



Petal Project Quality Plan

This document defines the quality expectations the project must achieve and how they will be met.

Title: Petal Project Quality Plan
Author: George Roberts/ Neil Smith
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Revision Information:

#	Date	Description
0.1	2004-09-07	First draft
0.2	2004-10-01	revised by NS in light of JISC feedback

This document will be reviewed and revised at the Petal Project Implementation Group meeting on 24 September.

1. Quality Expectations

The JISC programme manager completes this section defining the standards and level of quality expected to be achieved by the project.

The project will deliver the eLearning Tool(s) as specified in their proposal and refined in the JISC project plan document in line with following standards/guidelines:

- JISC (draft) Open Source Policy May 2004
- JISC (draft) Software Quality Assurance August 2004
- JISC Project Management Guidelines December 2003
- Release versions of development and final code are to placed with <http://sourceforge.net/>
- CETIS project page be maintained to communicate development progress and mapping of software to the ELF (eLearning Framework). <http://www.cetis.ac.uk/>
- Software should meet the high level functional specification as specified in the project plan.
- Software should be robust, maintainable and extendable (see JISC (draft) Software Quality Assurance August 2004).

Tolerances

- Cost – project must be completed within agreed grant.
- Time – project must be completed by 31st March 2005.
- Scope – given the short time scale of the project the scope of the deliverable (i.e. eLearning Tool(s)) may be narrowed to ensure completion on time and to budget. Any changes to scope must be agreed with the programme manager and documented via the change control procedure.

- Quality – project must adhere to the standards as defined for open standards, open source and software quality

2. Acceptance Criteria

For each of the main deliverables of the project criteria for its acceptance / competition are defined.

Successful completion of an external evaluation of the projects software outputs and development process, to be undertaken by the JISC.

3. Quality Responsibilities

List of who is responsible for monitoring and ensuring quality for deferent aspects of the project?

Project Manager is responsible for overall quality and for project documentation.

Head of Media Workshop responsible for user requirement and acceptance testing

- Lead Developer (K-Int) overall charge of SW quality who will assure work of colleagues at K-Int. Responsible for code and interfaces
- configuration management and version control
- disaster recovery

4. Standards and Technologies

Referenced list of standards and technologies to be used by this project.

4.1 Core Technologies:

- Java v1.4.2
- SOAP v1.2
- WSDL v1.0
- XML Schema v1.0
- XSLT v1.0

4.2 Technical Documentation:

- UML v1.0

4.3 eLearning Domain specifications:

- IMS LIP v1.0.

Application profile to be used:

- as defined in BS8788 (UKLeaP) DPC

Schema to be used:


- as defined in BS8788 (UKLeaP) DPC

- IMS Learning Design v1.0 level A

4.4 Core ACDF:

- Tomcat v5.0.27
- MySQL v4.0.2

4.5 eLearning Domain Application software:

- Open Source Portfolio (OSP) v1.5¹
-  IS v1.0

¹ v1.5 will be used for the alpha release. During the project the potential for moving to v1.6, v2.0 or any subsequent releases will be kept under constant review.

5. Quality Control and Audit Processes

Description of the process to be used to control project quality and enable auditing.

The Project will have three major reporting points Nov, Feb, March, coinciding with alpha, beta and r1.0 of the Petal portfolio software. Intermediate QC points (provisionally fortnightly) will be determined at the Implementation Group Meeting on Friday 24/09/2004.

Weekly conference calls will be held by the Project Manager, Head of Media Workshop and Lead Developers.

Software quality

Software quality is maintained at three levels: unit testing, integration testing and user acceptance testing. The projects will follow the procedure laid down in Knowledge Integration's internal quality process KI-SW-1004 (Software Quality Assurance Plan) wherever possible. All deviations from this procedure will be documented in the project summary document, along with reasons for doing so.

Conventions for Code Documentation will follow those already adopted within the base OSP software, as guided by the OSP community process.

All components should carry unit test classes that can be run in an automated environment as a part of the normal code build cycle. The tool used for this will be Junit v3.7. If necessary long running unit tests may be added to be run on an ad-hoc basis, but such tests must be executed by the nightly build environment.

The continuous integration engine (CruiseControl v2.1.5) provides an environment that detects changes to the source code repository and performs integration testing in real time.

The overall project plan will identify at what stage(s) user acceptance testing should occur. User acceptance testing should be structured against User Acceptance Criteria which are specified alongside the use cases.

Media Workshop at Oxford Brookes, with the Learning Technologists Pilot Group will test units as they become available. In addition ALT may elect to test units before they are mounted to the ALT public servers.

Fault tracking

Software fault tracking will be undertaken on K-Int's online bug-tracking system (Mantis v0.19.0a2). UAT issues will be logged and tracked by the Project Manager and Media Workshop. The Project Manager will keep a Project issue log.

Interoperability

The Petal portfolio system and processes will be developed as an independent, but standards compliant module, that will sit within the ELF.

The base measure of interoperability will be conformance with IMS LIP, as defined by the BS8788 (DPC) Schema. If human interpretation of compliance is required, we will seek advice in the first instance from Advisory Group member Peter Rees-Jones

Interoperability testing will largely be outside the scope of the Petal project, however three key issues will need to be addressed in the light of anticipated follow on developments:

- Integration with WS4RL (<http://www.jisc.ac.uk/index.cfm?name=ws4rl>)
- Process framework aligned with Shibboleth (http://www.jisc.ac.uk/index.cfm?name=project_sdss&src=alpha) technologies for accessing multiple record stores within an environment of trust.
- Integration with Progress Files (<http://www.qaa.ac.uk/crntwork/progfileHE/contents.htm>), and the Lifelong Learning Record (see, e.g. TransPortaLL <http://dbweb.liv.ac.uk/cll/page.asp?ID=1561>)

Time sheet tracking will be used for internal project control.

6. Change Control and Configuration Management Processes

Description of the process to be used to manage change and configuration management.

Project Manager has overall responsibility for change control and interpretation of project plans and compliance

Lead Developer is responsible for configuration management

Head of Media Workshop is responsible for unit specifications and user acceptance.

7. Quality Tools

List any tools to be used to help ensure quality.

tbc