applicant residential status?	'UK Resident'	-	other	-	-
c Has the applicant applied in the past six months?	F	-	-	T	-
d How many years of address history does the applicant have?	>= 3	-	-	-	< 3
Actions					
Post Message(s)					
A Balance transfer eligibility is	'Eligible'	'Ineligible'	'Ineligible'	'Ineligible'	'Ineligible'

Determine Credit Card Eligibility.ers						
Conditions	1	2	3	4	5	6
a Applicant card type	'Student'	'Student'	'Private'	'Private'	'Balance Transfer'	'Balance Transfer'
b Applicant credit score	>= 500	< 500	>= 750	< 750	>= 750	< 750
Actions						
Post Message(s)						
A Credit card eligibility is	'Eligible'	'Ineligible'	'Eligible'	'Ineligible'	app.eligibilityBalanceTransfer	'Ineligible'