

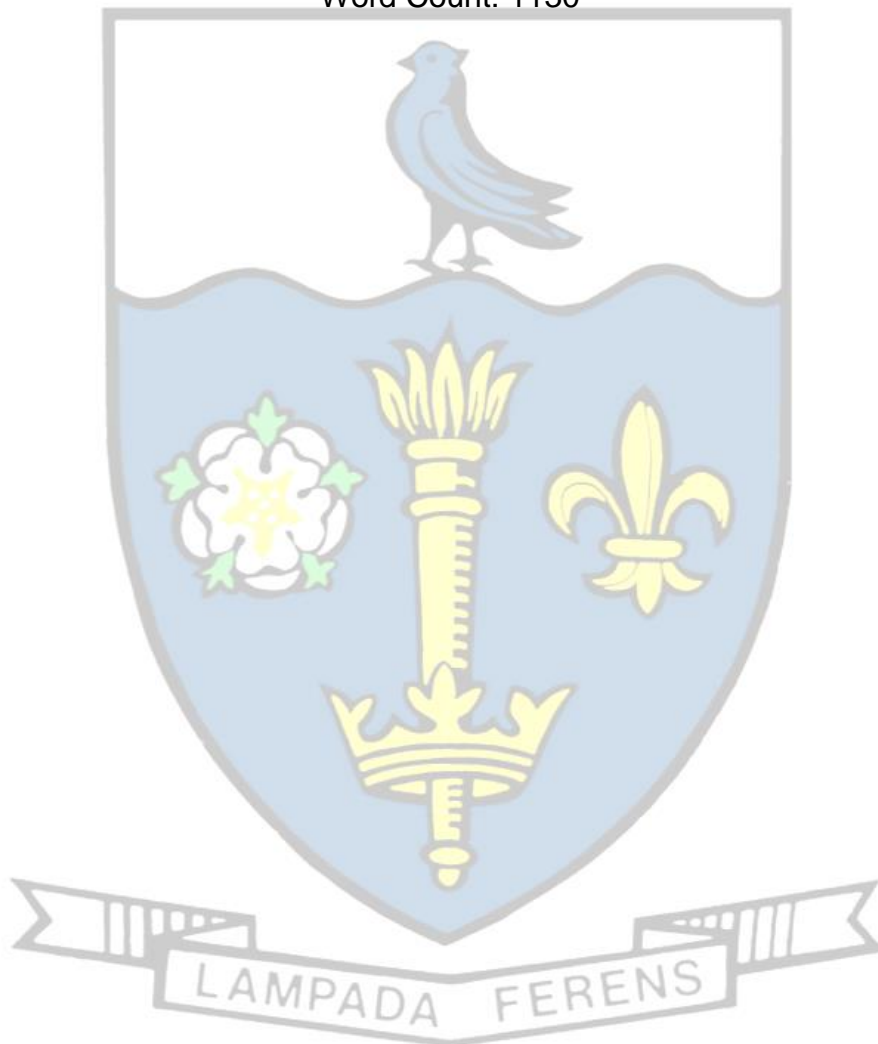
# **C++ Programming and Design and Real-Time Graphics Ethics Report**

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## Table of Contents

1	Child Pornography .....	3
2	Anti Worm .....	3
3	Assessment .....	4

# 1 Child Pornography

This issue pertains to a Mr Joe Green finding child pornography on the computer of a Mr Chuck Dennis while performing routine maintenance on Mr Dennis' personal computer. Mr Green was not authorised to access the files which contained the child pornography. However, Mr Green accessed the files after determining that they were named in a suspicious manner. This could be considered to be a breach of ethical and professional guidelines. This is because as stated in the Software Engineering Code of Ethics and Professional Practice (SECEPP) at line 2.03 "(The user must) use the property of a client or employer only in ways properly authorized, and with the client's or employer's knowledge and consent".

However, if Mr Green was not to disclose the information he had gained from accessing these files or had he ignored them then he would have been in breach of multiple other guidelines in the SECEPP such as at line 1.04 "(The user must) disclose to appropriate persons or authorities any actual or potential danger to the user, the public, or the environment, that they reasonably believe to be associated with software or related documents." and at line 2.05 "(The user must) keep private any confidential information gained in their professional work, where such confidentiality is consistent with the public interest and consistent with the law." lines 2.07 and 2.09 are also relevant.

