Publication Module
Level 1
UNIT & INTEGRATION TEST PLAN
Version 0.1

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Wednesday 18th May, 2016

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1 Test Plan Identifier

Publication Module
Level: 1
Version: 0.1

2 References

SOLMS, F., PIETERSE V., OMELEZE S., MICHAEL, A. 2016. *Researcher Support System (RSS) Application Requirements and Design Specications (version 0.1)*. Department of Computer Science, University of Pretoria.

3 Introduction

The purpose of the test plan is to test publication module for which was presented by the developers for the research support project. The master specification document version 0.1 released on the 15th march 2016. The objective of the testing the publication is the test the functionality of maintaining information of a publication throughout the circle of a research, in it has an option to be published or abandoned. The functional requirement of the preconditions for this case are:

- Detecting the actual publication.
- Checking the state of which entries captures for the state of publication.
- Checking publication in a database.
- Checking the notification alert for any of the authors.

4 Features And Functions To Test

4.1 Functional Testing

4.1.1 Pre-condition violations

4.1.1.1 addPublication

4.1.1.2 changePublicationState

4.1.1.3 modifyPublicationType

4.1.1.4 diactivatePublicationType

4.1.1.5 reactivatePublicationType

4.1.1.6 addPublicationType

4.2 Non-Functional Testing

4.2.1 Flexibility

4.2.1.1 addPublication

The function is easily add different access channel of publication.

4.2.1.2 changePublicationState

The function is to be able to make impartation in the state of publication of a research.

4.2.1.3 modifyPublicationType

The function is flexible to adopt change in the publication type

4.2.1.4 diactivatePublicationType

The function is flexible to turn off (disengage) a publication.

4.2.1.5 reactivatePublicationType

The function is flexible to restart a publication

4.2.1.6 addPublicationType

The function is flexible to created and update publications

4.2.2 Maintainability

It should be easy to maintain the system in the future. To this end future developers should be able to easily understand the system, the technologies chosen for the system can be reasonably expected to be available for a longtime, and developers should be able to easily and relatively quickly change aspects of the functionality the system provides, and add new functionality to the system.

4.2.2.1 addPublication

The function of maintaining the system to will rely on how the system is be manage and cared for. It depend on the developer to

4.2.2.2 changePublicationState

This function totally depend on the maintenance of the system

4.2.2.3 modifyPublicationType

This function totally depend on the maintenance of the system

4.2.2.4 diactivatePublicationType

This function totally depend on the maintenance of the system

4.2.2.5 reactivatePublicationType

This function totally depend on the maintenance of the system

4.2.2.6 addPublicationType

This function totally depend on the maintenance of the system

4.2.3 Scalability

The network round-trip which is outside the control of the System.

4.2.3.1 addPublication

The architecture of the system is easily scaled to add publication research communities of several hundred researchers.

4.2.3.2 changePublicationState

The function of the system is easy to change publication usually within the scale

4.2.4 Performance requirements

It was very hard to measure the performance of the services provided by publication module accurately. The execution time of the code is used at this stage to measure the performance of the provided service of publication module.

4.2.4.1 addPublication

The function add only text based information so the are not any performance issues.

4.2.4.2 changePublicationState

The function add only text based information so the are not any performance issues.

4.2.4.3 modifyPublicationType

The function add only text based information so the are not any performance issues.

4.2.4.4 diactivatePublicationType

The function it is not sufffering form any performance issues as it only manupulate some state falg for diactivation of publication type.

4.2.4.5 reactivatePublicationType

The function it is not sufffering form any performance issues as it only manupulate some state falg for reactivation of publication type.

4.2.4.6 addPublicationType

The function add only text based information so the are not any performance issues.

4.2.5 Security

User data in every of the services provided by the publication modules it is not valided to be a ligit data or to be in the boands. Users can perform buffer averflwo to try to exploait the vulnerabilities.

4.2.6 Testability

4.2.6.1 addPublication

4.2.6.2 changePublicationState

4.2.6.3 modifyPublicationType

4.2.6.4 diactivatePublicationType

4.2.6.5 reactivatePublicationType

4.2.6.6 addPublicationType

5 Features And Functions Not To Test

The reliability quality requarement and scalabilty quality requarement are not tested in this case.

6 Approach

This part will include the introduction.

7 Item Pass Or Fail Criteria

This part will include the introduction.

8 Test Deliverables

The test results from this test plan will be included in the unit/integration test summary report.

9 Test Environment

The development environment is used for all unit and integration tests.

10 Conclusion

This part will include the conclusion.

11 Github

This part will include the conclusion.