Business Rules in JavaScript from Symbolic Expressions

The Rules can be authored as a Symbolic Expression using the SLANG language ( available @ <http://slangfordotnet.codeplex.com> ) and the JavaScript language backend of the Compiler will be used to generate equivalent JSON .

The Excel Spread sheet will contain three worksheets viz

1. Variables ( Environment )
2. RuleText
3. ProgramToRule mapping

As an Example , A Elligibility rule based on some Variables are given below

1. Variables ( Environment )

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| |  |  |  |  | | --- | --- | --- | --- | | VariableName | Type | Remarks | DefaultValue | | TA | Numeric | Travelling Allowance | 0 | | DA | Numeric | Dearness Allowance | 0 | | BASIC | Numeric | Basic Salary | 0 | | HRA\_DEDUCTION | Numeric | HRA allowance | 0 | | OTHER\_DEDUCTION | Numeric | Other Deduction | 0 | | SEX | STRING | "F" or "M" | M | | Handicapped | Boolean | TRUE Or FALSE | TRUE | |

1. RuleText Sheet contains

|  |  |  |
| --- | --- | --- |
| Rulename | RuleText | Remarks |
| R1 | Numeric Temp;  Numeric Temp1;  Temp = ( TA + DA + BASIC );  Temp1 = ( HRA\_DEDUCTION + OTHER\_DEDUCTION );  Temp1 = Temp - Temp1;  return Temp1 < 10000; |  |
| R2 | return SEX == "F"; |  |
| R3 | return SEX == "M" && HandiCapped == TRUE; |  |

1. The ProgramToRuleMappings contain

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | ProgramName | Expression | Remarks | | P1 | R1 Xor R2 | Only R1 or R2 should be true not both | | P2 | R1 OR R3 | R1 or R3 can be true | |

The Spreadsheet can be used as a input to generate the JSON.