It could be understood that to a common lay person the damage associated with the production and distribution of child pornography far outweighs the breach in professional conduct that Mr Green committed by accessing file which he was not permitted to.

Thus, it is the opinion that Mr Green did in fact act professionally even though he was technically in breach of the code of conduct.

One way to move forward with this situation would be to stress to Mr Green and other employees of the company that it is unethical to breach the code of conduct and possibly recommend a refresher course in professional conduct, any further reprimand would be unjustified.

# 2 Anti Worm

This issue pertains to a Mr Tim Smart who created a worm which infects target computers via a network, the aim of the worm was to plug a security hole in a popular operating system which another worm was taking advantage of.

Principles which are relevant to this case include at line 1.03 of the SECEPP "(The user must) approve software only if they have a well-founded belief that it is safe, meets specifications, passes appropriate tests, and does not diminish quality of life, diminish privacy or harm the environment. The ultimate effect of the work should be to the public good." In this case Mr Smart is of the opinion that the 'anti worm' does work for the public good by removing a security exploit that a potentially unwanted program was taking advantage of this is also represented at line 1.05 of the SECEPP "(The user must) cooperate in efforts to address matters of grave public concern caused by software, its installation, maintenance, support or documentation.". However, it is also true that individuals cannot consent to Mr Smart's 'anti worm' making changes to their computer and as such the worm does diminish privacy.

Mr Smart's 'anti worm' could in fact be considered unlawful under the Computer Misuse Act 1990 as it allows for unauthorised access to a computer system and as stated at line 6.06 of

the SECEPP “(The user must) obey all laws governing their work, unless, in exceptional circumstances, such compliance is inconsistent with the public interest.”.

It could also be said that Mr Smart realises that his actions are unlawful and unprofessional as he attempted to cover his own tracks by ensuring that the ‘anti worm’ could not be traced back to him, this is unprofessional as it states at line 1.01 of the SECEPP that “(The user must) accept full responsibility for their own work.”.

Thus, even though Mr Smart’s intentions were in the public interest by attempting to thwart a potentially unwanted worm his methods of distributing his fix were entirely unethical and as such he acted unprofessionally.

### 3 Assessment

This issue pertains to a Mr Potter who attempted to pass off a Mr Warrington’s work as his own for a computer science assessment.

Principles which are relevant to this case include at line 2.02 of the SECEPP “(The user must) not knowingly use software that is obtained or retained either illegally or unethically” and at line 3.13 of the SECEPP “(The user must) be careful to use only accurate data derived by ethical and lawful means, and use it only in ways properly authorized.” in this instance even though Mr Warrington had good intentions by trying to help his friend by giving him a draft of his solution to work from by Mr Potter receiving a copy of another person’s work that work is received unethically as that work is not his own and by using it he attempts to deceive others. In this case by giving Mr Potter a copy of his work Mr Warrington has breached the principles at line 6.01 of the SECEPP “(The user must) help develop an organizational environment favorable to acting ethically.” as Mr Warrington by giving his work to Mr Potter is developing an unjust working environment.

However, a mitigating circumstance for Mr Warrington can be found at line 6.04 of the SECEPP “(The user must) support, as members of a profession, other software engineers striving to follow this Code.” in light of this principle it can be seen that by giving his work to Mr Potter Mr Warrington was attempting to aid the development of a fellow professional.

All in all, the most relevant principle to this case is found at line 7.03 of the SECEPP “(The user must) credit fully the work of others and refrain from taking undue credit.” By handing in a draft copy of Mr Warrington’s work Mr Potter is blatantly in breach of this principle.

Thus, even though Mr Potter is suffering from mental health issues and that Mr Warrington’s actions were probably pure both parties are in breach of unfair means and are not acting professionally. What should have occurred in this situation is that Mr Warrington supported his friend without giving him the answers and Mr Potter should have used his long running mental health issues to apply for an extension to his work. In this instance the department would have no option but to set an example and reprimand both parties.