Quality Assurance

By Filip Borowiak and Dawid Janelli

v1.0

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Introduction

The purpose of this document is to keep all of our CO600 project work up to standard. This document contains guidelines which will help us in keeping the work neat and professional. Thanks to the QA we can save time and keep up with the project's deadlines.

We divided the quality of the project into three sections:

- 1. **Software quality (code)** where we will make sure that code meets the highest standard and that the IDE used to write the code is good and can handle our project needs.
- 2. Software quality (GUI) where we will make sure that graphical user interface is fully functional and easy to use.
- **3. Documentation quality** where we will make sure that our documents meet the guidelines and are systematically updated.

1. Software Quality (code)

1.1 Coding

Code must be "clear" – easy to read. Keep it tidy with short comments next to each function and class that says where it belongs to and what it does; it will help others to join programming at any point. This is very important when we want to improve/update the code. It is also important to reduce the code duplication as much as it is possible in order to reduce the chance of errors and wasting time on changing the code in serval different places if it needs to be changed.

1.2 IDE

The choice of IDE is very important. We have to make sure that everyone within the group feels comfortable using the chosen program. It will improve the efficiency and the code quality.

1.3 Testing

Crucial part of the project that shows the group how good is the code and GUI; it shows its quality and reliability. It has to be done regularly after every major change to the program. Using few different types of testing is necessary. Every test has to be documented and examined, especially if errors have been detected.

1.4 Code language

The programming language has to be a choice of the entire group and we have to be sure that everyone can use it and read it with confidence in order to implement the project idea. Everyone should be capable of identifying errors and fixing them.

2. Software Quality (GUI)

2.1 Appearance

GUI of the program/website has to be clear and easy to use, colours should be soft and font style should be fixed for almost whole application (e.g. Arial, size 10~14). Text within the application has to be easy to read. However, buttons and hyperlinks has to be outstanding.

2.2 Functionality

Every part of the application has to be fully functional. Every possible move that client can make has to work (see 1.3 Testing). Buttons and links has to have appropriate names and navigate to right locations. If code has been updated/improved, we have to make sure that application still works the same way and that it is still fully functional.

2.3 Naming

Buttons, links and other functions names has to be clear and possibly short. It has to be one word sentence that describes what specific button do. It can help a client to navigate around the application/website.

3. Documentation Quality

3.1 Regularity

Regularity means keep documents updated – this will improve quality of the project in every aspect. Documentation has to be updated every time when something changes, do not delete old files, use version numbers in the titles (e.g. v1.0) and keep old documents – this will show the group how the project evolves and how its requirements has been changing. Thanks to this we can work more efficient and learn how to deal with project's changes.

3.2 Appropriate style and layout

Documents need to have relatively the same layout. This relates to the title page listing the contents of that particular document as well as its author and version. The font and its size should not differ between documents. This will have a huge positive impact on the general appearance of our documentation work and also make the documents easy to read and navigate.