

EiffelRSS

Project description

Michael Käser <kaeserm@student.ethz.ch>

Martin Luder <luderm@student.ethz.ch>

Thomas Weibel <weibelt@student.ethz.ch>

Abstract

EiffelRSS is an Eiffel library to parse RSS. The goal is to provide the Eiffel development community with an easy to use and well structured API for RSS.

The distribution also contains a simple RSS newsfeed reader written with EiffelVision and EiffelRSS.

1 Library

The library of EiffelRSS consists of several different clusters.

1.1 ADT

[TODO]

1.2 FETCH

FETCH is a class which has features that can fetch data from a source address to a local STRING using various services. FETCH provides a simple interface for the DATA_RESOURCE class in EiffelNet.

A valid source address has the following format: `service://address`.

Supported services are: file, http, ftp.

[TODO: BON diagram]

1.3 LOGFILE

LOGFILE represents a file which can be used for logging messages during the program execution.

Each message has its own priority (a positive integer value) and each logfile a certain user defined threshold. If the priority of the message is greater or equal than the threshold, it gets written to the log file together with a timestamp.

[TODO: BON diagram]

1.4 PROPERTIES

PROPERTIES represents a persistent set of properties. The properties can be saved to a file or loaded from a file.

Each key and its corresponding value in the property list is a string.

A property list can contain another property list as its default. This default property list is searched if the property key is not found in the original property list.

PROPERTIES is similar to the `java.util.Properties` class. The main difference is, that PROPERTIES doesn't support keys and values separated by whitespace only. It always expects `:` or `=` as a separator between key and value.

[TODO: BON diagram]

1.5 SYNDICATION

SYNDICATION is the main cluster of EiffelRSS. It contains several subclusters.

1.5.1 FEED

FEED is the central datastructure. It defines an abstract syndication feed.

[TODO: BON diagram]

1.5.2 FORMATS

FORMATS defines the different syndication formats.

[TODO: BON diagram]

1.5.3 READERS

READERS defines readers for different syndication formats.

[TODO: BON diagram]

1.5.4 WRITERS

WRITERS defines writers for different syndication formats.

[TODO: BON diagram]

2 Newsreader

[TODO: Description, screenshot, BON diagrams]

3 Extensibility

EiffelRSS is designed with extensibility in mind.

Initially EiffelRSS will only support reading of RSS 2.0. But the library is designed to be easily extensible by other RSS readers. Even non-RSS syndication formats like Atom can be parsed into EiffelRSS' datamodel. It is also feasible to add writing support and to write any syndication format (even non-XML). Because EiffelRSS uses an abstract intermediate representation of newsfeed data, one can also convert from one format to another.

Another possibility of extension would be the newsfeed reader written with EiffelVision. This application could be extended to a full fledged newsfeed reader.

4 Who does what?

4.1 Michael Käser

[TODO]

4.2 Martin Luder

[TODO]

4.3 Thomas Weibel

[TODO]