Overview

KnowWE is a semantic wiki designed for the integration of components for diagnostic problem-solving. To support the development of (diagnostic) knowledge systems, components for formalization (markup, editors), for reasoning (rules, decision-trees, fault models) and for executing/testing have been implemented. The goal is to combine the strength of knowledge-based systems with the ease of Wikis to support collaborative knowledge engineering.

KnowWE

• Wiki-based workflow: collaborative fast and simple editing with immediate feedback.
• Combination of unformalized (startup documents) and (semi-) formalized knowledge.
• Problem-solving knowledge is instantly compiled into a knowledge base after saving a wiki page. It can be tested via starting test cases in user interviews.

User Interviews

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Markups and Editors

• Wiki editing (proprietary markup)
• Additional editors
  • Table/Inline-editing
  • Visual editors
  • Syntax highlighting
  • Verbose syntax-check
  • Integrated refactoring tools
• Unit-test-cases
• Extensibility

Refactoring

d3web Engine

• Open-source reasoning for diagnostic problem-solving, e.g. heuristic scoring rules, heuristic decision trees, set-covering fault models
• Implemented as KnowWE extension
• Compatible knowledge interchange with d3web.KnowME

Architecture

Flowchart Editing

Textual Editing

Table Editing

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Page Dimensions: 595.0x842.0