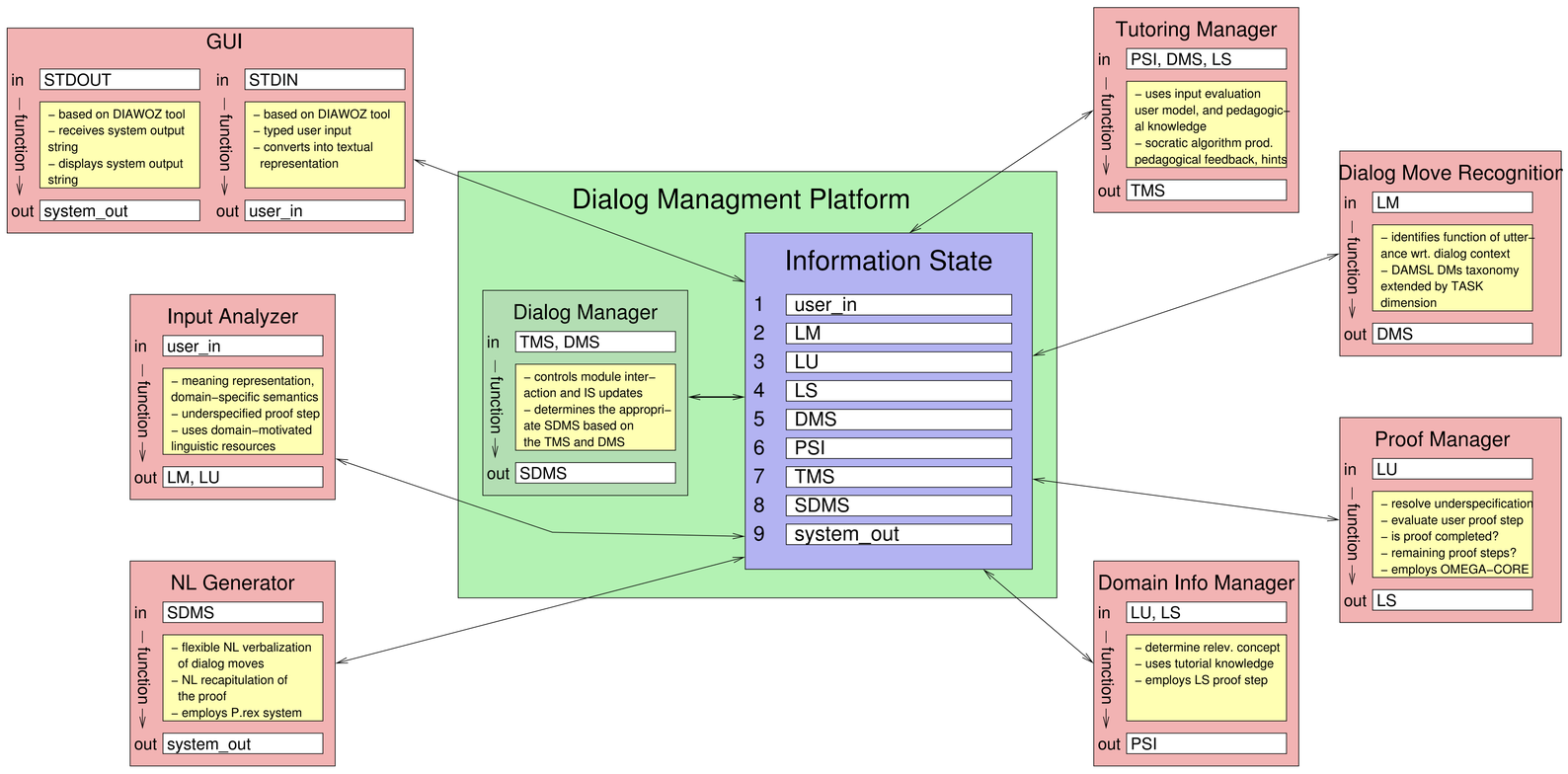
SFB 378
Ressourcenadaptive
Kognitive Prozesse

