



CHAPTER HIGHLIGHTS

- Definition and characteristics of a profession.
- Elements of a professional code of ethics.
- Copyright:
 - Definition
 - Rights
 - Remedies
 - Challenges created by the digital revolution
- Digital Rights Management
 - Challenges and opportunities.

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This slide has a light gray background with a network of white circles and lines. The title 'CHAPTER HIGHLIGHTS' is in a bold, dark blue, sans-serif font. Below the title, there is a list of bullet points in a dark gray, sans-serif font. The list includes 'Definition and characteristics of a profession.', 'Elements of a professional code of ethics.', 'Copyright:', and 'Digital Rights Management'. Under 'Copyright:', there are four sub-bullets: 'Definition', 'Rights', 'Remedies', and 'Challenges created by the digital revolution'. Under 'Digital Rights Management', there is one sub-bullet: 'Challenges and opportunities.'. The number '2' is in the bottom right corner.

CHARACTERISTICS OF A PROFESSION

- An occupation that requires specialized training or education.
 - Preparation often involves an accredited program of study.
 - Continuing education is important to remain proficient in the field.
- Professional associations formulate codes of ethics for their members.
 - Professionals have obligations to individuals they serve and society at large.

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CHARACTERISTICS OF A PROFESSION

- Professional associations have an active role in promoting and enforcing obligations of the members.
- Professions are autonomous and self regulating.

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MULTIMEDIA DEVELOPMENT

- Shares defining properties of a profession.
 - Requires specialized knowledge and continuing education in latest techniques.
 - Members of the team often belong to professional organizations.
 - Educational standards are developing in college and university programs as the field matures.
 - The work of a developer may have significant social consequences.

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PROFESSIONAL RESPONSIBILITY

- Code of ethics is a statement of obligations and standards that define a practitioner's professional responsibilities.
- No direct code of ethics for multimedia developers yet, but the Software Engineering Code of Ethics and Professional Practice directly relates to the work of a multimedia programmer and offers guidance to other members of the team.

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THE COPYRIGHT TRADITION

RIGHTS, REMEDIES, & EXCEPTIONS

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DEVELOPERS AND COPYRIGHT

- Multimedia developers must understand copyright law for a variety of reasons.
 - They must guard against intentional or unintentional violation of the rights of others.
 - Developers must protect their own work.
 - Developers must frame agreements with the client to specify copyright ownership.

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COPYRIGHT PROTECTION

- **Copyright** is a form of legal protection given to creators of "original works of authorship."
 - Purpose of copyright protection is cultural advancement.
- Copyright differs from patent protection.
 - Copyright applies to original or creative expression.
 - Patent protects original inventions.

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COPYRIGHT PROTECTION

- U.S. law protects any form of original expression that is in fixed form.
 - Work does not need to be registered.
 - Notice of copyright protection is not necessary.
- "Works of original authorship" combined with automatic coverage of works in fixed form (including computer programs) means any content created by another party is potentially covered by copyright.

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COPYRIGHT PROTECTIONS

- Owner of a copyright has five major rights:
 - To reproduce the copyrighted work.
 - To produce derivative works.
 - To distribute copies to the public.
 - To perform the work publicly.
 - To display the work publicly.
- Owner retains these rights unless specifically transferred to another party.

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COPYRIGHT PROTECTIONS

- Protection is granted for set period of time.
 - Works created after 1978 extend to life of creator + 70 yrs.
 - Corporate rights extend 95 yrs. from date of publication or 120 years from creation, whichever comes first.
- Copyright registration is required if:
 - Lawsuits are being filed for infringement.
 - Statutory damages and attorneys' fees are involved.

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COPYRIGHT REGISTRATION

- Registration:
 - Provides evidence of copyright claim.
 - Establishes basis for legal enforcement.
 - Recommended in multimedia development.
- Infringement can lead to:
 - Injunctions to prohibit further production and distribution.
 - Compensation for monetary damages.
 - Statutory damages and criminal sanctions.

Register copyright at:
www.copyright.gov

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COPYRIGHT EXCEPTIONS

- Public Domain
 - Works for which copyright has expired.
 - Works where it was never applied such as:
 - Government documents
 - Works not in fixed form
- Fair Use
 - A doctrine intended to advance important social goals.
 - Free and open press
 - Education
 - Research and scholarship

Conditions of Fair Use described in
section 107 of U.S. Copyright Act.

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FAIR USE CRITERIA

- Four criteria used to determine fair use:
 - Purpose and character of the use.
 - Nature of the copyrighted work.
 - Amount and significance of the portion used.
 - Effect of the use on the value of the work.
- Fair use is likely to be found for uses that:
 - Are non-profit.
 - Are factual rather than creative.
 - Use small amounts of the work.
 - Have little or no effect on the value or potential market of the work.

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WORKS FOR HIRE

- Works that are produced under specific direction of an employer and with the employer's resources.
 - Employer may own the copyright for works for hire.
 - Written agreements detailing copyright ownership should be established by employer and employee.

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COPYRIGHT AND DIGITAL MEDIA

- Copyright law was developed in age of analog media.
 - Media was more difficult to copy and distribute in analog form.
- Digital versions of media pose challenges to traditional protections.
 - Easy to copy in full fidelity.
 - Editing tools easily generate derivative works that are difficult to detect.
 - Public display rights are threatened by Web technologies.

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COPYRIGHT AND DIGITAL MEDIA

- Responses to preserving copyright and digital media:
 - Strengthen and improve enforcement of existing legal protections.
 - Develop new strategies within the digital media itself to protect content.
- Digital Rights Management
 - The application of digital technologies to the management of intellectual property (IP).

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DIGITAL RIGHTS MANAGEMENT

- Applied to many forms of intellectual property (IP) including:
 - Patents
 - Corporate reports and communications
 - Creative works traditionally covered by copyright (analog "legacy media")
 - Original digital media.

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DIGITAL RIGHTS MANAGEMENT

- Contract law also protects creative works.
 - Owners of creative works can sell a license to use the product.
 - End User License Agreements (EULAs) are popular for software programs and in use with digital books or "ebooks."

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USES OF DRM

- DRM has often focused on rights of content owners.
- Commonly used to control copying and accessing digital content.
 - Adobe "eBooks"
 - Content Scrambling System (CSS)
 - Audio CDs (Sony BMG)
 - Music sold on the Web.
- Digital Millennium Copyright Act (DMCA) reinforced DRM copy/access protections.
 - DMCA also generated controversy.

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DIGITAL MILLENNIUM COPYRIGHT ACT

- DMCA contains provisions that directly affect the work of digital media professionals.
 - Clarified permitted copying of digital media.
 - Limited liability of ISPs for copyright infringements by provider's users.
 - Criminalized the circumvention of DRM controls.
 - Outlawed the creation and distribution of any technology, service, or device to circumvent the controls.

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DIGITAL MILLENNIUM COPYRIGHT ACT

- The DMCA has generated controversy:
 - Potential abuse of copyright claims
 - Limitations on fair use
 - Discouragement of research
 - Stifling of creative expression.

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DRM and Digital Watermarks

- Digital watermarks - alterations to a media file that encode information about the file. For instance:
 - Copyright ownership
 - Identity of creator
 - Identity of purchasers of copyright.
- Used to enforce copyright but also may support broader goals of “Second Generation” DRM.

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DRM and Digital Watermarks

- Two Generations of DRM:
 - First Generation: a “prevent and protect” strategy intended to limit access to, and use of, digital media.
 - Second Generation: a “respect and promote” strategy to facilitate legal distribution and use of digital media.
- Digital watermarking can play a role in second generation

DRM