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Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author(s)** |
| 2017-11-21 | 0.1 | Test cases and description added | Elfat Esati |
| 2017-11-30 | 0.2 |  |  |
|  |  |  |  |

# 

# Introduction

A short introduction should be part of any written document.

# Public API Overview

## Public Classes

The following classes are part of the public API and should be tested by using automated test procedures:

|  |  |
| --- | --- |
| **Container Elements** | **Leaf Elements** |
| * DOCUMENT * LISTNODE * TABLENODE * TEBLEROWNODE | * CUSTOMELEMENT * TEXTNODE * DOCUMENTLINKNODE * LISTITEMNODE * TABLECELLNODE * IMAGENODE * HEADIGNODE * EXTERNALLINKNODE |

## Public Routines

|  |  |  |
| --- | --- | --- |
| **Routine** | **Class of the Routine** | **Expected Arguments** |
| accept | DOCUMENT | Object belonging to a subclass of A\_VISTOR |
| getname | DOCUMENT | none |
| accept | LISTNODE | Object belonging to a subclass of A\_VISTOR |
| addChild | LISTNODE | Object of LISTITEMNODE |
| accept | TABLEROWNODE | Object belonging to a subclass of A\_VISTOR |
| accept | TABLENODE | Object belonging to a subclass of A\_VISTOR |
| addChild | TABLENODE | Object of TABLEROWNODE |
| accept | CUSTOMELEMENT | Object belonging to a subclass of A\_VISTOR |
| addtext | CUSTOMELEMENT | String |
| accept | TEXTNODE | Object belonging to a subclass of A\_VISTOR |
| accept | DOCUMENTLINKNODE | Object belonging to a subclass of A\_VISTOR |
| accept | LISTITEMNODE | Object belonging to a subclass of A\_VISTOR |
| accept | TABLECELLNODE | Object belonging to a subclass of A\_VISTOR |
| accept | IMAGENODE | Object belonging to a subclass of A\_VISTOR |
| getSource | IMAGENODE | none |
| getAlt | IMAGENODE | none |
| accept | HEADINGNODE | Object belonging to a subclass of A\_VISTOR |
| getLevel | HEADINGNODE | none |
| accept | EXTRENALLINKNODE | Object belonging to a subclass of A\_VISTOR |
| getLink | EXTRENALLINKNODE | none |

# Test Suite Description

Test Suite also called Validation Suite comprise the sets of test cases. Test Cases help us define or list down all the cases or situations under which the system or library works as expected and comply to a high level of quality. When the test cases represent a scenario for instance login, do something and log out, then the test suite may contain those test cases. Succesful completion of one test case need to happen before we test the next case. When we have identified all the test cases then we need to validate them to ensure the system works correctly with no failures and bugs.

## Individual Tests

### General

|  |  |
| --- | --- |
| Test Case ID | T.3.1.1.001 |
| SRS ID of Functionality | R3.2.1.001 |
| Name of Functionality | Inexplicit Usage of Functions |
| Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle |  |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.1.002 |
| SRS ID of Functionality | R3.2.1.002 |
| Name of Functionality | System |
| Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle |  |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.1.003 |
| SRS ID of Functionality | R3.2.1.003 |
| Name of Functionality | Creating Documents |
| Class and Routines | Class: Document, routine: make |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | A valid document object should be created. It should have an internal name that was determined within the creation procedure. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

### Presentation Semantic

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.001 |
| SRS ID of Functionality | R3.2.2.001 |
| Name of Functionality | Internal Links |
| Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | NOT YET IMPLEMENTED |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.002 |
| SRS ID of Functionality | R3.2.2.002 |
| Name of Functionality | Linking Multiple Reports |
| Classes and Routines | Class: DOKUMENTLINKNODE, routine: make; Class: DOCUMENT, routine: addChild |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | An object characterized by a link text and a DOCUMENT object, on which the object refrences, is created and assigned to an object of type DOCUMENT. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.003 |
| SRS ID of Functionality | R3.2.2.003 |
| Name of Functionality | Linking Documents / Web Pages Accessible through the Web |
| Classes and Routines | Class: EXTERNALLINKNODE, routine: make; Class: DOCUMENT, routine: addChild |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | An object characterized by a link text and a string representing an URL, on which the object refrences, is created and assigned to an object of type DOCUMENT. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.004 |
| SRS ID of Functionality | R3.2.2.004 |
| Name of Functionality | Referencing Images by URL |
| Classes and Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | An object characterized by an alternative text and a string representing an URL, which leads to the extrenal image, is created and assigned to an object of type DOCUMENT. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.005 |
| SRS ID of Functionality | R3.2.2.005 |
| Name of Functionality | Generating Images from Local Files |
| Classes and Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | An object characterized by an alternative text and a string representing a local file path, which leads to the local image, is created and assigned to an object of type DOCUMENT. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.006 |
| SRS ID of Functionality | R3.2.2.006 |
| Name of Functionality | Creating Bullet Lists |
| Classes and Routines | Class: LISTITEMNODE, routine: make; Class: LISTNODE, procedure: make, addChild; Class: DOCMENT, procedure: addChild |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | One or multiple objects of type LISTITEMNODE containing simple text are created and added to an object of type LISTNODE. The latter is assigned to an object of type DOCUMENT. The text contained in the objects of LISTITEMNODE are given by user input. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.007 |
| SRS ID of Functionality | R3.2.2.007 |
| Name of Functionality | Creating Tables |
| Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle |  |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.008 |
| SRS ID of Functionality | R3.2.2.008 |
| Name of Functionality | Text |
| Classes and Routines | Class: TEXTNODE, routine: make; Class: DOCUMENT, routine: addChild |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | An object specified by a string entered by the user is contained in an object of type DOCMENT. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.009 |
| SRS ID of Functionality | R3.2.2.009 |
| Name of Functionality | Headers |
| Classes and Routines | Class: HEADINGNODE, routine: make; Class DOCUMENT, routine: addChild |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | An object of type HEADINGNODE which is characterized by two features representing the heading text and hierarchy level ais contained in an object of type DOCUMENT. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.010 |
| SRS ID of Functionality | R3.2.2.010 |
| Name of Functionality | Including Existing Code |
| Routines | Class: CUSTOMELEMENT, routines: make, addText |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | An object of type CUSTOMELEMENT containing an user-specified string representing markup code is assigned to an oject of type DOCUMENT. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.2.011 |
| SRS ID of Functionality | R3.2.2.011 |
| Name of Functionality | Reading from File |
| Classes and Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | NOT YET IMPLEMENTED |

