**D4.2.1 Interface Control Document (ICD)**

ModelWriter

Text & Model-Synchronized Document Engineering Platform

Project number: ITEA 2 13028

Work Package: WP4 Knowledge Base Design and Implementation

Task: T4.2 - API of the Knowledge Base

Edited by:

Ferhat Erata <ferhat.erata@unitbilisim.com> (UNIT)

Moharram Challenger <moharram.challenger@unitbilisim.com> (UNIT)

Geylani Kardaş [geylani.kardas@ege.edu.tr](mailto:geylani.kardas@ege.edu.tr) (KoçSistem)

Date: 07-June-2015

Document version: 1.0.0

Apart from the deliverables which are defined as public information in the Project Cooperation Agreement (PCA), unless otherwise specified by the consortium, this document will be treated as strictly confidential.

Document History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Author(s) | Date | Remarks |
| 0.5.0 | Ferhat Erata  Moharram Challenger | 07-June-2015 | Draft |
| 1.0.0 | Mehmet Onat  Geylani Kardas | 09-Sep-2015 | Providing the content including the interface and description |
|  |  |  |  |

Table of Contents

[Document History 2](#_Toc430175428)

[1. Introduction 4](#_Toc430175429)

[Role of the deliverable 4](#_Toc430175430)

[The List of Technical Work Packages 4](#_Toc430175431)

[Structure of the document 4](#_Toc430175432)

[Terms, abbreviations and definitions 4](#_Toc430175433)

[2. Interface Control Document (ICD) 5](#_Toc430175434)

[3. Conclusion and way forward 6](#_Toc430175435)

[References 7](#_Toc430175436)

1. Introduction

Role of the deliverable

This document provides the Interface Control Document (ICD), which specifies the API for accessing & manipulating the Knowledge Base.

The List of Technical Work Packages

|  |  |
| --- | --- |
| UC Code | Requirements derived from |
| WP2 | Semantic Parsing and Generation of Documents and Documents Components |
| WP3 | Model to/from Knowledge Base (synchronization mechanism) |
| WP4 | Knowledge Base Design and Implementation |
| WP6 | Architecture, Integration and Evaluation |

Structure of the document

This document is organized as follows:

Chapter 1 introduces the document.

Chapter 2 the interface.

Chapter 3 concludes the document.

Terms, abbreviations and definitions

|  |  |
| --- | --- |
| Abbreviation | Definition |
| RDF | Resource Description Framework |
| WP | Work Package |
| UC | Use Case |
| ICD | Interface Control Document |

1. Interface Control Document (ICD)

package synalp.commons.input.knowledgeBase;

import java.io.IOException;

import java.util.Set;

import com.hp.hpl.jena.ontology.DatatypeProperty;

import com.hp.hpl.jena.ontology.Individual;

import com.hp.hpl.jena.ontology.ObjectProperty;

import com.hp.hpl.jena.ontology.OntClass;

import com.hp.hpl.jena.rdf.model.Resource;

import com.hp.hpl.jena.util.iterator.ExtendedIterator;

public interface IOntologyAnalysis {

// Method that provides the list of the ontology's classes

public abstract Set<OntClass> getClasses();

//Method that creates a text from the label skos definition

public abstract void CreateTextFromDefinition(String fileTextFromKB)

throws IOException;

// Method that provides the list of the ontology's datatypesPoperties

public abstract ExtendedIterator<DatatypeProperty> getDatatypeProperties();

// Method that provides the list of the ontology's objectPoperties

public abstract ExtendedIterator<ObjectProperty> getObjectProperties();

// Method that provides the list of the ontology's individuals

public abstract Set<Individual> getIndividuals();

// Method that provides the list of all ontology's concepts

public abstract Set<Resource> getOntoConcepts();

// Method that provides the resources corresponding to a word

public abstract OntClass getResource(String word);

// Method that checks if two classes are disjoint or not

public abstract boolean isDisjoint(OntClass c1, OntClass c2);

}

1. Conclusion and way forward

This document provides the Interface Control Document (ICD), which specifies the API for accessing & manipulating the Knowledge Base.

In the second year of the implementation of these interfaces will be realized and integrated in the project.

References

N/A