DASISH Web Annotator (DWAN)

Master Test Plan

Test Plan Identifier

DWAN release 1.0 Master Test Plan version 1.0

Note, the structure of this document is primarily based on the IEEE 829-1998 Standard for Software Test Documentation.

Introduction

The Software Test Plan (STP) is designed to prescribe the scope, approach, resources, and schedule of all testing activities. The plan must identify the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

Testing is the process of analyzing a software item to detect the differences between existing and required conditions and to evaluate the features of the software item.

Testing will be performed at several points in the life cycle as the product is constructed. Testing is a very 'dependent' activity. As a result, test planning is a continuing activity performed throughout the system development life cycle.

Test Items

The scope of this testing activity will include:

- Server API for DWAN release 1.0 server side software
- DWAN release 1.0 client side software for FireFox browser
- DWAN User Guide

The scope of this testing activity will not include:

- DWAN release 1.0 server side software
- DWAN development documentation - Requirements Specification, Design Specification, Operations and Installation Guides

Features and Functions to Test

Testing will consist of several phase, each phase may or may not include testing of anyone or more of the following aspects of the DWAN software (listed alphabetically):

- Availability
- Content
- Functionality
- Performance
- Reliability
- Scalability
- Security
- Usability

Features and Functions Not to Test

It is the intent that all of the individual test cases contained in each test plan will be performed. We are not testing the following aspects of the DWAN software (listed alphabetically):

- Accessibility
- Audit
- Coding standards
- Compatibility
- Legal
- Marketing
- Navigation

Approach / Strategy

The philosophy of the testing is the agile black-box testing with the use of the scenario testing where appropriate. Agile development recognizes that testing is not a separate phase, but an integral part of software development, along with coding. Testing and coding are done incrementally and iteratively, building up each feature until it provides enough value to release to production.

The client side software - plugin for FireFox browser - and API for the server side software are tested separately. The client side software is tested manually by following some basic test scenarios. The server API is tested with several Python scripts.

All discovered software anomalies during the testing are registred in the project issue management pages under the GitHub - https://github.com/DASISH/dwan-client-wiredmarker and https://github.com/DASISH/dwan-backend.

Item Pass/Fail Criteria

The WP5.6 task group will retain the decision as to whether the total and/or criticality of any or all detected incidents/defects warrant the delay (or rework) of the DWAN release 1.0.

Suspension Criteria and Resumption Requirements

In general, testing will only stop if the DWAN server becomes unavailable. If testing is suspended due to the DWAN server becoming unavailable, testing will be resumed once access to the DWAN server is reestablished.

Certain individual test cases may be suspended, skipped or reduced if prerequisite tests have previously failed e.g. usability testing may be skipped if a significant number of navigational tests fail.

Test Deliverables

The following documents will be generated as a result of these testing activities:

- Master test plan (MTP - this document)
- Individual test plans for each aspect
- Test log for each testing effort
- Automated test scripts and supporting test data

Under normal testing conditions, the incident reports would be produced in GitHub.
With the exception of the automated test scripts, all documents will be delivered as PDF documents.

Remaining Test Tasks

Upon delivery of the aforementioned test deliverables and the successfully installation of the DWAN application into the production environment, all of the tasks covered by this master test plan will be deemed to have been completed. The only exception being the post-implementation test plan, which will be a continuing effort until the application is replaced or decommissioned.

Test Environments

There are essentially two parts to the DWAN application in production: the client-side software in form of browser plugin for Firefox and the server-side software which (initially) will be comprised of a single cluster of servers residing at MPI.

Testing is performed on the client side with operating system Windows 7, Windows 8, Mac OS X or Linux. For testing of the browser plugin the latest Mozilla Firefox version (29 or later) is used. For the testing of the server API the Python programming environment with the unit testing framework and the package Requests 2.3.0 (https://pypi.python.org/pypi/requests/) is used.

Responsibilities

The following people will be responsible for:

- DWAN server side software development
  Olha Shkaravska (MPI)
- DWAN client side software development
  Olof Olsson (UGOT), Stephanie Roth (UGOT)
- Testing of the API to the DWAN server side software
  Indrek Jentson (UT), Kristel Uiboaed (UT)
- DWAN client side software testing
  Indrek Jentson (UT), Siiri Pärkson (UT), Sirli Parm (UT)
- DWAN User Guide
  Valentina Asciutti (KCL)

Staffing and Training Needs

The UT managers will ensure that the staff assigned to this testing project are experienced with:

- general testing techniques
- all development and automated testing tools that they may be required to use.

MPI will ensure that administrator of the server side software is available during the test period.

Schedule

The following tentative schedule will hopefully be meet:

- Master Test Plan (this document) completed - 30.05.2014
- Test plans for each aspect completed - 13.06.2014
- Ad hoc testing in order to study the DWAN tool - from beginning of May till 16.06.2014
- Testing according to test plans - from 16.06.2014 till 31.10.2014

Risks and Contingencies

The following seeks to identify some of the more likely project risks and propose possible contingencies:

- DWAN server becomes unavailable – Testing will be delayed until this situation is rectified. A server not being available should be immediately communicated, minimizing delays in testing and development. Long unavailability may lead to need to reduce the number of development cycles.
- Testing staff shortages/unavailability, many of the test staff are part-time and have other higher priorities, in addition no slack time is allocated for illness or vacation - May need to recruit more staff to do the testing or reduce the number of test cases.
- A large number of defects/incidents makes it functionally impossible to run all of the test cases – As many test cases as possible will be executed, The WP5.6 task group will ultimately make the decision as to whether the number of defects/incidents warrants delaying the implementation of the production version.
- Not enough time to complete all test cases. If time cannot be extended, individual test cases will be skipped, starting with the lowest priority.

Approvals

The WP5.6 task group must approve this plan.