



CMPUT 605

Ethics in the Software Development Life Cycle: A Case Study of Health Informatics Systems

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Review of Last Meeting



- ◆ Hamman's background experience
- ◆ Suggestion to look at existing work on ethics in health informatics
- ◆ Tasks assigned to Hamman
 - ◆ Review FDA document
 - ◆ Review literature on health informatics ethics
- ◆ Website for course to be set up for posting and sharing links, documents, announcements

Existing Knowledge



- ◆ A Handbook of Ethics for Health Informatics Professionals
 - ◆ British Computer Society [BCS]
 - ◆ International Medical Informatics Association [IMIA]
- ◆ General Principles of Software Validation
 - ◆ US Food and Drug Administration [FDA]
- ◆ ISO/TC 215 Standards
 - ◆ International Standards Organization (ISO)



Auxiliary

- ◆ Ethics and Information Technology: A Case-Based Approach to a Health Care System in Transition [Book]
- ◆ Software Engineering Code of Ethics and Professional Conduct [ACM-IEEE]

Ethics



- ◆ Autonomy
- ◆ Equality and justice
- ◆ Beneficence
- ◆ Non-maleficence
- ◆ Impossibility
- ◆ Integrity

Information & Ethics



- ◆ Privacy and disposition
- ◆ Openness
- ◆ Security
- ◆ Access
- ◆ Legitimate infringement
- ◆ Least intrusive alternative
- ◆ Accountability

Software Engineering



- ◆ Duties of Software engineers
 - ◆ To the public
 - ◆ To the client and employer
 - ◆ Product
 - ◆ Judgment
 - ◆ Management
 - ◆ To the profession
 - ◆ To colleagues
 - ◆ To self

Health Informatics



- ◆ Duties of Health Informatics Professionals
 - ◆ Subject-centered
 - ◆ To healthcare Professionals
 - ◆ To institutions/employers
 - ◆ To society
 - ◆ Self-regarding
 - ◆ To the profession

Software in healthcare



- ◆ FDA regulations on software life cycle
 - ◆ Quality planning
 - ◆ System requirement definition
 - ◆ Detailed software requirements specification
 - ◆ Software design specification
 - ◆ Construction/coding
 - ◆ Testing
 - ◆ Installation
 - ◆ Operation and support
 - ◆ Maintenance
 - ◆ Retirement



Next week

- ◆ Access to ISO/TC 215 standards
- ◆ Thorough review of FDA document
- ◆ Formulating final report topic
- ◆ Possibility of incorporating case studies
- ◆ Course website