MI 3: DIALOG
The Demonstrator

SPRACHE LOGIK

Project MI 3 — DIALOG — Pinkal, Siekmann, Benzmüller, Kruijff-Korbayová

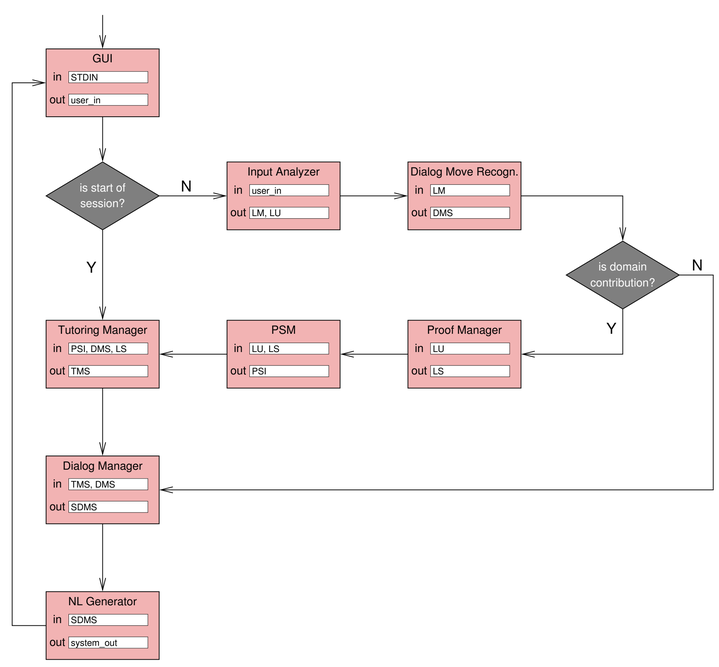


Abbreviation	Meaning	Example
STDIN, user_in	standard input	*“nach deMorgan-Regel-2 ist* $K((A \cup B) \cap (C \cup D)) = (K(A \cup B) \cup K(C \cup D))$*”*
LM	linguistic meaning	$s : @h1(\mathbf{holds} \wedge <\text{Norm}>(d1 \wedge deMorgan\text{–}Regel\text{–}2) \wedge <\text{Patient}>(f1 \wedge FORMULA1))$
LU	proof language with underspecification	(input (label 1_1) (formula (= (complement (intersection (union a b) (union c d))) (union (complement (union a b)) (complement (union c d)))))) (type ?) (direction ?) (justifications (just (reference DeMorgan-2) (formula ?) (substitution ?) (role:from))))
LS	system-oriented proof language (+ evaluation)	((KEY 1_1) ⟶ ((Evaluation (expStepRepr (label 1_1) (formula (=(complement(intersection(union(A B) union(C D))) union(complement(union(A B)) complement(union(C D))))))) (type inference) (direction forward) (justification ((reference demorgan-2) (formula nil) (substitution ((X union(A B) Y union(C D)))) (role nil)))) (StepCat correct))) (ProofCompleted false) (completeProofs . . . see next poster . . .))
DMS	dialog move specification	{ fwd = “Assert”, bwd = “Address_statement”, commm = “”, taskm = “”, comms = “”, task = “Domain_contribution” }
PSI	proof step information	{domConCat: “correct”, proofCompleted: false, proofstepCompleted: true, proofStep: “”, relConU: true, hypConU: true, domRelU: false, iRU: true, relCon: “” “+(char)8745”, hypCon: “” “+(char)8746”, domRel: “”, iR: “deMorgan-Regel-2”}
TMS	tutorial move specification	{mode= “min”; task= (signalAccept; {proofStep= “”; relCon= “”; hypCon= “”; domRel= “”; iR= “”; taskSet= “”; completeProof= “”})}
SDMS	system dialog move specification	{ mode = “min”; fwd = “Assert”; bwd = “Address_statement”; task = (“signalCorrect”, {proofStep= “”, relCon= “”, hypCon= “”, domRel= “”, iR= “”, taskSet= “”, completeProof= “”}); comms = “”; commm = “”; taskm = “” }
system_out	textual representation of NL output	“Das ist richtig”.

Employed Software Systems

- Rubin dialog management platform from CLT company (Dialog Managment)
- New mathematical assistance system OMEGA-CORE (Proof Management)
- Wizard-of-Oz experiments support tool DIAWOZ (GUI)

Module Execution



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