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## List of Symbols

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$N_{DL}$	Namespace of a DL
$N_{DL}^C$	Set of classes in $N_{DL}$
$N_{DL}^R$	Set of roles in $N_{DL}$
$N_{DL}^I$	Set of individuals in $N_{DL}$
$\Delta^I$	Domain of interpretation
$\cdot^I$	Interpretation function
$\mathcal{F}$	Functional properties in DL
$\varepsilon$	Full existential qualification in DL
$\mathcal{H}$	Role hierarchy in DL
$\mathcal{C}$	Complex concept negation in DL
$\mathcal{U}$	Concept union in DL
$\mathcal{N}$	Cardinality restrictions in DL
$\mathcal{J}$	Inverse properties in DL
$\mathcal{O}$	Nominals or enumerated class in DL
$\mathcal{D}$	Datatype properties in DL
$\mathcal{S}$	Abbreviation for $\mathcal{ALC}$
$\mathbb{O}$	Ontology

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$K$	Formal context
$O$	Set of objects in $K$
$A$	Set of attributes in $K$
$I$	Binary relation between $O$ and $A$ of $K$
$\mathcal{T}$	Translation function to convert DL to DeLP
$\mathcal{L}$	Concept lattice
$\mathcal{K}$	Set of formal contexts
$\mathcal{R}$	Context of roles whose lattice represents role hierarchy
$\mathcal{M}$	Set of functions mapping roles of $\mathcal{R}$ to their domains and ranges
$\mathcal{Z}$	Three tuple $(\mathcal{K}, \mathcal{R}, \mathcal{Z})$
$C(\mathcal{R})$	Formal concept set of $\mathcal{R}$
$\delta$	Domain function
$\rho$	Range function
$\mu$	Function to map a context to set of roles
$op_{\odot}$	Operator type for any operation $\odot$
$ X $	Cardinality of set $X$
$\lambda$	Function mapping FCA elements to DL

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