Quality Assurance Standards

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CO600: JustHealth
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1.0 Overview

The JustHealth project involves a significant amount of planning and pre-development work. In order to maintain a professional standard across all documents produced, the expectations of 'quality' must be defined at the start of the project.

It is the role of the Quality Assurance manager to ensure that other group members abide by the correct standards and that all documents are produced within the set guidelines.

2.0 Implementation of QA

Quality assurance standards depend on the size of the project being undertaken; in the JustHealth project, we are using agile software development. One of the primary principles of agile is 'working software over comprehensive documentation'. (Agile, 2001)

Whilst being careful not to be dismissive of the value of documentation, we must remember that it documentation is not our priority. However, the overall size of the tasks involved with the development of JustHealth combined with the fact we have just four project group members, should enable us to maintain a high standard of work.

The following sections outline the standard that is expected to be adhered to.

3.0 Documentation

3.1 Cover sheets

All documents should use the standard document template, as shown in Appendix 1. This enables the project supervisor and project manager to track who has authored documents, version control and when they were last updated.

All cover sheets must be completed in full before submission.

3.2 Styles

When producing documentation in Microsoft Word, the style set should be selected as 'Word 2010'. The features of this should be as follows:

- **Heading 1**: Cambria (Headings), 14pt, bold, dark blue
- **Heading 2**: Cambria (Headings), 13pt, bold, blue
- **Heading 3**: Cambria (Headings), 11pt, bold, light blue

- There should be a default space before the heading
- There should be no space after the heading

- **Text:** Calibri (Body), 11pt, black
- **Line spacing:** All documents should maintain 1.15pt throughout

- Bullet points should be a standard circular bullet at the first indentation

3.3 Contents

All documentation produced will have a contents page; this will be automatically generated by the headings used.

Pages must be numbered in the document footer, excluding cover sheet.

3.4 Spelling and Grammar

All documentation should be produced with accurate spelling and grammar, conforming to the English (UK) dictionary.

3.5 References

All document referencing should conform to the Harvard 2008 standard; all works must be included at the end of each document, with citations inserted at appropriate points throughout the document.

3.6 Appendices

Appendices should appear at the end of each document, they should be numbered appropriately and included in any contents table.

4.0 Coding

Code should be written according to the general guidelines for the language it was written in. The main focus should be readability and ease of comprehension by any reader. In order to achieve this, the following guidelines will be followed as closely as possible.

- Soft tabs (Generally 4 spaces)
- Correct indentation to show blocks.
- Regular comments describing functions and specific lines of code that do not read as 'obvious'. When possible, documentation standards were used:
  - Java – Javadoc
  - Python – Docstring according to the PEP submitted standards (Goodger, 2002)
- Line length should conform to the standards provided by the language, but generally not exceed 100 characters.
- Avoiding single letter or obfuscated variable names where possible.

5.0 Version Control

Document versioning will be controlled through GitHub (https://github.com/)

Aside from the automatic control of GitHub, documents should be updated on the cover sheet every time they are edited:

- Appropriate version number
- Group member name
- Date of edit

6.0 File Management

The folder structure should not be altered without agreement of the QA manager; this is in order to maintain an organised project file management system.

- Top level:
  Documentation
  Iterations
- Documentation:

  - 1.0 Research
  - 2.0 Scope
  - 3.0 Project Requirements
  - 4.0 Planning
  - 5.0 Design
  - 6.0 Meetings
  - 7.0 Legal
  - 8.0 Risk Assessment
  - 9.0 Quality Assurance
  - 10.0 Standard Document Templates
  - 11.0 Review Documentation
  - 12.0 Testing
  - 13.0 Tracking

- Iterations:
  Main folder to include separate folders with iteration specific files; numbered clearly (Iteration 1, Iteration 2, Iteration … etc.)

- File names must all be lower case, with an underscore to represent an intended space

7.0 File Format (Submission)

- Microsoft Word files should be converted to .pdf format
- Microsoft Excel files will be inserted as appendices in final versions of evaluation documents
- Images should be saved as .png or .jpeg

8.0 References

Agile, 2001. *Manifesto for Agile Software Development.* [Online]
Available at: http://agilemanifesto.org/
[Accessed 7 October 2014].

Goodger, D. 2002. *PEP 287 - reStructuredText Docstring Format* [Online]
Available at: https://www.python.org/dev/peps/pep-0287/
[Accessed 12 January 2015].

9.0 Appendix 1

Standard document cover sheet template:

justhealth

University of Kent | Computing

[Type the document title]

[Publish Date]

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[Version X.X]
Last saved by:
Last saved on: dd/mm/yyyy