### Document Structure

|  |  |
| --- | --- |
| Test Case ID | T.3.1.3.001 |
| SRS ID of Functionality | R3.2.3.001 |
| Name of Functionality | Document Name |
| Classes and Routines | Class: DOCUMENT, routines: make, getName |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | Each object of type DOCMENT is characterized by an user-specific string representing the document’s name. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

|  |  |
| --- | --- |
| Test Case ID | T.1. |
| SRS ID of Functionality | R3.2.3.002 |
| Name of Functionality | Correctly Indented Output |
| Classes and Routines | Class: DOCUMENT, routine: accept |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | The markup output is well-structured by using indentation. Each child element is intended in relation to its parent element. The indentation has always the same size. No messages should be displayed. Furthermore, no errors should be raised. There is no item or value returned. |

### Output

|  |  |
| --- | --- |
| Test Case ID | T.3.1.4.001 |
| SRS ID of Functionality | R3.2.4.001 |
| Name of Functionality | Output to HTML (Clear Text) |
| Classes and Routines | Class: DOCUMENT, routine: accept |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | The content an DOCUMENT object is returned in form of a string representing a valid HTML document. No messages should be displayed. Furthermore, no errors should be raised. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.4.002 |
| SRS ID of Functionality | R3.2.4.002 |
| Name of Functionality | Output to Markdown (Clear Text) |
| Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | The content an DOCUMENT object is returned in form of a string representing a valid markdown document. No messages should be displayed. Furthermore, no errors should be raised. |

|  |  |
| --- | --- |
| Test Case ID | T.3.1.4.003 |
| SRS ID of Functionality | R3.2.4.003 |
| Name of Functionality | Markup Output to Local File |
| Routines |  |
| Set Up |  |
| Tear Down |  |
| Test Data |  |
| Oracle | NOT YET IMPLEMENTED |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Id** | **SRS ID** | **Test Case Description** | **Set Up** | **Tear Down** | **Test Data or Situation** | **Expected Result** |
| 2.1.1 | R3.2.5.001 | The functions (classes) of the software library must be already implemented without having to do them explicitely. | Check the effective classes and functions | None | Depending on functions, if they expect argument()s or not. | The functions must either be a query or procedure. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Id** | **SRS ID** | **Test Case Description** | **Set Up** | **Tear Down** | **Test Data or Situation** | **Expected Result** |
| 2.1.2 | R3.2.5.002 | The library should be available only for Eiffel Projects. | None | None | The library does not guarantee to work on different Projects or Platforms. | HTML snippets. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Id** | **SRS ID** | **Test Case Description** | **Set Up** | **Tear Down** | **Test Data or Situation** | **Expected Result** |
| 2.1.3 | R3.2.1.001 | The library should be able to generate HTML links to be placed in the document. Linking to other parts of the report. The user can specify the link display text. | Html Links to be provided as argument | None | Valid URL for external links and valid targetname for internal links: | HTML hyperlink. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Id** | **SRS ID** | **Test Case Description** | **Set Up** | **Tear Down** | **Test Data or Situation** | **Expected Result** |
| 2.1.4 | R3.2.1.002 | The User should be able to reference a Document “B” in another Document “A” to create a link from A to B. | Html Link or document link to be provided as argument | None | Document must be valid and located in the parent directory or in another external html link. | Link must not be broken or invalid. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Id** | **SRS ID** | **Test Case Description** | **Set Up** | **Tear Down** | **Test Data or Situation** | **Expected Result** |
| 2.1.5 | R3.2.1.003 | A Document should reference external pages referenced by a URL. | Provide html Link for external pages | None | No | Link must not be broken or invalid. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Id** | **SRS ID** | **Test Case Description** | **Set Up** | **Tear Down** | **Test Data or Situation** | **Expected Result** |
| 2.1.6 | R3.2.1.004 | An image should be generated by using a remote URL (http / ssl). | Provide html Link for external pages | None | No | Link must not be broken or invalid. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Id** | **SRS ID** | **Test Case Description** | **Set Up** | **Tear Down** | **Test Data or Situation** | **Expected Result** |
| 2.1.7 | R3.2.1.005 | An image should be generated by using a local file reference. | Provide image link. Image must exists located in main directory. | None | Image | Image must be shown or generated. |

Oracle

 If possible, pass/no pass evaluation

 Expected returned values

 Expected messages

 Expected exceptions

 Resulting state of IUT and environment

Tear down

Any steps that must be taken after test execution.

# Expected Coverage

[What is the coverage you expect given your system and the individual tests you described?]

# Benchmarks

The benchmark testing aims to determine the execution time of each functional requirement that found its way into the «Markup Generator». This allows to perform statistical evaluations like the calculation of the mean execution time. Each benchmark test should be performed under the sam environmental conditions and there should not be any application in active state other than the ones needed for testing purposes. Furthermore, the hardware- and software specifications of the test system should be similar to the specifications of the user systems.